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Ships Passing in the Night? E-Learning Designers'
Experiences with User Experience

Christijan D. Draper

A dissertation submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

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ABSTRACT

Ships Passing in the Night? E-Learning Designers' Experiences with User Experience

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Doctor of Philosophy

This qualitative study investigated the extent to which a diverse sub-set of e-learning designers were aware of UX principles and practices, where their e-learning design practices overlapped with established UX practices, and where UX principles might benefit e-learning designers. E-learning has grown dramatically as an area of focus in instructional design within the last decade and a half. This growth suggests a need for a better understanding of design tools, concepts and principles that can guide an e-learning designer to design better and more effective instruction. One field of design that has potentially had an impact on e-learning design recently is user experience (UX) design. Both fields of UX and e-learning are concerned with designing interactions with technology, but while there are some shared ideas and terms between the two, there has been no research into the perceptions and understanding of UX tools by practicing instructional designers. Nine professional e-learning designers were interviewed to understand their perspective and experience.

The findings of this study resulted in four themes and several subthemes. In general the participants of the study were not familiar with the formal practices of UX design. Many were also not familiar with several of the seminal works of the UX design field. The emergent themes suggest there are similar concerns between UX design and e-learning design. There were varying perceptions of the role of an e-learning designer as well as a broad spectrum of perception of what qualifies as good e-learning design. Participants reported the e-learning design field has numerous practitioners who lack formal training in instructional design principles in addition to limited training in other design disciplines. Participants also discussed constraints that could impact their ability to embrace UX practices. Findings suggest e-learning design practitioners and students of the field would likely benefit from a greater awareness of, or even formal training in UX practices. Additional research into the shared practices of UX and e-learning design could also likely open new opportunities to advance the practice of e-learning design.

Keywords: e-learning, user experience, design, instructional design, learner experience

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You hold in your hands a miracle. There were many, many prayers offered on my behalf. I know they were heard and answered. The faith and prayers of my children were almost palpable. They can't remember a life before graduate school. I hope we all learned a thing or two over the years. Now we will have new adventures to tackle.

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Chapter 1: Introduction and Statement of the Problem

The practice of instructional design has matured in recent years to a state where there are multiple subdisciplines within the field. Research has also deepened our understanding of effective instructional practices, especially within the use of digital technology. In particular, e-learning has grown dramatically as an area of focus in instructional design within the last decade and a half. E-learning is defined as “instruction delivered on a digital device such as a computer or mobile device that is intended to support learning” (Clark & Mayer, 2011, p. 8). It covers computer and web-based learning as well as virtual classrooms and digital collaboration (Eklund, Kay, & Lynch, 2003). E-learning is a field rich with burgeoning opportunities as devices, technologies, and platforms proliferate. This growth also opens the door for a need for a better understanding of design tools, concepts and principles (Garrett, 2011) that can guide an instructional designer to design better and more effective instruction. Traditionally the field has followed a systems approach to design (ISD). Yet, according to interviews conducted by Gordon and Zemke (2000), ISD has been labeled as “slow and clumsy” (p. 44) by “highly respected people in the training industry” (p. 44). Miller, Hokanson, and Hooper (2009) likewise suggested that the algorithmic, linear approach of ISD is insufficient to solve the design problems inherent in instruction.

The instructional design field appears to be shifting focus from the systems approach to other ways of accomplishing instructional needs. As suggested by Parrish (2009), instructional design is increasingly seen as a “design discipline” (p. 511) as opposed to a technology or a science. *Design per se* and *design thinking* have become watchwords and have led to significant discussion and research within contemporary instructional technology literature as well (Hokanson & Gibbons, 2014). The Association for Educational Communications and

Technology and the Educational Communications and Technology organization have also published a recent collection of chapters focusing on design in educational technology, and the first edition of the *Handbook of Design in Educational Technology* was published in 2014 (Hokanson & Gibbons; Luckin et al., 2013). The explicit adoption of design thinking is “widespread in the field of education” (Hokanson & Gibbons, 2014, p. vii). Additionally, *design-based research* has gained prominence as a viable research strategy (Anderson & Shattuck, 2012; Barab & Squire, 2004; McKenney & Reeves, 2013). Instructional designers are reevaluating existing, traditional practices and researchers and practitioners alike are seeking improved processes for creating designs that are effective and gain traction with learners. They are also turning to other fields for practices that can guide the improvement of instructional design (Nelson & Palumbo, 2014). Clearly there is a focus on design within the realm of educational technology, including within the subdiscipline of e-learning.

Software and web design in particular have a wealth of processes and sub-fields that have matured in recent years. One field of design that could have a potentially strong impact on instructional design and e-learning literature recently is user experience (UX) design. UX has emerged and matured as a field in roughly the same timeframe as e-learning. UX evolved from the broader human computer interaction field that began in tandem with the emergence of computers in the mid-to-late 70s. Modern UX design consists of a very broad set of subdisciplines, including information architecture (IA), interaction design (IxD), visual interface design, usability engineering and user research (Garrett, 2011). Peters (2014) has also addressed the connection between UX and e-learning through a book aimed at introducing user experience design concepts to e-learning designers.

Both fields of UX and e-learning are concerned with designing interactions with technology, but the number and types of references in the literature between the two reveals that there has been some shared learning across fields, but it is not clear to what extent practitioners of e-learning have embraced that learning.

In the late 1990s and early 2000s, instructional design literature began calling for a focus on user-centered design in response to the “bureaucratic and linear . . . slow and clumsy” ISD approach to instructional design (Baek, Cagiltay, Boling, & Frick, 2008, p. 660; Gordon & Zemke, 2000). Baek et al. promoted the concept of user-centered design and development (UCDD), which they defined as placing users “at the center of the design process from the stages of planning and designing the system requirements to implementing and testing the product” (p. 660). They focused on two aspects of UCDD to illustrate its developmental process: participatory design and rapid prototyping. Eklund et al. (2003) likewise noted a “greater acknowledgement and understanding of User Centred Design” (p. 17) that they said had resulted in greater success in e-learning products.

While the UCDD approach was highlighted and discussed somewhat for a brief span of time, there appears to be a dearth of research or discussion within the e-learning field of the use of UX concepts and practices among practicing designers as opposed to professional researchers. Although some of the subdisciplines of UX appear frequently within the literature, there has been very little work done within the e-learning field to date to illuminate to what extent e-learning designers understand these concepts as design practices.

Because designers of e-learning seem to fit comfortably within the realm of software and web design (Eklund et al., 2003), it seems instructional designers would benefit from a clearer understanding of the current practices and knowledge-base of the web and software design

communities. They would potentially find value in following the latest trends and established practices of the web design, software development, and graphic design communities.

Additionally, it would be useful to understand how much practicing designers have gathered from the e-learning literature or from UX design literature or other resources. It is possible that more cross-disciplinary discussion or interaction could allow the e-learning field to benefit from sharing language, practices and theories that could inform the field's work.

As instructional designers increasingly rely on larger teams to implement an instructional design, it is also important to be able to understand the roles of others who will be designing interfaces or other components of an instructional system. Design languages are proposed to be at the heart of the design process (Gibbons & Brewer, 2005). The e-learning design literature as discussed below appears to use many terms in common with UX design, but there are slightly different connotations of these terms that might lead to confusion within design teams.

Understanding the language of UX design could help instructional designers of e-learning communicate better with design and development team members and produce stronger work.

This qualitative study investigated the extent to which a group of e-learning designers were aware of UX principles and practices, where their practices overlapped with established UX heuristics and practices, and also speculated where the practice of e-learning design might benefit from the implementation of UX principles.

Research Questions

To better understand the current state of awareness of UX concepts within the e-learning field, this investigation was designed to answer the following questions:

Main Question 1: What UX design techniques, skills or heuristics are practicing designers of e-learning aware of?

Related Sub-questions: Do e-learning designers understand UX terms in a way consistent with how UX designers understand those terms? How important are user experience design tools for e-learning designers? Do they use them at all? If so, when and why? If not, why not? What rationale do e-learning designers express for the omission?

Main Question 2: How do practicing e-learning designers use UX activities within their practical, daily design work?

Related Sub-questions: How often do e-learning designers seek guidance from sources of UX design practices? What circumstances prompt their use of UX design?

Main Question 3: To what extent did e-learning designers' formal training include references to UX design practices? To what extent has their informal or on-the-job training included reference to UX design concepts or practices?

Related Sub-questions: What were their sources of formal or informal UX training? To what extent does that training impact their daily work?

Additional guiding questions can be found in Appendix A.

Definitions

To reduce ambiguity and improve clarity of this study, I present the following definitions and explanations of terms used in this document.

E-learning. As there is “no single agreed definition of e-learning” (Nicholson, 2007, p. 1), I have adopted, with one caveat, the definition of e-learning as expressed by Eklund et al. (2003): “E-learning is a wide set of applications and processes which use all available electronic media to deliver vocational education and training. The term covers computer-based learning, web-based learning, and the use of mobile technologies; it includes virtual classrooms and digital collaboration and uses” (p. 3).

The caveat is that, for this study, e-learning should not be considered limited to vocational education. I include all forms of education and training that makes use of the indicated digital tools within the definition of e-learning.

User experience (UX), UX design. User experience is a nebulous term and has been interpreted in myriad ways, but as Garrett (2011) said, all definitions generally “have the same principle at their core: Users need usable products. It’s the most universal user need of all” (Chapter 3, Section 3, para. 20). For the purposes of this study, UX design refers to the processes and tools by which creators of software, websites, or other electronic interfaces design a product to make it usable. Some of the tools and techniques considered part of UX and which are of most interest for this investigation are further identified, defined, and outlined below.

Information architecture (IA). Information architecture “is concerned with how people cognitively process information” (Garrett, 2011, Chapter 5, Section 3, para. 2). It is also a “discipline and community of practice focused on bringing principles of design and architecture to the digital landscape” (Morville & Rosenfeld, 2007, p. 4). Practical definitions of IA relevant for this work are:

“The combination of organization, labeling, search, and navigation systems within web sites and intranets.

“The art and science of shaping information products and experiences to support usability and findability” (Morville & Rosenfeld, 2007, p. 4).

Interaction design (IxD). Interaction design is the designing of “the behavior of complex interactive systems” (Cooper, Reimann, & Cronin, 2007, p. xxx.) and is “based on an understanding of users and cognitive principles” (p. 143). IxD steps beyond mere visual design

and aesthetics into the realm of physical interaction and intellectual comprehension of activities and interactions within a digital product.

Usability engineering. Usability engineering is a blanket term used to describe the evaluative practice within UX. It is the process by which researchers evaluate the use of a digital product by its intended users. As Krug (2005) pointed out, usability is “making sure that something works well: that a person of average (or even below average) ability and experience can use the thing . . . for its intended purpose without getting hopelessly frustrated” (Krug, 2005, p. 5).

User research. User research is the counterpart to usability engineering. Whereas usability research is conducted after a product is designed, user research is conducted to anticipate user needs and goals, to allow designers to understand the objectives their designs should fulfill. User research often incorporates techniques of ethnography and phenomenology to gather understanding that guides design activities.

Visual design. I use the term visual design to describe the process of creating the visual and aesthetic qualities of an interface design. Visual design, information architecture, and interaction design have many overlapping and intermingled qualities, but visual design is focused more on the static visual considerations of a design, rather than movement, interaction or content per se. It is viewed as having a strong impact on the affective or emotional response to a designed product (Parrish, 2009).

Chapter 2: Review of the Literature

The foundation of this study is the observation that the awareness of UX design, especially as it constitutes a gestalt of its subdisciplines, is limited within the field of e-learning. I observed this condition while engaged in coursework associated with the degree program this dissertation completes. While still a student, I began working part-time (and subsequently full-time) as a UX designer for a digital agency where I participated in the design and development of websites, mobile apps, and other software. I noticed many parallels between my UX design work for the agency with the circumstances and concerns of instructional designers that I was learning about as part of my degree program. While I noticed the parallels in both fields, I also observed there were many practices within the field of UX that could potentially benefit the design practice of e-learning designers but were not part of the curriculum of my program.

To understand more of the relationship between the two fields, I developed an independent curriculum to study UX within the context of e-learning design. As part of that course, I surveyed seminal books and articles outlining UX design principles and practices. Additionally, I surveyed research within instructional design journals to seek to find a connection between e-learning design practices and the parallel practices of UX. This review resulted in my concluding that the connection was very indistinct and potentially limited. Yet, the review of literature and my independent observations suggested that the concepts of “design” and “design thinking” had emerged as very important topics of study for the e-learning and instructional technology fields. This connection suggested that an understanding of UX, as a design discipline, could potentially help increase e-learning designers’ understanding of design through exploring it from the perspective of a new lens. The potential connection seemed to warrant additional investigation into the knowledge and practice of e-learning designers outside the walls

of academia, to understand both their practices and how the field of UX design influenced those practices, if there was indeed any influence at all.

What follows is an adaptation and expansion of the original literature review performed as part of my coursework. It commences with a history and summary of general design research trends within the fields of instructional technology and e-learning. It next discusses the current literature of e-learning design to show how user-centered design and UX are referenced in passing but not discussed at length. Next, it outlines some of the primary concepts and techniques of UX design based on seminal UX design literature. This is provided as a reference to those not familiar with UX as a field. Finally, this review discusses the state of existing relevant literature regarding similar research between UX and instructional design.

Design in E-learning

Historically, e-learning has grown across a multitude of learning scenarios including the fields of education, business, training, and the military. Starting with the work of Suppes and Bitzer among others in the early 1960s, e-learning has a broad history that, through its evolution, has resulted in an equally broad definition (Nicholson, 2007). Citing Campbell, Nicholson connected e-learning in industry settings with an emphasis on “just-in-time learning” (p. 2) aimed at productivity, while in higher education settings, e-learning focuses on developing reflective learning and metacognitive skills.

Early e-learning consisted of computer-based, drill-and-practice models, largely based on behaviorist learning paradigms (Nicholson, 2007). With the rapid growth and expansion of technology, and especially the Internet, the e-learning marketplace has expanded and evolved significantly in recent years (Eklund et al., 2003; Clark & Mayer, 2011). It now frequently

consists of complex, distributed, Internet-based learning interactions, often with constructivist- or cognitivist-based instructional models.

In examining the literature on the instructional efficacy of e-learning, Clark and Mayer (2011) concluded that e-learning can be as effective as in-person learning, but that success is often dependent on the design of the e-learning. Poorly designed e-learning results in poor learning outcomes. Clark and Mayer suggested that the medium is not as important as the instructional strategy and caution that, while the potential of modern e-learning technologies is immense for learning opportunities, the same opportunities could serve as “pitfalls when not used in ways congruent with human learning processes” (p. 14). Likewise, Tallent-Runnels, et al. (2006) in their review of online learning literature, stated that online teaching and learning activities that were not carefully planned or were impeded in their delivery by technology problems resulted in less-effective learning.

This planning process, designing for specific instructional interactions, is a key concern for designers of e-learning. Parrish (2009) suggested that the field of instructional design, while once perhaps considered just a science or a technology, is branching out beyond a focus simply on “immediate learning outcomes” (p. 511). As members of a design discipline, Parrish suggests instructional designers are “considering all the qualities of designed experiences” (p. 511). In e-learning, however, as instructional design has become heavily intertwined with the design of software, any focus specifically on the *interface* of learning or instructional software or the *interaction design* have perhaps not kept pace with the focus on the design of the instruction per se.

The focus of instructional design has always been on helping *learners* improve their knowledge or understanding. Instructional designers used models or processes, such as

Instructional Systems Design (ISD), as guidance for the development of instruction. As mentioned above, however, ISD has been labeled as “slow and clumsy” (Gordon & Zemke, 2000, p. 44). To combat this problem, researchers in instructional design have begun to focus on understanding and improving the design process itself, rather than just the management practices that improve efficiency. There seems to be a growing desire to connect established design processes from other fields to e-learning design. In particular, design languages, design-based research, and user-centered design have emerged as substantial areas of research interest (Hokanson & Gibbons, 2014; Luckin et al., 2013). This focus on design has opened up interest in other design cultures and how they might impact design within the instructional design discipline (Boling, 2003). User experience is one area that has been referenced by at least one author as a relevant source for increasing the design capacity for e-learning designers (Peters, 2014). To help illuminate why this might be the case, the following sections discuss the concepts and principles of UX design.

User Experience Design

The field of user experience design is an outgrowth of the broader field of human computer interaction (HCI). The term user experience was first coined by usability researcher Don Norman with the intent to provide a broader term for understanding the design of human interactions with computers beyond simple user interface and usability questions (Merholz, 1998, 2007). The field has expanded to encompass numerous subdisciplines. Garrett (2011) proposed a concept of user experience for the World Wide Web, which encompassed the entire design process from the foundational elements of user and software goals to the finished aesthetic design. Others have proposed similar models (Saffer, 2008), but there is no universally accepted definition of user experience design. However, a few of the elements of user

experience as discussed by Garrett appear to be fairly universally considered a part of UX design and those are: information architecture, interaction design, visual design, and user research.

Additionally, the evaluation of a user experience design is deemed best conducted in the context of actual use by the intended audience through usability engineering research (Krug, 2005). The following paragraphs expound on each of these elements of user experience design.

Information architecture. Information architecture is the “art and science of shaping information products and experiences to support usability and findability” (Morville & Rosenfeld, 2007, p. 4). It has emerged as an independent discipline underneath the blanket concept of UX design and applies to websites as well as “any product that requires users to make sense of the information presented” (Garrett, 2011, Chapter 5, Section 3, para. 2). E-learning designers are charged with the organization and presentation of information to help others digest and learn it. It seems that information architecture as a field could contribute a great deal to the understanding of ways to approach the presentation and organization of information within an instructional design.

Additionally, information architecture borrowed many of its practices from library science. Libraries have always been a strong partner and companion to instructional institutions. As repositories of information, libraries became the source of information for generations of scholars. Similarly, information architects help organize the information available in digital environments. They try to help make the information easily browsable and searchable in “massively complex environments” (Morville & Rosenfeld, 2007, p. 17). Their goal is to make information retrieval as simple and orderly as possible.

Interaction design. Interaction design (IxD) is another element of a digital product that affects its user experience. As noted earlier, interaction design is the designing of “the behavior

of complex interactive systems” (Cooper et al., 2007, p. xxx.) and is “based on an understanding of users and cognitive principles” (p. 143). As a field that addresses design on a deeper, cognitive level, IxD shares a common trait with instructional design. Recent research demonstrated the “significant role” psychology has played in the development of the most influential ideas in contemporary instructional design (Small, 2012).

Interaction designers and researchers have created and tested myriad interaction elements in software and web browser technologies. Their work has been published, discussed, and refined through blogs, conferences, and books (e.g., Scott & Neil, 2009; Cooper et al., 2007; Krug, 2005). There are many accepted best practices for a variety of human-computer interactions that an instructional designer can choose from (e.g., see Scott & Neil 2009). In fact, usability expert Steve Krug (2005) suggested using existing interaction paradigms rather than trying to design a new way to interact with a computer. “My recommendation,” he said, is to “innovate when you know you have a better idea (and everyone you show it to says ‘Wow!’), but take advantage of conventions when you don’t” (p. 36). By being aware of the best practices in the field, instructional designers can focus on their specialties of performance improvement and assessment, while not neglecting the UX of their software interface.

Cooper et al. (2007) provide detailed discussion of interaction elements, including buttons and other controls, menus, windows, toolbars, and dialog boxes. Their work was written to help designers understand “principles, patterns, and processes” (p. xxxiii) in order to show “how they work together to create effective designs” (p. xxxiii). They suggest that while following guidelines (such as those espoused by ISD) tend to make the design process “easier . . . it doesn’t necessarily make the end result better” (p. xxxiii). Their emphasis is on understanding the end user of any product and using the principles and processes of interface design to help the

user achieve his or her goals. Understanding user goals becomes a pivot point for effective design. It would be useful to understand the extent to which designers of e-learning are aware of some of these ideas and how these concepts and ideas impact their design process.

Visual design. Another key to effective design is understanding its visual impact. The visual impact of an instructional interface design has many implications. First, a “professional-looking design” (Fogg, 2003, p. 161) promotes credibility. Credibility impacts adoption of a product, as Fogg elaborates: “When earned credibility is high, people are likely to spend more time at the site, visit it more often, make repeated purchases (if it is an e-commerce site), tell others about it, and be open to persuasion techniques the site uses” (p. 170). Fogg’s research specifically targeted websites, but it seems likely that his findings hold true for instructional software, especially web-based instruction. Second, an aesthetically pleasing design is associated with a more positive assessment of a design’s usability (Cooper et al., 2007; Miller, 2011). When software is perceived as easier to use, it is more likely to be used more frequently. Finally, a product’s visual design impacts the user’s perception of the company and, consequently, other products from that company. Perception of usability also impacts decisions to keep using one product over another and positive impressions of the products a company produces can likely affect sales of its other products as well.

With the impacts that visual design has on consumer experience, instructional designers cannot afford to make visual design decisions an afterthought. Yet, scholars have asserted that the visual (Miller, 2011) and aesthetic (Parrish, 2009) qualities of the design of instructional interfaces have been a neglected aspect of instructional design until very recently. Miller stated that the visual design is “frequently delegated to graphic designers late in the game” (p. 311) limiting their ability to contribute to the overall project design.

User research. The ISD process generally includes a step of learner analysis to determine the state of understanding of users in order to fit the design to their learning needs. It is not clear from the research literature how similar the process of learner analysis is to general user research conducted by UX designers. Following are some processes outlined by prominent UX authors on their processes and justifications for user research.

Cooper et al. (2007) outline a user-centered approach that shapes a software tool around a user's specific goals and objectives. Their goal-directed design has emerged in response to loosely or poorly designed digital products. They observed that developers and even designers often structure their products' interfaces according to the underlying logic of the software rather than the overarching objectives of the user. That approach tends to make the learning of software more difficult. Users not only have to learn how to do a task, they have to learn it in an unfamiliar context that does not fit with anything else they have ever done before. The authors propose that refocusing design efforts, making user goals or objectives paramount, will improve the software design process. Kuniavsky (2003) mounts a similar argument:

Tools solve problems, and to build the right tool, you need to know what the problem is. . . . You can guess, using your knowledge of the target audience and what they're trying to do. This is fast, but it's fraught with danger: if you're not a member of the target audience (which, as a developer, you rarely are), your understanding of the nature and severity of your users' problems will not be the same as theirs. You could decide that someone needs a bigger hammer, when in fact, he or she needs smaller nails. (p. 159)

There are a variety of methods for performing qualitative research that contribute to an understanding of user behavior and goals. Cooper et al. (2007) promote ethnographic interviews,

a “combination of immersive observation and directed interview techniques” (p. 58) as their preferred approach to initial user research. Kuniavsky (2003) similarly advocates *contextual inquiry* as a means for determining what goals users have. He says that in contextual inquiry a designer collects information about tools their intended audience uses, the sequence in which they try to solve their problems or achieve their objectives, the methods of organization they use, and what kinds of interactions they have (p. 172). By collecting this data, a designer develops a rich picture of the end user of their product, which gives them a much stronger chance of designing something that will meet those users’ objectives.

Other user research methods have been developed to aid in the design process. Kuniavsky (2003) provides in-depth discussion of numerous methods, including focus groups, surveys, and usability studies. Kuniavsky provides detailed instructions and examples for each. Research done prior to the design phase can “focus a project early on, eliminating many wrong turns and reducing the need to ask major, fundamental questions about the product later on, when development should concentrate on honing the product’s experience, not its purpose” (Kuniavsky, p. 199). Any design would benefit from additional user research.

Once goals for the software have been established, using personas as a way to help the design process stay focused on those user goals. Personas are brief descriptions of fictitious individuals who represent users of an intended design. Personas can be used to create scenarios by which designs can be created to help those personas achieve their goals (Garrett, 2011). Although, as Krug (2005) asserts, “there is no Average User” (p. 128), personas can help provide a guide to designers and developers to help them understand the product user and his or her goals. “Almost every aspect of a well-developed persona can be traced back to a user statement or behavior” (Cooper et al., 2007, p. 81). As developers and designers rely on these models, they

“become much more interested in creating a product that will give this person a satisfying experience” (p. 81). The authors suggested this attention to the end user’s goals results in a superior design.

User research builds the necessary data to guide the creation of an interaction framework that supports the rest of the design. Cooper et al. (2007) suggest that designers often start designing interfaces for specific interactions too early in the process, which can “get in the way of effectively designing a comprehensive framework that the rest of the product’s behaviors can fit within” (p. 126). They said a design framework provides a foundation for formulating specific designs at a more granular level. The output of this design phase is a rough prototype that can be tested and refined before moving into a final design phase.

Learner analysis has been a key part of ISD, but it might not fully address the needs of an interface design for e-learning, especially if it is focused on the learning explicitly to the exclusion of the delivery mechanism. As suggested by Peters (2014), instructional designers are focusing on learning goals, not on interface interactions. Learning goals might not equate directly to user goals within an application. It is possible that the user research process espoused by the UX design authors above could inform instructional designers in the e-learning field. It could help them consider an additional aspect of design not currently within their frame of reference.

Usability engineering. While the UX design process aims to create a usable product, no design is perfect on first iteration. Design feedback from users is paramount to continual progress of the design. Perhaps the most well-known research practice used to assist in the design process is the usability study. Usability studies are extensively used in the web-design and development process. As Krug (Krug, 2005) suggests, “The point of testing is not to prove

or disprove something. It's to inform your judgment" (p. 135). In usability testing, a design at some stage of development is put in front of someone who is a member of the target audience of the design. A moderator guides the participant through a series of tasks that the design is meant to allow them to achieve. Designers watch as the user attempts to do the tasks laid out for them. Inevitably, the designers will find flaws in their designs that can be quickly fixed, improving the end product. Even with the help of interface guidelines, information architecture, and aesthetic principles, usability of an interface really comes down to the specific user of specific software. Krug says, "It's not productive to ask questions like 'Do most people like pulldown menus?' The right kind of question to ask is 'Does this pulldown, with these items and this wording in this context on this page create a good experience for most people who are likely to use this site?'" (p. 129). Krug goes on to say that usability testing is the best way to find out what works in the specific scenario, which will guide improvements to the design. The more designers see their designs in the hands of intended users, the more they recognize deficiencies and can correct them.

Summary of UX Concerns

The foregoing section was a review of some of the foundational elements of a user experience design process. It presented and described the practices of information architecture, visual design, interaction design, user research, and usability engineering. Through this review, I also attempted to make connections between these UX design practices and the practices of instructional design. The final section of this literature review will address the current state of research connecting e-learning and UX design.

State of Research Connection Between UX and E-learning

To further illuminate any existing connection between e-learning and UX design, I performed a series of searches on Google Scholar. First, I performed a general search of the terms “UX,” “user experience,” and “e-learning.” Next, I searched for the terms of the individual components of a user experience design (“information architecture,” “interaction design,” “visual design,” “user research,” and “usability engineering”) to see if there might be relevant existing literature connections. The following sections discuss the literature based on these searches.

My first search used the terms “UX,” “user experience design” and “e-learning.” Because so much of user experience design has emerged since the turn of the century, I limited the search to articles published since the year 2000. The search yielded 103 results. To further narrow this result set, I reviewed titles and summaries of the articles seeking those discussing the design process specifically.

Many of the articles focused on evaluating the user experience design of websites or web 2.0 technologies (e.g. blogs or learning management systems) with an educational purpose (Millard, Borthwick, Howard, McSweeney, & Hargood, 2013; Walker, Prytherch, & Turner, 2013; Zhang, 2013). Similarly, there were a number of articles addressing the UX design of applications created for special education needs (Borgia, Bianchini, & De Marsico, 2014; González et al., 2013; Rubio, Navarro, & Montero, 2014). Treviranus (2009) discussed the pioneering of user experience design approaches for distributed environments.

A few books also appeared in the search. Udell (2014), in a chapter discussing mobile learning platforms, suggested user experience design skills are a new need for e-learning designers. “As new technologies, processes, and platforms are needed for mobile learning

creation,” he said, “it’s clear that we need to reexamine the roles and skills we have represented on our teams and find where we may have gaps” (p. 210). User experience skills are highlighted as areas for improvement. Another book (Peters, 2014) contains a strong call for incorporation of UX principles into instructional design. Peters introduced the concept of learner experience design and illustrates the connections between e-learning design and the practice of UX. She made a call for a new discipline at the juncture of these two fields.

It seems that recent publications have made it clear that there is a recognized connection between UX design and e-learning. It seems also apparent that perhaps the connection, especially as it relates to the skills involved with UX design, is not ubiquitous among e-learning designers. There is still a need to understand how much e-learning designers know about UX concepts. To further illustrate this, the following sections expound on the state of literature with regards to the building blocks of user experience discussed above.

Information architecture. A search on Google Scholar with the search terms “e-learning” and “information architecture” returned more than 2,000 results. On closer inspection, it seemed that many of the articles had mentioned information architecture only in passing rather than being the primary focus of the article. This suggests that information architecture is certainly a term being used within the field, but questions remain as to whether e-learning designers have a shared understanding of the term’s meaning and whether there is an established information architecture practice within the field.

To hone in on the connection between e-learning and information architecture, I performed another search on the terms “e-learning” and “information architecture” but limited the results to journals with “e-learning” in the journal name. This returned 67 results. Reviewing this limited set of results revealed a clearer picture. Several articles discussing the

practical aspect of e-learning design suggested information architecture as part of a successful e-learning design (Hauck, 2008; Lee & Dron, 2008; Travis, 2008). Morville and Rosenfeldt's (2007) seminal book on information architecture was cited numerous times among the results of this search. This literature indicates that information architecture, while deemed important within the e-learning field, is perhaps assumed to be a fundamental understanding of e-learning design practitioners. Yet, from what was reviewed, it does not appear clear whether or not practitioners have more than cursory understanding of the practices and skills of information architecture.

To see if I could find a stronger representation of information architecture in the e-learning field, I performed another search for the terms "e-learning" and "information architecture," but this time limited the search to the title of the article. This returned four results (Chen & Lin, 2014; Siqueira, Braz, & Melo, 2007; Truyen, Van Rentergem, & Icto, 2005; Zhan, Liang, & Gu, 2013). One of these articles (Truyen et al.) was addressing the architecture of an information system, rather than information architecture, per se, as defined within this document. Of the other three articles, one assessed the influence a digital library's information architecture had on the learning performance of students using the library in the context of e-learning (Chen & Lin, 2014), another proposed activity theory as a framework for creating an information architecture for an e-learning system (Zhan et al., 2013), and the third proposed a method of creating an information architecture for e-learning using data warehousing as structural guide (Siqueira et al., 2007). From these articles, it appears information architecture might be penetrating more deeply into the e-learning field, but this is a very small set of articles addressing the subject. There still appears to be value in trying to understand the extent to which

information architecture, in the context of overall user experience design, is understood or practiced among e-learning designers.

Interaction design. An initial Google Scholar search of “e-learning” and “interaction design” since 2000 returned more than 6,000 results. Initial review of this list among the most relevant results suggested the connotation of interaction design within the e-learning field might have been slightly different than the definition used for this project. For example, Ravenscroft (2003) reviewed “fifty years of research in e-learning interaction design” (p. 4), which covers many theoretical approaches to e-learning pedagogy. There is no explicit definition of interaction design within the article. It is, perhaps, assumed to be a self-explanatory term. However, given the focus of the article on theoretical underpinnings of instructional theory, his discussion of examples of “interaction design” seemed more oriented around the learning interaction as opposed to the software interaction. This might be a subtle difference, but has implications for how interaction design is approached from the UX perspective.

With this difference in mind, the next search performed was to search Google Scholar for articles after 2007. This year was chosen to place the articles after the publication of the third edition of Cooper, Reimann, and Cronin’s (2007) seminal work on interaction design, which took for its sub-title that year *The Essentials of Interaction Design*. This subtitle superseded a title from previous editions using the term *interface design*. Additionally, the search was limited to having the keywords in the title. This search returned eight results.

Each of the results of this search was from Chinese research or educational organizations with limited English access. Only abstracts were available to me. From the abstracts, there appeared to be confirmatory evidence of the “ambiguous understanding of interaction design” (n.p.) as suggested by Yanjun and Shaoqing (2012), which they considered one of the “most

important research fields of e-learning” (n.p.). Other results appeared to be more focused on pedagogy, per se, (Wu & Shi, 2009) while three of the results of this search were not relevant to the subject of interaction design. Two of the results ended up linking to the same article addressing the interaction design of a museum installation that used eye-tracking as part of the interaction (Jingyan, Chensheng, Yanjun, & Yan, 2009).

To gather clarity and broaden results, another search was performed that included the same search terms, but limited results to articles published in journals with the term e-learning in the title which had been published in or after 2007. This returned 167 articles. A manual review of the titles within this result set resulted in a subset of 22 articles considered pertinent for closer examination. The articles not selected for additional review appeared to either (a) only mention information architecture in their reference list or (b) mention information architecture only in passing or tangentially.

Of the 22 articles reviewed, two stand out as most relevant (Kirschner, Strijbos, Kreijns, & Beers, 2004; Kirschner, 2004). Kirschner makes a call for a new design approach to e-learning design and proposes “interaction design” as the solution. He pits interaction design against the traditional, prescriptive instructional systems design approach as well as a “predetermined usability” focus of software design.

For Kirschner (2004), it appears that interaction design encompasses many of the attributes this paper aligns with user experience. Rather than being a subset of user experience, interaction design, according to Kirschner, is essentially equated with the UX design process. Kirschner included usability, usefulness, aesthetics, and emotion as attributes of interaction design and suggested “user experience” as the “ultimate goal of interaction design” (p. 42).

Kirschner, et al., (2004) followed up with a discussion of implementing interaction design within the context of an online collaborative learning environment. Their discussion of interaction design is very early in the life of the interaction design discipline. They acknowledged there was “no commonly agreed on definition and exact scope” (p. 51) of interaction design, but cited a definition as “a discipline dedicated to define the behavior of artifacts, environments, and systems (i.e., products)” (p. 52). They proposed a six-step interaction design process that includes steps for (a) observing intended audience to determine what students do in their current interactions with technologies, (b) determining what needs to be provided to students to support their learning and objectives, (c) accounting for learning, environmental, social, and other constraints as well as existing conventions that could be leveraged, (d) determining learners’ perceptions of the support they received and performing iterative design and research, (e) following up with users to watch and understand how the support is used, and (f) determining what has been learned. This pattern parallels the aspects of UX design of user research (a & d), interaction design (b, c & d), visual design (c), and usability engineering (e & f).

There appears to be a strong connection between this interpretation of interaction design and the discipline of UX design. It also had a fairly high impact on the e-learning design field. Google Scholar returned an index of more than 200 articles citing Kirschner, et al. (2004). A keyword search within these articles reveals an additional 30 articles containing the term *interaction design*. The additional 30 articles did not address design per se, but rather referenced the concept of interaction design in the context of other research questions.

What seems apparent from this review of interaction design within the e-learning literature is that, while interaction design has made some headway into e-learning design, there

have been no studies investigating the actual practice of interaction design by e-learning designers in the wild, so to speak.

Visual design. One area I felt likely would be saturated and difficult to tease out within the e-learning design literature would be the aspect of visual design. Initial searches with the key terms again found thousands of articles. I added “user experience” to the other key terms searched (“visual design” and “e-learning”) and also limited the search to articles published since the year 2000. The new result set was just over 300 articles. Limiting the search to “e-learning” and “visual design” just in the title further reduced the result set to eight articles. Two of these articles were trade publications. Two of the listed articles were indexed citations with no connected document, three were in foreign languages, and the final article was a presentation from the proceedings of a conference. These were of little value to this literature search.

A manual scan of titles and descriptions of other articles within the larger pools of search results showed there were many articles connecting visual design to e-learning design, yet no articles appeared to be able to help illuminate the questions of how practicing e-learning designers perceive and approach the visual design of their work.

Usability engineering. Usability in e-learning appears to suffer no lack of attention and awareness. Similar to the other areas of user experience reviewed by this paper, the initial search for “usability engineering” and “e-learning” since the year 2000 returned a result set of about 2,500 articles. The difference in this case, however, was that virtually every article in the list was directly relevant to this paper in that it appeared that most of the articles either reported on a usability evaluation of an e-learning application or made recommendations for more effective usability evaluations, either through heuristic review or usability study (Ardito, Costabile et al., 2004a; Ardito, De Marsico et al., 2004; Ardito et al., 2005; Chai, Zhao, & Zhu, 2008; Costabile,

Marsico, Lanzilotti, Plantamura, & Roselli, 2005; Giannakos, 2010; Granić, 2008; Ssemugabi & De Villiers, 2007; Zaharias & Poylymenakou, 2009). To reduce the breadth of this search and to seek more directly relevant literature, I selected articles from this set that used the search terms in the title only. The reduced result set of 179 articles was reviewed manually to see if any articles investigated the perception or understanding of e-learning design practitioners directly, with e-learning designers being the unit of analysis. None of these articles fit these criteria.

Summary

This literature review sought to determine the extent to which user experience design and UX subdisciplines are extant within the e-learning design literature. But, more importantly, it also aimed to determine whether design practitioners had been studied to understand their perception and understanding of UX and its subdisciplines in their daily work. I have assumed the literature is predominantly written, submitted, and reviewed by scholars. That being the case, it is difficult to determine from the literature how pervasive concepts presented in the literature are within the practitioner field. Have the ideas presented in the literature trickled down through courses and independent study of students who then turn to the field for their careers as e-learning designers? This review of the literature suggests it is likely that at least some of the terms and concepts of user experience design and its subdisciplines have been in the lexicon, if not the practice, of e-learning designers. However, it is almost impossible to guess, based on the content of the literature, how influential some of these practices and ideas are among e-learning designers. Therefore, this study will launch an initial investigation to shed light on the nature of the relationship.

Chapter 3: Methods

As recommended by Yanchar and Williams (2006), I begin this methods section with a discussion of “assumptions, values, and moral commitments that have practical and theoretical consequences” (p. 9) to this work. The objectives of this discussion are to clarify my position as a researcher, add clarity to the objectives of this research project, to acknowledge the theoretical nature of this work and provide a rationale for the methods proposed for this research project.

My outlook is that there is a general truth, but that it can only be approached approximately through research. Triangulation and multiple perspectives help bring us closer to the truth. Yet, humans are agents with power to act in the world. Individual actions are largely unpredictable. Although there tend to be observable trends in behavior across large groups, no amount of understanding of trends can truly illuminate an individual’s experience. Additionally, I believe humans are empathetic. Our powers to empathize make the study of individuals meaningful to others through our ability to approximate others’ experiences through our own feelings and thoughts.

Approach

In light of the philosophical stance outlined above, I have chosen a hermeneutic phenomenological approach for this project. Three primary reasons prompted the selection of this approach. First, the hermeneutic framework assumes the researcher has a basic understanding of the phenomenon at hand (Packer, 1985). Second, the hermeneutic phenomenological approach embraces the ambiguities of human activity and recognizes that understanding can only be approached through a systematic and coherent investigation that focuses on the human interaction. In fact, the researcher is acknowledged to be a part of the interaction, “embedded and essential to the interpretive process” (Laverly, 2003, p. 28). Third,

in the hermeneutic paradigm, the object of study is “what people actually do when they are engaged in the everyday practical tasks of life rather than in the detached contemplation that characterizes pencil-and-paper tasks and most interview situations” (Packer, p. 1086). My role as director of user experience for a small software agency and a PhD student studying instructional design has given me a unique, insider perspective on the subject that fits well with the assumption of the framework that the researcher has a basic understanding of the phenomenon. Additionally, my belief that it is virtually impossible to be truly objective and able to “bracket” my assumptions fits well with the hermeneutic tradition that acknowledges and even embraces the impact of the researcher on the research scenario. Lastly, this research will attempt to capture both participants’ perception of their own actions as well as the actions themselves through a review of designed materials. While not approaching a true ethnographic approach, this step of research attempts to bring the research outside of the respondents’ minds and into their lived experience. Thus, a hermeneutic phenomenological approach seems well suited for this project.

The hermeneutic tradition has been called a “methodology” rather than a “method” (Lavery, 2003, p. 28). It is not a set of rules to follow, but rather “a creative approach to understanding, using whatever approaches are responsive to particular questions and subject matter” (Lavery, p. 28). The data-gathering procedure outlined here sought the best way to gather information that would inform and flesh out answers to the questions of interest. It is acknowledged that the answers are “necessarily partial (in both senses of the word: incomplete and with its own point of view)” (Packer, 1985, p. 1089). Yet, the objective is to add as much clarity and interpretation as possible that will result in greater understanding of the phenomenon of interest. The following sections explain the procedures followed to obtain sufficient data to

make a reasoned and detailed analysis of the data that could inform and explicate the questions stated above. With this in mind, this section outlines the approach taken for this study. I will first explain the sampling procedure followed by a discussion of the data-gathering process. Finally, I will outline the process followed to analyze the collected data.

Participant Selection

Participants were chosen through a mixed purposeful sampling process aimed at creating maximum variation (Patton, 1990) through which I solicited e-learning designers from broad educational and professional backgrounds. The initial request for participation was sent through my educational and professional networks seeking practicing, professional e-learning designers (criterion sampling) (Patton). The objective was to find participants through this network who had differing training backgrounds and varied levels of work experience. Participants were solicited without offer of compensation. This initial request garnered several willing volunteers from whom five were chosen to represent varied backgrounds and experience levels in e-learning design, based on:

- years of experience
- training type
- training institution
- gender
- current work location
- current work type (What types of products are they designing?)

The primary objective in diversifying the initial selection was to avoid a particular location, gender, or background bias that would immediately limit the impact of the results of this investigation. This initial group included four women and one man.

As the initial interviews took place, I began to feel there were distinct types of experiences represented by the participants that warranted additional investigation. I felt it was important to gather more data by using confirming or disconfirming sampling (Patton, 1990) to seek more participants who could help fill gaps in my understanding and in the information being gleaned from the initial participants. I was able to solicit additional volunteers through the Instructional Technology (IT) Forum hosted by the Association for Educational Communications and Technology (AECT). From the handful of volunteers who responded to the request for participants, an additional four were chosen to represent both a broader set of practice as well as educational experience and years in the field. As the interviews with these additional participants continued, I began to notice data saturation in topics and themes. In all, nine participants provided sufficient coverage of the data for the scope of this initial and preliminary investigation.

Description of the Participants

Of the nine total participants, five were women and four were men. Five participants either had earned or were working toward an advanced degree in the fields of instructional design or instructional technology (two PhD, three master's degrees). These degrees came from five different institutions in three separate states, including one online degree program. Of the other four participants, two were in process of working on obtaining master's degrees in fields not directly related to instructional or e-learning design (a teaching licensure program and one in organizational management) and one had an advanced degree in language studies. All participants had an undergraduate degree in another field (examples include English; English literature; library science; information technology; education; human development and family studies; speech communication, business management and organizational development; and art).

Current employment for participants included instructional technology consulting, instructional design and teaching for an online high school, instructional design for a university independent study program, and in-house instructional designers/developers. Each participant self-identified as an e-learning designer based on the definition provided in chapter one of this document, although at least one participant acknowledged that he did not design for e-learning exclusively. Participants had also had professional experience in other fields, including the following occupations: high school teacher (not online), software developer and technical lead for software firm, technical writer, university professor, curriculum writer, instructional designer and consultant. The level of experience in e-learning design ranged from approximately five months for the least experienced participant to more than 15 years in the field for the two most experienced participants. Most of the participants fell within the two- to five-year range of direct professional instructional design experience. The participants will be referred to with pseudonyms in this report to protect their anonymity.

Data-gathering Procedures

Data were gathered through a series of two interviews with each participant and a follow-up email exchange with each participant. This approach was patterned after research conducted by Yanchar, South, Williams, Allen and Wilson (2010). Each interview was aimed at gradually growing more focused on the subject matter of user experience design. Each interview was performed at the participants' place of work, when possible. Several participants lived out of state or had other logistical concerns, which made it impossible to perform some of the interviews in person. To interview those participants who were not able to meet in person, I used video conferencing software (Google Hangouts or Skype) to attempt virtual face-to-face interviews. In the case of a couple of the interviews, technological difficulties made it necessary

to conduct the interview over the phone. With some participants, the first interview was performed in person while the second interview was conducted over the Internet through Google Hangouts. While in-person interviews were the preferred method, there did not appear to be any difference in rapport or the ability to collect data effectively through mediated channels.

The first interview broadly discussed the designer's lived experience as an e-learning designer. The interview was semi-structured following a set of interview questions that was prepared for the purpose of guiding the interview (see Appendix A). The guide consisted of a series of questions and probes aimed at uncovering information relevant to participants' experience with UX and instructional design. Not all questions listed were asked of each interviewee. Additional questions also emerged in the process of the interview that led the discussion into unanticipated territory. Although the interview guide provided some structure, the interview itself was fluid, following thoughts and new information that helped inform the questions at the foundation of this study.

The initial interview also provided a launching point for me to understand the context of design for each particular participant. User experience design was generally not addressed or defined explicitly for the participant at this stage. The intent was to allow the interviewee to discuss their design process to see if they mention or describe UX design concepts or tools—either directly or indirectly—without any prompting by me. This discussion provided a foundational framework of understanding, allowing for further, deeper exploration in subsequent interviews. At the conclusion of the first interview, I described the nature of the second interview and requested a copy of a designed artifact along with any ancillary design process documents the participant was willing to share. In most cases, participants were not free to share a design fully with me, due to proprietary concerns. Rather, I had to wait and view the product

with them during the second interview. For those who shared design artifacts, I reviewed the artifacts to understand them better and see what areas of the design might be applicable to a UX-design-specific focus.

During the second interview, I asked participants to walk through the process by which the participant designed the specific artifact I had requested during the previous interview. Through this second interview I tried to have the participant describe as much of their actual design process they could remember about the designing of the provided artifact. With the artifact at the center of the discussion, I was able to delve into the designer's practical approach to e-learning design. As appropriate, I discussed their understanding of UX principles and their experience with using them or not and how they might apply to their work.

After the findings for this paper were compiled, a draft of the findings was sent to each interview participant. Participants were asked to review all quotes attributed to them to ensure that their thoughts were represented accurately. Each was also invited to comment on any of the themes or ideas represented in the findings document. This member check of the data provided an additional form of triangulation to help bolster the validity of this study. Of the nine interviewees, eight responded. Participants offered only minor corrections to quotes and a couple of clarifications, each of which has been corrected in the findings section or addressed in the discussion section.

Data Analysis

This study followed a pattern of analysis pioneered by Yanchar et al. (2010) and described in more detail in South (2008). Their process consists of a series of steps: (a) holistic reading, (b) meaning condensation, (c) thematization, (d) inter-theme exploration, (e) thematic amplification, (f) holistic amplification, and (g) coherence assessment. *Holistic reading* consists

of reading the full text transcripts to gain a “general sense of the whole” (South, p. 37). *Meaning condensation* begins a process of reduction that captures what the researchers called *meaning units* that would be signaled by shifts in topics or focus in the conversation. These meaning units are gathered from across all transcripts and grouped into categories meaningful to the purpose of the research (or themes) through the process of *thematization*. These themes are not a complete map of the phenomenon of interest, but rather provide insight into individual attributes or aspects of the phenomenon. Thematization is followed by a phase of comparing and contrasting themes called *inter-theme exploration*. This process is meant to find connections between themes that help us understand the context for those themes. This process might also result in broader categories, or *meta-themes* of highly related themes. *Thematic amplification* aims to expand on the themes through considering the gestalt of the whole phenomenon. It allows the researcher to consider the themes from the broader context of the full phenomenon, to tease out a richer and fuller analysis of each theme. The reverse process of *holistic amplification* turns the analysis back on the whole phenomenon and prompts the researcher to ask how the understanding each theme informs our understanding of the whole. What is illuminated about the phenomenon through a deeper understanding of each theme? South suggests there is a particularly strong synchronous interplay between the thematic and holistic amplification processes (p. 37). Finally, the analysis concluded with a *coherence assessment* in which the researcher reviews findings to determine if they are coherent and intelligible. This process is designed to help the researcher determine if all aspects of the phenomenon are adequately addressed based on the questions of interest. Internal contradictions were addressed and all themes and results have been amalgamated into a “meaningful and coherent conclusion” (South, p. 38). These steps do not represent a discrete, linear analysis process, but rather involve a lot of back-and-forth and

concurrent integration. As new insights occurred, there was a need to return to previous steps to address the emerging information. The end result of this process should be a conclusion that is a clear, rich and meaningful analysis of the phenomenon of interest.

Trustworthiness

As recommended by Lincoln and Guba, (1985) I endeavored to create trustworthy results through the use of qualitative research guidelines developed for that purpose. The objective was to treat the data in a fair way. Some of the recommendations I used include triangulation of sources, peer debriefing, member checking, negative case analysis and dependability and confirmability audits. The structure of the interviews, with two interviews per participant followed by a member check interaction by email, allowed for a triangulation of data over time. Participants were given the opportunity to clarify, correct, or expand on earlier discussions. The final interaction with participants consisted of an email containing the analysis and findings section, which provided participants an opportunity to review the analysis, including quotes attributed to them. Additionally, after conducting the initial interviews, I was able to probe for negative case analysis with subsequent interviewees. I maintained a reflexive journal of memos of my thoughts and ideas generated through the analysis process. I also recorded and aggregated the data, field notes, process notes and other ancillary products of the analysis. Members of my committee were invited to review this audit trail, allowing them to raise any concerns they might have about the analysis process or results (see Appendix B).

Limitations

The study's purpose was exploratory in nature and, as such, the questions and interview process still managed to result in interesting and potentially useful findings, but there was a potential for greater depth in the questioning that was possibly missed through the interview

procedure. As interviews progressed, I relied on a process whereby participants first responded to open-ended questions, telling me of their experience as designers. Latter interviews focused on using artifacts that participants created in order to probe their intentions for specific design decisions. As noted in Pichert and Anderson's (1977) classic work on memory through the case of the homebuyer and the burglar, this focus may have simultaneously allowed for a more heightened focused discussion, while ignoring other, also interesting, observations.

Additionally, the sample for this study included, with only one exception, participants who had obtained, or were in process of obtaining, a graduate-level degree. While this did not seem a reason to disqualify individuals from participating in this research, there is a potential for bias by having this similarity across a large majority of the participants. Some respondents alluded to working in conditions where their colleagues were not adequately trained in instructional design. This view might be tainted based on the participants' educational status. Additional research examining the experiences of the purportedly untrained contingent of designers would be useful as a comparative case to further clarify the design experience of e-learning designers and their understanding of UX design.

Another limitation is the definition of UX used in this study. User experience itself is a somewhat nebulous field of endeavor. It is not likely that all UX designers would perform their work in the same way, following the same steps and guidelines. By putting a box around a specific definition of UX, I have inevitably excluded potential practices that would be considered by some to be UX design. Similarly, by selecting specific seminal works of UX authors to use as a means of assessing the extent to which participants were aware of UX, I have placed a boundary around what constitutes one aspect of UX training or awareness. My intent during the interview process was to cast as wide a net as necessary to tease out understanding of the UX

field; however, this approach might have tainted the results if there are other articles or trainings participants had experience with that did not emerge from the interview. I feel confident that the findings represented here are a faithful representation of UX understanding among participants, yet there remains a risk that this might not be the case.

Chapter 4: Findings

Numerous themes emerged from the analysis of the 18 interviews conducted with the 9 participants. This findings section will elaborate on the four most relevant themes, including providing evidence and examples. Supporting evidence will come in the form of quotations from participants. Some quotations have been edited for clarity. It should be noted that pseudonyms have been used in this report to protect participants' anonymity. This presentation of the findings does not contain much interpretation of the themes. It simply seeks to introduce and explain the themes. Additional interpretive commentary about each theme will be provided in the discussion and conclusion sections that follow.

Theme One: Lack of Awareness of UX

Generally speaking, UX was not a field familiar to participants. Some individual activities performed by UX practitioners in the field or terms related to the discipline were familiar to the interviewed e-learning designers, but as a practice or field of knowledge, there was (for all but one or two participants), at best, rudimentary understanding of the UX field as a whole. Only one participant had read some of the more prominent works of the discipline, making user experience design an area of personal, independent study. No participant had been exposed to user experience design explicitly as part of their formal training for their current career.

Basic general awareness. In spite of the lack of overt knowledge of UX, most participants could respond to UX with a general sense of understanding. They could not, however, point to any specific training or interaction with seminal literature in the field. For example, Penelope indicated familiarity with user experience terms, but not to the explicit adoption of those activities in her design work.

INTERVIEWER: ... by user experience design, I describe it as the use of information architecture, visual design, usability research or user research and interaction design. So for any of those terms do you feel like you are familiar with them or are they new terms to you?

PENELOPE: I would say that I am familiar with them. I wouldn't say that anything in my design that would approach with: 'Now I need to think of these things formulaically', no I don't think I approach it that way.

Similarly, Charlotte indicated she had some exposure to UX concepts, but that they were not part of her academic training.

CHARLOTTE: I have dabbled in some of the ideas about it but I am not too familiar about it from an academic perspective.

Interestingly, Charlotte worked at an organization that had a UX department. Her instructional design department never collaborated with them on training—the UX team was focused on the company's products and website.

Nancy and Brandon also both indicated that they had not read any of the texts presented in the interview.

INTERVIEWER: Have you read any other books or anything about user experience design that you could speak to?

NANCY: Nope not really, not book level. As I said, I just mainly Google fast and fun articles on things.

On the other hand, Brandon indicated he had some familiarity with the general concept of user experience design.

BRANDON: I am familiar with the concept of UX and I view it as attempting to take the user's entire experience of your product into account during your design process—not just of what you're putting in front of them, but how it might potentially affect them and/or interact with them from the moment it enters their consciousness until the moment it fades from same. To me it's taking a holistic approach to your product and how it integrates (or doesn't) into a person's life, versus viewing it as primarily a means to an end.

Very limited exposure to UX. For others, UX design was completely new. When Shawn was introduced to the term he responded simply, “I don't think I have necessarily heard that exactly.”

Further discussion about the subdisciplines indicated that he was generally unfamiliar with the discipline. As we talked, he indicated he was “piecing it together” and began to share how he felt he was practicing user experience in his work.

SHAWN: One thing in regards to our views of the user experience is we, at the end of every class and actually during the classes, we are constantly looking at reports. So like, checking what assignments had the poorest activity on it or what assignments had the least amount of clicks or completion and then we actually write up a quantitative and qualitative report that we submit every quarter for our course. So, that report is something that's kind of nice in regards to seeing the users' experience through the data. . . . Then I go in and improve my course from that data and also from that feedback that I got from students.

This suggests a similarity of concerns between e-learning design and user experience design, but Shawn had not been exposed to the field as a practice prior to this interview.

Markus also had not been exposed to some of the seminal works of the user experience field. As a self-taught web designer, he had taught web design for a time at a local college.

While teaching, he had potentially been exposed to user experience design concepts:

MARKUS: Back when I was teaching I did have a book, I couldn't even begin to tell you what it was called but it was a really good resource for that.

But, he also said he had only limited exposure to the subdisciplines of user experience.

When asked about how much user experience concepts were discussed within his current work experience he responded:

MARKUS: Not regularly. We have discussed, once or twice we have done that in the last five years I have been on the team. One of those is after I went to one of the local ASTD and they had a session on design and I brought back a few of the ideas from that. Other than that, no.

Greater familiarity with UX. A couple of participants had what seemed to be a closer familiarity with the ideas of user experience design, with various levels of exposure. For example, Patrick and Brandon were aware of Jakob Nielsen, one of the pioneers of usability engineering perhaps noted most for his research-derived usability heuristics (Nielsen, 1994), but his usability heuristics were not something either could reproduce from memory.

PATRICK: I have used [Jakob Nielsen's] website for inspiration and reference and stuff like that but I don't know specifically. If you said what that heuristic was, it might sound familiar but I couldn't tell you off the top of my head.

Patrick had also heard of a few of the UX related books discussed as part of the interview process and had read from two of them. Patrick also seemed to have a better intuitive sense of the scope of user experience design as a field.

PATRICK: I would say when I hear UX I think about user interface kind of stuff but I feel like user experience would be a broader thing. Like a more holistic thing, how do people feel when they are doing this thing? What kind of path do they take? It is not just about usability.

One of the organizations where Patrick worked was concerned with the “learner experience” with the products they created.

PATRICK: We talked about learner experience. I feel that in the sense that we used that, I would say that it was similar to user experience in that it was like what was the entire experience the learner is going to have with our training.

The outlier in this group of participants was Katrina, who had read several of the seminal works of user experience design and had read widely beyond the list presented to her in the interview. Katrina had a PhD from a department in the field of instructional technology at a Western state university and considered keeping current an important part of her career.

KATRINA: To me professional development is very critical. As an academic, you die if you don't do conferences and trainings and read broadly because you have got to stay current.

Usability engineering as exception. Another exception to the general lack of awareness of user experience was in the subdiscipline of usability testing. A few more participants were aware of usability testing (referred to as user testing in some cases) and expressed belief in its value; however, only Patrick indicated that usability studies were part of the design process at his current workplace. One of the companies Patrick worked for implemented usability studies regularly into their design and development process, following specific guidelines from Krug (2009).

PATRICK: It is more formal . . . it is a more formal part of our process where I am now. It is definitely something that we consider and we conduct regular usability tests and it is something we think about and we talk about.

Nancy, who had had experience observing usability studies early in her career in a different field, suggested usability studies were not done at her current place of employment because the process does not fit their timeline:

NANCY: We don't really do a behind the glass mirror type of study because it just takes too long to [design and develop] a course.

Similarly, Katrina indicated she would rather spend her time and resources on performing a more thorough analysis of the problem than to test her solution on representative members of the intended audience of her training.

KATRINA: If I could do great user interface testing I would, but the return on investment for it is not as dramatic as understanding the problem and making sure that I have actually got performance to the level that I want it to. So I would sacrifice user interface testing in a heartbeat because I can make it work with cheap second-best options.

Analysis and user research. As a final note about participants' awareness of user experience design principles and concepts, user research in a discovery or pre-design capacity was often neglected. People seemed very attuned to at least a perceived value of engaging in an initial effort to understand the learner by actually interacting with the intended audience but, due to constraints, user research increasingly did not happen. There was often an analysis stage, but the analysis would include interviews with client representatives or meetings with subject matter experts. The analysis process less frequently involved observation of, or interaction with, the

actual intended audience of the course or training. For example, Charlotte lamented the lack of access to audience in her process.

INTERVIEWER: To what extent are your audience members consulted or used in the design and development process?

CHARLOTTE: None, which is sad. We are focusing to get them more integrated into that process but none at this time.

Similarly, Katrina suggested that lack of an analysis phase is detrimental to instructional design outcomes.

KATRINA: One of the problems I see in the field generally is that instructional designers are very quick to take the client's word for what they think the problem is. There needs to be data, there needs to be verification, we need to make sure we really understand it. If the client misunderstands their own problem and you design a solution for their misunderstanding you will never see performance change.

The data collected from these participants revealed a predominant lack of a full understanding (and even awareness in some cases) of user experience design as a field or many of its subdisciplines. However, as will be discussed below, there are many similarities in the overall concerns of UX designers and those expressed throughout the interviews by these e-learning designers. First, we will discuss the second theme emerging from this investigation, which suggests there are many hats that contemporary e-learning designers feel they must wear.

Theme Two: E-learning Designer's Role Spans Range of Perceived Responsibilities

One of the implications of UX as defined and discussed by Garrett (2011) is the UX designer's sense of responsibility for a full product as it manifests itself in an interaction between a person and the designed experience. This interaction or experience is impacted by strategic

objectives as well as by the tactical delivery mechanisms of the experience, that is, the interface level interactions, visual design, and auditory cues. UX design practices are meant to provide a framework to guide designers as they consider the many design decisions across the layers of the experience they are designing.

As the participants of this study discussed their duties and the practice of design within their organizations, there seemed to emerge a concern with their assigned or assumed responsibilities and how those responsibilities impacted their ability to perform their role as an e-learning designer. On one side, at least one designer wanted to focus primarily on the instructional design, per se, of the e-learning experience, leaving interface-level concerns to be addressed by a designated graphic designer or developer. On the other side, some participants either enjoyed or were required to be responsible for both the instructional design as well as visual design and interface development. As an e-learning designer's responsibility increases for the full depth of the overall designed experience, rather than just a subset of the design, the more relevant learning UX design practices might be to him or her. This theme explores some of the overall perceptions of e-learning designers' responsibilities as discussed by the participants of this study.

The practice of e-learning itself covers a very broad range of applications. As defined for this project, e-learning "covers computer-based learning, web-based learning, and the use of mobile technologies; it includes virtual classrooms and digital collaboration and uses" (Eklund et al., 2003, p. 3). For example, high schools and colleges have started to port their traditional courses to online formats. Corporations have begun to adopt self-guided or facilitated online training. Independent companies like Lynda.com and Coursera have developed their own online training businesses that cover a broad range of subject matter. The ubiquity of electronic media

has allowed e-learning to work its way into myriad learning scenarios. As indicated by Brandon, instructional designers sometimes find themselves designing across a variety of delivery media.

BRANDON: I guess you could make an argument that most everything has a component of e-learning these days. . . . I think you could make a strong argument for many of the instructor-led trainings because there is usually an electronic component to it. The reason why I bring that up is that I am not dedicated 100% to e-learning; I take whatever comes in, whatever they want to have me on.

Additionally, not only do e-learning designers often find themselves across myriad presentation forms, they also are often required to work with huge amounts of data to formulate a delivery solution for myriad data types and massive amounts of information—often outside their area of expertise. Even more, some participants reported finding themselves responsible for the development of the actual course itself—the interface-level design and development—rather than dealing strictly with instructional concepts. Interaction design practices as a subset of UX design have the potential guide e-learning designers when they find themselves faced with the interface-level design decisions. UX practices could potentially help an e-learning designer address the need to design for multiple formats and a variety of media.

Division of responsibility. There is a spectrum of how much e-learning designers are required to step into a development role that requires them to address interaction design concerns. Different companies structure their businesses differently with regard to how they accommodate the design process. Some have a single designer tackle instructional design, visual design, and development. Others provide specialized employees for some or all areas. The overlap of who is responsible for which part varies between organizations. For some

organizations the role of instructional designer is very distinct and separate from the development process, as Brandon explained:

BRANDON: We also have content developers and we have media developers. That means that I don't have to worry about developing the content, I never have to know the content. I don't have to touch the content. I will work through it in order to gain a feel for it but that is it. Unless I am interested in it or unless there is something particularly complex about it or whatever, I don't need to internalize it or really work with it. I need to understand how it flows and how it fits, so I go through and I will do my analysis and then I will do my design and then the content developers work together to develop a solution and I don't really play a part in that.

Similarly, one of the companies where Patrick worked had very “segmented” roles. The company where he currently works is less segmented, but still separates development from instructional design to a large extent.

PATRICK: Where I used to work, it was one role where . . . one person would be doing all of the design work and then oversee the development throughout. We would have people—part time employees, or whatever—would do a lot of the actual scripting and then we had a dedicated programming team. . . . And it is the same at my company now. We have SMEs and then we have programmers who actually build stuff and we have graphic designers who create the videos and graphics and all of that stuff. Those were definitely segmented, but at the company where I was, it was segmented even more.

Interaction design as a field, as will be discussed later, was established in response to the practice of companies that relied on software developers to create interfaces for digital products. E-learning design organizations run the same risk of creating sub-optimal interfaces if their

designers rely on software developers to create the interfaces—or even relying on an e-learning designer who has not been trained specifically in interface design. UX design could potentially provide that kind of understanding for an e-learning designer.

The design approach described by Patrick, however, was not typical for the other participants. For example, Markus and Charlotte were each responsible for both instructional design and development tasks.

INTERVIEWER: Will you describe in a general sense what it is that your current job entails now that you have been here a few months?

CHARLOTTE: Yeah, so it is a lot of different things: Project manager; kind of a liaison between this department and other departments, making sure that our department grows in reputation positively; and then, of course, designer and developer along with analysis. .

. . . It is a lot of different roles for one title.

Markus' current work environment tends to use designers to perform both design and development tasks as well. The designers work on their projects independently, with little collaboration and no real specialization on one part of the process.

MARKUS: There are about 14 of us on the team and we really don't collaborate too much on projects. Every now and then we will have maybe a couple of people on a project but it is individual work. Reviews—we try to involve at least one person on the team in review. We don't have a lot of collaboration once we get on a project.

In a previous company, however, Markus said there was more specialization by the instructional designers. He said there was more collaboration across the process at that job but that his current position is “more of a one-man-show now.” When designers become responsible for all areas of a design, their work can be overwhelming. UX design practices could potentially

provide new ways of approaching design or talking about design that would benefit the solo practitioner—exposing them to best practices in the field of software design and potentially enhancing their ability to design a more effective learning experience.

Content creation is another role that blends in with the other responsibilities of e-learning designers. Traditionally, the instructional designer receives content from a subject matter expert, but there are multiple roles now for the designer and one thing some participants said they find themselves doing is generating content.

Nancy, for example, said she had a similar experience with being responsible for the full spectrum of design and content development early in her instructional design career.

NANCY: When I was at [my previous employer], when I was getting into instructional design, that is what I did. I created the content. I wrote it and put together the questions and put together all that kind of stuff.

There seems to be a perception by some businesses that designers of e-learning should be responsible for the development of instructional material (for example, interactive training modules, videos, illustrations and graphics, as well as interface design, etc.) along with the instructional design itself. Brandon, however, suggests that as an industry instructional designers are responsible for too much of the design and development process, which he attributes to the fledgling nature of instructional design.

BRANDON: We are basically trained to be a jack-of-all-trades and do everything but I think that is because we are basically in a really immature field.

Brandon compared the field of instructional design to software development where the field has developed into specializations. Whereas the same software developers used to program the backend and frontend (or interface) of a computer application, now there are specialized

independent roles in front-end development and back-end development. He suggested instructional design should recognize there are specialized roles within the role of instructional designer.

BRANDON: We as instructional designers still think that it makes sense for one person to do it all, one person to go from soup to nuts and it doesn't make any sense. We haven't evolved, and I don't know why we haven't.

Brandon went on to suggest that instructional designers still play an advisory role in the development process, but the actual execution of the development work falls on other team members' shoulders.

BRANDON: Am I helping the developer? Absolutely. We are not limited by what I can and cannot do. I am not a visual developer, you know. I don't do graphic design. That is not my thing at all. I know what I like and I am also pretty confident that most people don't like what I like, and that is fine because I don't have to worry about it because I have a media developer who takes care of it. I don't have to worry about my grammar or the fact that I don't really like to write because I have content developers who love to write. All I have to do is structure the content, make sure that it is not going to put the learners to sleep, make sure that it is structured in a way that they can actually internalize it and hopefully transfer it and apply it on their job, and then I hand that off and they build it. They build it to my specifications, but they are the ones who get to do the actual building and I do the actual design.

An awareness of the skills and language of UX design, while not as relevant for the designer who is focused on curriculum or instructional design per se, can provide a language that could potentially help e-learning designers communicate design intent and make the hand-off

process smoother. On the other hand, Katrina said that although her primary focus is on the instruction, she enjoys participating in the development process as well.

KATRINA: Because I am a consultant I tend to be involved in all aspects of it, which I really like. I do a lot of analysis work, I do a lot of evaluation work, when I am not busy doing either one of those for different projects, then I will help out with the very granular instructional development. I will take those larger design elements; I am developing tiny units within a larger task.

The participants who designed e-learning courses for college and high school also had more ownership over the development of content, much more so for the online high school designers, because their job responsibilities include design, instruction and subject matter expertise. In the case of the college course development, though, there still was support from an editorial department and a media development department. The instructional designers were very involved with getting content into the learning management system, but editors helped refine textual content and media developers were largely responsible for the creation of visual design elements and interactive pieces.

PENELOPE: I am not that involved in actually creating or developing [interactive pieces]. [I'm] more involved in figuring out the concept and what we want it to be. . . . We have a media team, we have an art team. . . . I bring the concept to them and say build this.

On the other hand, without a supporting team of developers, the high school course designers were basically responsible for their own content and media elements. They often leverage content developed by others with a creative commons license that allows them to use it

in their courses. Shawn in particular also leveraged students to help create additional instructional material for his courses.

SHAWN: Just saying that they come up with some of the best stuff or making interactive games. Like, those are the things—animation, videos—students are so good at that stuff and they have such a good sense of what is going on in the world today and what is going on in their specific age groups' culture that they can create this wonderful stuff that I then implement in the course and it just makes the course so much cooler.

Designers' background impacts roles they can perform. With such a broad range of responsibilities, it's no wonder that some e-learning designers might seem neglected at times. It also is no wonder that e-learning designers would not be aware of other parallel fields of design, such as UX. Not only do e-learning designers lack in training in other design fields, they reportedly often lack training even in instructional design practices. A few interviewees mentioned that many of their colleagues do not have formal training in instructional design. Many people are promoted or transferred within the organization to become e-learning designers. That was the path of at least one of the interviewees.

MARKUS: Even on my team there are some folks, and, as you probably know and have experienced, a lot of people in instructional design aren't trained. They are kind of brought into the role because they are knowledgeable about the subject but when it comes to the actual designing of a subject they are lacking in that and so they will put graphics in there that have nothing at all to do with the subject.

There is a spectrum of skill across the varying iterations of the e-learning designer. Three distinct categories seem to be represented among participants: professionally trained teachers who have begun to teach online, designers who have an advanced degree in instructional design

or similar, and designers who have entered the profession without formal training in instructional design.

KATRINA: I don't know if I have mentioned this before but I have a pet peeve about working with instructional designers that are designers by assignment. They sort of used to be something else, never been properly trained to be an instructional designer. They just do instruction design and they tend to have a much narrower scope of skills and ability to write good instructional materials. It can be quite challenging when your team is made up of predominately designers by assignment. Not that instructional designers by training automatically make them great instructional designers, hardly, but they at least understand what it means to write objectives or to write good assessment questions and they are not just relying on the templates that come with Captivate or whatever software you are using.

It is interesting to note that of all the people interviewed for this study, none had chosen instructional design as their first career choice. Even those with an advanced degree in ID or similar had entered the field in a somewhat roundabout way. There appears to be no standard path to instructional design—few if any undergraduate degrees in instructional design exist, much less a degree program in e-learning design specifically. Perhaps there are programs that are beginning to teach about designing for an online learning experience in education programs.

KATRINA: Most of the people at the master's level come from somewhere else because there is no feeder degree for bachelor students for the most part. [One university] has a great distance education bachelor's degree but it is one of the few in the country that actually prepare undergraduate students to work in this field.

Katrina also reported that one client she worked with had 70 instructional designers on staff and not one of them had a degree in instructional design. It seems possible that the practice of hiring people to be instructional designers without formal training is common. With this inconsistency of background in instructional design, there are constraints to both the ability of individual designers to output consistent and effective e-learning designs as well as limits on the effectiveness of collaboration within e-learning design teams.

Participants with advanced degrees in instructional design or a similar degree reported having more formal training in various design practices than those who did not. Some had had visual and aesthetic design instruction in addition to instruction on theories and practices of instructional design, but that was not universal. For example, Charlotte indicated she felt her degree program had lacked some basics in visual design practices and tool training.

While formal education helped provide the foundation for many of the participants. A few indicated they continue their training through conferences and independent study. Many participants said they turn to colleagues for guidance on solving specific design problems. A couple of participants said they turn to the Internet and search engines to get inspiration and learn best design practices. There seemed to be no formalized design-focused training at any of the companies where participants were currently working.

Katrina also suggested visual design was one area instructional designers are not provided adequate training in it relates to instruction.

KATRINA: We are just not taught, I don't think with enough precision, as instructional designers, on how to choose or create our own graphic, to communicate the instructional intent of what we are creating.

This theme seems to suggest that, while not always the case, practicing e-learning designers frequently are responsible for interface-level design decisions. There are implications within these findings that available training has been insufficient for many practicing designers who find themselves responsible for the development of their training. Understanding UX could potentially impact these designers' ability to create better instructional experiences. This theme suggests additional connections to UX as well that will be addressed in Chapter 5 of this document.

In spite of the current state of "imprecise" instruction, e-learning designers move forward with their practice and manage to create training experiences, for better or worse. What's more, although there are general features of design that e-learning designers deem important, there is also a broad spectrum in the perception of what qualifies as good e-learning design, which will be discussed in the next section.

Theme Three: Beliefs about Characteristics of Good E-learning Design Cover a Broad Spectrum

Similar to how an e-learning designer's role is exercised in multiple ways, the designed e-learning product also seemed to be perceived with multiple lenses. As Brandon suggested, the primary goal of an e-learning designer is to navigate design constraints:

BRANDON: I say a good e-learning design is one that makes the best attempt to meet a learner's needs while staying within the constraints of the project. There are always constraints. There is budget, there is client environment, there is what technologies are available, how much deviation from tried and true does the client have appetite for?

Negotiating all of that. Those are all constraints that are placed upon your design and

you have to incorporate them. So good e-learning design is one that basically optimizes the paths navigating all of those concerns.

While designing within constraints, designers still seemed to have four distinct areas of concern that emerged from the interviews as having an impact on the quality of the designed learning experience: visual design; content organization and structure; learner engagement; and designing toward instructional goals. Each of these areas will be discussed below.

Visual design. Many participants indicated they felt a visually appealing interface was important to the quality of the design. However, both the strength of that importance as well as concepts of what qualifies as a good visual design ranged dramatically. For example there were those who advocated that simply adding imagery or interactive media to an instructional experience improves the instructional design.

SARAH: Our teachers know that some sort of a picture, or interactive or anything that is very visual works with students well, that is good teaching, they know that.

SHAWN: You know I think even just a simple photo, and I talk about that often with other faculty members and stuff like that, it is like even a photo that has something to do with it opens your mind to the text that is there. If you open it up and there is a photo or some little image it will open up the visual learner's mind to the text that is there. It will spur them forward; it is like a green light saying go forward.

Other participants suggested that you should not put imagery with a design unless it has a manifest purpose toward the end objectives of the learning.

CHARLOTTE: Good visual design is not just putting in a picture for the sake of filling in white space. I really hate seeing that. There is nothing more that bothers me. Visual design really has to work with the content, not against it. Not just for aesthetic. The

more accommodating that picture or graphic is to the content that is being delivered the better. Even better, we can make a graphic explain the content more precisely. That is the way to go.

Markus also indicated he felt there was a negative effect of a poorly designed visual interface to the potential for learning.

MARKUS: Because of my experience, personally, when I see things on the screen, I am always trying to figure out: ‘OK, what in the world is that there for?’ Or something that might distract me, like a really bright border, might take away from the actual content with that contrast of colors. . . . Or the graphics are too big or they are placed in the wrong spot. Where the learner’s eye wants to focus, right in the center of the page, they might have this big picture of a sun and then all of the content is over to the right hand side or something like that.

Another potential negative impact of the visual design is its overall impression. Nancy said it was her objective to ensure that the design was not noticed.

NANCY: I really like the quote—I am just paraphrasing—but it said good design should be invisible. So my invisible design is something that doesn't stand between the student and the content. That makes it easy and seamless to get what you need, to demonstrate what you can do and to go on. You know, just no impediments.

Some designers put a stronger emphasis on creating an aesthetic that creates a positive response in learners. For example, Charlotte said her organization was putting more emphasis on the visual design of their training to combat against negative first impressions.

CHARLOTTE: It is so easy, when it comes to e-learning, to quickly judge a module on the way it looks on first contact, so the design is what me and a few of my colleagues are focusing on, trying to make it look better.

Shawn expressed that he was “very passionate” about the way his courses look. He also referenced web design outside e-learning as examples of inspiring visual design.

SHAWN: When you look at Squarespace . . . it is one of the top newer websites that has a really cool feel to it and the pictures aren't like just little tiny pictures on the side that you can kind of see if you like squint but having the text live next to the picture or inside of that image, I think it is cool.

In spite of efforts designers make to influence the visual design (or possibly because of it), Patrick suggested that e-learning in general suffers from a common aesthetic in the industry that has lagged behind other online software design standards.

PATRICK: There was also this weird thing, e-learning conventions don't always match with web conventions and e-learning is just kind of its own weird thing. A lot of times the graphic design in e-learning, is like kind of crappy, dated and old and the controls are weird and it is just like it is a different thing from web sites.

While this view was not articulated directly by other participants, there were some comments that suggest why this might be the case. As mentioned in theme two (and as will be elaborated on in the next theme), many e-learning designers enter the field with neither instructional design nor visual design training. Additionally, many e-learning designs are constrained to the aesthetic provided through a specific software package like Captivate or PowerPoint. Also, even e-learning designers with expertise in instruction are not necessarily trained in visual design principles. A few of the designers expressed a less pronounced concern

for the aesthetics of their training designs. For example, when asked about the value of the visual design in her e-learning designs, Penelope described a spectrum of concern for aesthetics in her organization.

PENELOPE: So that is an interesting question and it creates a fair amount of controversy within our organization because some people feel very strongly that [our course] has to look awesome or a student is not going to engage with it and, kind of, the quality of the content being secondary. And then other people feel like the quality of the content is primary because a student won't actually learn anything, no matter how beautiful the course is if the content sucks, so therefore making the aesthetics secondary. I lean toward that side, the content side.

She goes on to add that she felt aesthetics have an impact on the actual learning only to a certain extent.

PENELOPE: I think having nice clean aesthetics help support a course and, yes, having a beautiful course makes it more appealing but all kinds of studies show that aesthetics don't actually—beyond a certain point, all these extra aesthetics of making it so beautiful or flashy or look cute or whatever don't actually engage a higher level of learning.

Design aesthetics, from some participants' perception, came secondary to the instructional content and when constraints limited time, focus was placed on the instructional design. One area where aesthetics suffered was mentioned in the interview with Nancy. One course she had participated in designing had a somewhat inconsistent aesthetic throughout the course. From Nancy's perspective, learners often would not notice the difference between the various media elements. She used a previous experience with observing a user study to explain her perspective:

NANCY: I worked at [a software company] back in the day, and one of the things we did was usability studies on our test screens. . . . We were highly aware of the difference between how our help looked and how [the competing software company's] help looked and how the other programs' help looked. So as we were sitting there behind the mirror watching these users who would start out in our program, get into our help, click out of it, get somebody else's help up, you know, so they went out of [our software] and went into [the competitor's software] help for instance, they did not even notice it, even though we had different colors and we had different set up, different fonts . . . they didn't even see it because that is not what they were looking for. So, I think while my editor would be highly, highly intrigued by the font change . . . most of our students either don't bother to register that, because it is not important to them, or they don't care like we do.

Some argue that aesthetics have minimal impact on an instructional design beyond any case where the design interferes with the user even being able to access the content. They suggest instructional design can still be sound and create behavior change while not being as aesthetically appealing as some might hope. The point where lack of attention to those details begins to impede the learning is the point at which aesthetics play a role in e-learning design.

KATRINA: I am just thinking of one piece that I just evaluated, the ubiquitous next button on every single slide and three sentences per slide. I mean, it was like: 'How many times am I going to have to click that dang button?' It just didn't flow well and it was annoying and the interactions were badly arranged on the slides. The instructional design itself or the material on the slides was solid. So after you get over being annoyed at the repetitive bad navigation, if the instructional design is still good, the content on the slide are designed to teach, then the navigation can be overcome.

The navigation is a visual manifestation of the content's structure and organization, which is the second sub-theme of important e-learning design qualities that emerged from the data. Organizing and structuring of the learning content is an integral part of the process of designing e-learning. We'll now discuss some of the points raised by participants on this subject.

Content organization and structure. A significant part of an e-learning design is how the material is presented—its organization, navigation and structure. Nancy indicated it was one of her primary responsibilities:

INTERVIEWER: What are the parts of the e-learning design that you spend the most time on? What are you most concerned about as you are doing your designs?

NANCY: I would say sequencing; clarity; making sure that everything is very, very straight forward, that people do not have to spend their mental energy wondering where to go next, what to do next. Giving them what they need next, when they need it is very important.

Generally speaking, it seemed the consensus among those interviewed was that visual organization of the content should be “clean,” or uncluttered, and navigation should be consistent. The primary concern seemed to be avoiding creating a cognitive load that preoccupied the learner and interfered with the learning process.

NANCY: I think a simple navigation is important, again something that doesn't cause extra mental load. Just set it out. Set it clearly and make sure it is consistent. Then the layout itself needs to be clear, uncluttered and pleasing looking. It doesn't have to be fancy, but it should show a level of professionalism and care so it doesn't just look like stuff tossed up on the Internet.

It was mentioned that part of the concern for navigation that was consistent, intuitive and simple was because learners would be going through the instructional experience without an instructor in most cases. They would need to be able to find what they needed in order to complete the learning experience. For Patrick, good organization follows the practice of good writing and serves as the foundation of a solid e-learning design.

PATRICK: I think it starts with good writing; I think that comes across in e-learning.

Good organization: There is a clear logical flow to the page or series of pages or whatever chunk of content you are working with. Then, it is always clear to the learner: ‘Why am I talking about this right now? Why am I reading this?’ We are making sure that they know what the big picture is and then as you go through each point, having good transitions—just a lot of basic principles of good, clear writing.

Most of the participants talked about the structure of content and their role in ensuring it would make sense to the learner. Katrina perhaps added clarity to the issue by comparing navigation to a mother doing housework:

KATRINA: Navigation is one of those things that you want to blend seamlessly into the background and to be so wonderfully easy to use that it never occurs to you that navigation is even an issue it is kind of like a mom being at home doing housework.

Nobody sees what she does until she stops doing it. If a mom at home didn't do the dishes, and clean up and cook dinner and make everything run smoothly it is pretty much chaos, everything is a mess. To me navigation falls in that category, it is only an issue if it so bad that you can't get over it.

In the same vein, Penelope summed up the concerns with visual design, content layout, and content structure this way:

PENELOPE: But up to this point they do matter. If the course is messy, or cluttered or visually too distracting, whatever, it can distract, even take away from the level of learning of the student.

In tandem with attempting to create a structure to the design that does not inhibit learning, the designer generally seeks to actively engage learners. Engagement emerged as another subtheme of the characteristics of good e-learning design.

Engagement. Engagement addresses similar concerns to those mentioned in the visual aesthetics discussion above. In that section, it was suggested there is sometimes a tendency to add interactive material or media to a course to make it more appealing when there might not be a good instructional reason to do so.

KATRINA: A lot of times we put a movie in there of a little talking head of somebody blah, blah, blah blah-ing and we don't need it, it breaks up the monotony but it is not instructionally sound to add a movie. Or we add audio narration because it is kind of boring to just read slides or read pages of information but there is no instructional reason for us to add the audio. We increase the cost of our instructional materials with no sound instructional reason as to why we are doing it and we find ourselves media rich and instruction poor.

There are things that designers use with the intent to engage the learner, but perhaps those things are really superfluous. It might be that they just reduce the opportunity for creating more functionally compelling content because they are easy and quick to put into an instructional design. Charlotte also suggested that designers have a responsibility to address the need for engagement but to weigh it against the constraints of time and resources and the need to present all the learning material.

CHARLOTTE: The second thing is more of the engagement factor; how thorough should we make it? Is it worth our development time and development process to focus more heavily on interaction or are those resources needed elsewhere? Every instructional designer would say they wish they had more time to devote to their courses, but we often need to consider business needs over learning needs.

She said engagement is more important in e-learning design than traditional instructional design because you usually do not have an instructor available in the e-learning environment to gauge learning attention and adjust to accommodate flagging students. But, in spite of its importance, usually media or design approaches that increase engagement also increase cost to produce.

PATRICK: I think a lot of those things are what help to make it engaging, which I think is another important part. The more relevant and useful the learners find it, the more engaging it will be without having to add a lot of superfluous, silly things that people typically think are engaging. Lots of bells and whistles. If it is really something meaningful, important and interesting to the learners then it will be engaging. I think a lot of that can be done through the design of the activities and the content and such.

For the e-learning designers who were responsible for online high school courses, engagement seemed to be even more of a major driving force. Sarah indicated that maintaining attention in the material was a pain point for their students.

SARAH: You can't get too long [in text] with these kids, if you lose them they quit.

Teachers at the online high school talked about designing to keep their students engaged much more than did other participants. One potential reason for this is that they are more able to monitor student performance. They can observe when students are not accessing the content.

Their analytics system allowed them to see how long students take to do any particular part of the course. Their solvency as an organization depends on students participating in the course and achieving defined objectives, so they have built in processes by which the course designer/instructors monitor those engagement metrics.

Sarah said her organization has encouraged course designers to add video elements and slide presentations to their courses to help maintain student attention and engagement. Shawn said that was a big part of his approach to his courses as well.

SHAWN: I am very passionate about . . . making that video element and making it as entertaining as it can be. But that is me as an art teacher and someone who really is a visual learner. So often I feel with online classes, it is like a textbook. It is like all text and the text is really well written but I remember, in high school, reading a class wouldn't necessarily stand out as something I would really get excited about.

Similarly, Patrick described using video in an internal training course he was working on for an enterprise client. The video perhaps served an engagement purpose, but that was not necessarily its primary goal. It also helps tie the online instructional portion to the in-person portion of the training.

PATRICK: The videos are not just narrated. It is a live video of one of the coaches that they might interact with in other parts of the educational offering. They explain additional principles or other things that are more complicated. They might do software demonstrations. A lot of the videos are to communicate things that would be difficult to communicate with just text and static graphics or things that are maybe kind of a little bit deeper. It is optional; if people want to learn more about a specific topic, sometimes those videos will go into more depth with those things.

Interactive elements also serve an engagement function. Some designers inserted quizzes or other “check-your-understanding kinds of interactions” as a way to either capture or maintain attention and improve learning. For example, Markus showed one course where they used a quiz at the beginning of a course.

MARKUS: We started it off with a little bit of a quiz; it was just more of getting their mind ready for the learning. It wasn't a graded quiz, just more of a question to get their mind going.

Similarly, in one college level course, Nancy and the course SMEs created a way to engage in short interactions in the context of the course to provide “a little feedback, kind of little break, a mental break, a little bit of application . . . without breaking the flow of what they were doing.”

NANCY: One of the things that we recently did was a physical science course. . . . it had a text book and quite a lot of lecture material online. So the problem was: ‘how do you keep them engaged?’ Because, if you throw a lot of text at people, especially people who are overwhelmed, they tend to check out. . . . What we figured out with that was that we needed some way to keep that interaction in the flow of the context. . . . [W]e worked with the instructors and the programmers to put together a nice HTML widget that even non-technical designer people could fill in, so you can come put that code in, put in your questions, put in the feedback which could be anything from a little video clip, to text, to images. Just have it right there. The student goes through. It is just seamless for them.

Katrina described a recent instructional experience they created where they had designed numerous interactions, but there were places the client felt the content was still “a bit dense,” so they ended up including more interactions she described as “cheesy.”

KATRINA: Lots more stories, stuff that you can roll over trying to tie it to meaningful benefits. Then we have a bunch of check-your-understanding kinds of interactions. This one is not especially complex so you're just going through and doing that matching kind of exercise. . . . Then you would submit and get some feedback. . . . We tried to put in an interaction every three to four slides of content, of some sort. If we were forced to go back in and add additional interactions because they felt that the content was a bit dense some of them are like this, a little cheesy.

Patrick and his colleagues also designed one course to act as a simulation of a real-world scenario that would allow them to explore the simulated situation.

PATRICK: The idea is rather than make them sit through all of this information we give them an activity, a real world scenario up front and then they access the information they need to answer it.

Overall, the designers reported creating a variety of elements aimed at engaging their learners. Some used video or slide decks of visual material; others created interactive experiences meant to test a learner's knowledge. Participants cited a need to keep learners engaged with the learning experience by building non-textual material into the course. Several participants emphasized the need to create interactive content that was not simply "bells and whistles," but that was inherently tied to an instructional objective. Most also acknowledged a higher cost in time, money or other resources, to create more engaging content. Thus, weighing the value of an interactive instructional experience against the cost to produce it became an important responsibility for participants.

There is a fuzzy line between designing for engagement and designing to achieve a specific instructional objective, which is the fourth (but certainly not least) sub-theme of the characteristics of good e-learning design that emerged from the interview data.

Designing for instructional goals. The participants tended to agree that an instructional design should be aligned with course objectives. This could be performance objectives or learning outcomes. This seemed to be a fundamental attribute of a good e-learning design, as mentioned by all participants in one way or another. Here are a couple of examples:

PATRICK: At the very beginning of the project the main concern is what are the objectives? What do the learners need to be able to do after this training? What are some activities that I can come up with to help obtain those skills? What content do I need to put in there so they have the knowledge that they need in order to do those things? I think that is where it starts.

PENELOPE: Number one—I am concerned with clear objectives, content that aligns with those objectives and assessments that align with those objectives, so that the student learning outcomes are really very well mapped. That would be one of my biggest concerns.

For the high school e-learning designers, the goals were aligned with state or national educational standards.

SARAH: Well, I guess the first thing that I do, is I pull up the standards. Most of our classes have Common Core standards. Electives don't but even if electives don't have Common Core ones usually UEN, I can find standards on the UEN website so Utah has standards for them. I start with that, I do this on paper by the way, before I ever get online.

The focus on objectives had a dual purpose, one was to be able to design toward a specific goal, while the other was to be able to know how to evaluate or measure the effectiveness of the training. Certainly, those two purposes are related.

KATRINA: If it is not about meeting very specific goals, you don't know when you've hit it.

Having objectives was not necessarily enough. For example, if learning objectives are not very useful, the course could still *appear* to be good because it is helping people reach those subpar objectives, while still not providing useful training in practice.

PENELOPE: The SLO's [student learning objectives] could be really poor so it doesn't always imply high quality course but it could imply: 'yes, the course is working as designed because these are the outcomes that were set out for the course.'

Part of the instructional e-learning design process for some participants is to communicate to client or sponsor the intent of the design. Brandon, for example, in discussing his company's process of conveying design intent, described the design document he created on a recent project, which outlined performance objectives along with the target audience(s).

BRANDON: The purpose part of the detail design document was fairly standard.

Executive summary, sort of has a high level view of performance objectives. Here are the target audiences.

In a similar way, Patrick's company would create a document outlining findings from a high-level analysis that would help clarify the business objectives of the training they were about to design.

For these e-learning designers, all their content and materials had to align to specific goals in order to be considered good design. They built in assessments to measure how well the

instruction had met those goals. In spite of efforts to create these quality instructional experiences, multiple constraints emerge to make that a difficult prospect. Participants reported that there are many reasons why an instructional e-learning design might not fulfill its intended purpose. Sometimes, perhaps too frequently, the designers are not even aware or able to find out whether or not their training has been effective or otherwise successful. The following section addresses the fourth theme emerging from this analysis—the constraints that impact designer’s ability to attempt user experience design.

Theme Four: Constraints Impact Overall Ability to Attempt UX Design

As participants discussed their design processes, a few constraints became apparent as potential impediments to the ability of e-learning designer being equipped to implement user experience design principles or approaches into their work. Three constraints stood out as most important. These included the potential disconnect between goals of the learner and the goals of the learning experience; the time designers have to complete a design; and the technology used in the design process.

Learning goals vs. learner goals. The first constraint to a connection between user experience design within the context of e-learning design is that designing toward learning goals creates a potential conflict of interest at times between learner and designer or between learner and project owner.

In UX design, there is an objective to design toward the goals of the user. The design of the interface is meant to help the user achieve their goals as smoothly as possible. The problem arises when the learner’s goals are not necessarily in line with the goals of a course or the goals of a particular company. This is an interesting conundrum within the instructional design field and marks a distinct difference between instructional design and typical user experience design.

For example, the goal of a high school learner might be to get an ‘A’ in the course. This could conceivably be achieved without any lasting learning taking place if the student is able to navigate quizzes through short-term memory cramming, etc. Similarly, a learner might have the goal to just pass the course, while the institution's goal is to give the student a thorough understanding of the course material. The course could be designed with such rigor that the learner would learn the material just by following the designed steps. Because that requires work—work that is not justified in the learner’s mind when compared against their personal goals for the course—the student might lose steam and stop attending to the course, making it so that neither the institution nor the student achieves their goals. Whereas, if the design was more flexible so that the student could attend to some of the material and not give full effort they might still pass the course, learning something, even if they did not master the material.

In a similar fashion, in a corporate setting a company might have to create a training course for some legal or institutional reason. In such cases, learners’ needs are often not a priority for some clients:

BRANDON: Still, foremost in your mind as an instructional designer is going to be the learners’ concerns. I would say that is not always foremost in the mind of the client. Sometimes you have to remind the client of that and sometimes you have to stealth it in. There are a number of different reasons why people purchase e-learning, sometimes it is compliance driven and sometimes it is rushed because it is compliance because they are trying to avoid some kind of a fine or some kind of a regulation. Sometimes the client is very up front about the fact that this is not going to be high-quality learning. They have a plan to roll out something that will be high quality but they don't have the time to do that

right now because deadline for delivery is one month and they need to show that they are doing something.

Such competing priorities interfere with a designer's ability to put learners first in the process. The company might not have learning as their priorities and so they will not pay for what it would take to make the training effective. They might just need to have it available and running to meet regulatory requirements. If this is the case, the designer can acquiesce or argue for more funds/time to do an adequate job, but perhaps the company does not value that. All they value is spending as little as possible to meet minimum requirements.

Time. Assuming the above scenario is not typical, there were other constraints reported by participants that might also interfere with an e-learning designer's ability to take a user-centered approach to their design activities. One of those constraints is lack of time. As alluded to earlier, designers must juggle cost and the time they spend on various aspects of the design— aesthetics, content quality, content structure and interactivity.

SHAWN: I would say the biggest constraint is just time. It is one of those things especially in an online class, where I could spend all, like years developing, and I have seen that in the research that I have been doing right now and the literature in regards to online classes is just—the amount of time it takes to develop a class is astronomical.

Time to create a course is one side of the time constraint, but there are also time constraints placed on the learner that limits the amount of time they can spend in training. Business decisions about time spent training impacts the scope of what an instructional designer can implement in order to achieve the desired outcomes. Markus told of a scenario where their training plan had to be reduced because management would not spare employee time for the training.

MARKUS: Just because of the way the business has changed it came down from management that they can't stay off the phone so this is what we came up with as a team: shorter training, shorter videos.

Brandon likewise suggested companies he worked with would sometimes be working against a deadline that severely limits the time an e-learning designer has to spend on the project. As an example, regarding such companies, he said:

BRANDON: They have a plan to roll out something that will be high quality but they don't have the time to do that right now because deadline for delivery is one month and they need to show that they are doing something.

For Charlotte, the time constraint affected how much time she was able to spend on detailed interactions. She said part of her role was to help project sponsors understand how long creating e-learning training can take and to help them decide what the priority should be. If there are more time-intensive development tasks to achieve a specific end, she and the sponsor must negotiate to achieve their objectives.

CHARLOTTE: If they care a lot about it, then they are willing to make some changes to the time frame to have those interactions.

Participants reported that e-learning experiences could often be time consuming to design and develop. An e-learning designer's responsibility becomes to navigate the limited time and communicate to stakeholders what outcomes can be achieved within that constraint.

Technology. Technological constraints are related to systemic constraints in that they are often specific to a context, but within that context, they add on additional constraints. For example, learning management systems (LMS) and tools like Adobe Captivate serve to reduce time on some areas of that design process so more attention can be paid to the other areas. (Or

those other areas can be done more quickly so there is more time to pursue additional projects.) However, software functionality at times limits the ability of a designer to execute his or her vision. Limitations within the company LMS, for example, prevent Charlotte from designing her assessments in a way that allows her more instructional nuance:

CHARLOTTE: Well our LMS doesn't, at least not quite yet, look at the specifics about how someone answered a question. It can identify the question as answered correctly or incorrectly but it can't identify the scale of how incorrect it is. I am a little bit inhibited by that.

She also felt limited by functionality in one tool that was meant to speed up the design process.

INTERVIEWER: So if I understand you have got widgets that are made for a specific purpose and more often than not their specific purpose does not match exactly what you need so in order to use them you would either have to minimize what your actual goal or vision was or you would have to tweak it and that makes it more difficult.

CHARLOTTE: That is exactly what it is. I usually have to adjust my vision for the training to fit the needs of the widget or their last of modifications that I might want to connect with.

Similarly, Nancy explained how the LMS they used for a while limited their students' ability to interact the course in a way that matched their needs.

NANCY: They couldn't save their answers. . . . You could take it once; you had to take it all the way through. That was it. Well now, happily, we have got a much better LMS so, yeah, they have the capability to get part way through; save it; go answer the phone or whatever they need to do; come back to it.

Nancy feels that the software impedes her design vision “fairly often.” She frequently has a vision of instructing in a specific way that exceeds the abilities of her system. This potentially causes wasted time as the designer wrestles with a vision, trying to force it into a reluctant receptacle, like a square peg in a round hole, or to abandon the vision altogether.

Katrina also had problems with a client requiring them to use a specific release of a particular tool, which greatly limited the type of interactions they were able to create and also increased the amount of time they spent creating the training.

KATRINA: That was asked for by the client and the version of Captivate is still constrained to Captivate 6. On the project I am working on now, which I find an abysmal abuse of WBT. Considering what Captivate can do now, the fact that we are constrained by the client to use such an old version of Captivate I just find criminal. They want lots of interaction, they want lots of things a newer version of Captivate is easily capable of but they don't want to pay to upgrade the system that they currently deliver on and so they end up paying more to vendors like us to build material in ancient software. I mean it is crazy. Sorry, little soapbox, you can tell I am annoyed.

That is not to say that the tools available do not help with the creation of e-learning experiences. In spite of limitations, many designers—even those who were frustrated by some aspects of the tools—still found great value in the tools. Each tool has strengths and weaknesses. Sarah and Shawn both praised their LMS in spite of limitations.

SARAH: I love the benefits of using an LMS. . . . I have worked in several LMS's and I definitely feel that the one I am working in now . . . is better than what I have seen it before. I don't feel like it impedes. I feel that for online it enhances it.

Sometimes, the more powerful a tool is, the more difficult it becomes to master. Not knowing the full capabilities of a tool can impact time to produce something using that tool.

CHARLOTTE: The thing I love about [Captive] is you can do just about anything if you know enough about the standard actions and the more complex actions. Those are great. The difficulty with that is you need to know it well enough that you don't need to worry about using a guide online. . . . [I]t requires a lot of learning on my end in order to make that done and done well. . . . That would be kind of a love hate thing with Captivate.

A final technological constraint experienced by some participants was that sometimes the medium of delivery in e-learning does not match the content of the course. An extreme case was with the online high school team attempting to have a synchronous online choir course.

SARAH: We tried choir a couple of years ago with someone who did a virtual choir. It didn't work very well. Not everyone has a robust Internet connection to be able to do that. That was our hold up with that.

Summary

Based on the analysis of the interviews conducted for this study, there were four major themes reflecting e-learning designers' understanding of UX design and its actual and potential impact on the designers' professional practice. To wit:

- Lack of awareness of UX
- E-learning designer's role spans range of perceived responsibilities
- Beliefs about characteristics of good e-learning design cover a broad spectrum
- Constraints impact overall ability to attempt UX design

In this section we have primarily considered the data directly from the interviews with participants. The next chapter will discuss some of the implications of these findings in context of the current literature of the field.

Chapter 5: Discussion and Conclusion

The purpose of this study was to better illuminate the extent to which e-learning designers are aware of UX principles and practices. The objective of the final chapter of this dissertation is to contextualize those findings within the body of research. To do so, this section will first discuss the findings of this study in relation to the questions of interest enumerated earlier in this document. As part of this discussion, I will also, where appropriate, relate the findings to extant research and literature in the field. I will also present a few observations made in the course of this research that do not bear specifically upon the research questions, but may be of interest to the field of e-learning design in general. Lastly, this section will discuss limitations of this study and offer summary remarks.

Reflection on Themes

Lack of awareness of UX. The primary question of interest for this study was: *What user experience design techniques, skills or heuristics are practicing designers of e-learning aware of?* The short answer is that the study participants generally were largely unfamiliar with the seminal UX works presented in the interview. Participants were aware of some of the UX terminology discussed in the interviews, but UX did not appear to be an area of independent study by most participants. When the findings were presented to participants, many responded they felt the findings accurately represented the state of the field in general. Brandon specifically responded to this first theme—the general lack of awareness of user experience design as a formal discipline—suggesting participants might not have been familiar with some of the thought leaders and seminal works of UX, but he said that might not represent how much they truly understand about UX.

BRANDON: I would interpret that to mean that they may not be in tune with current thinking in that field or that they call it something different. This may mean that their understanding and approach may diverge (perhaps a good thing), they may be reinventing the wheel (mostly a bad thing) and they are likely developing an alternative vocabulary (mostly a bad thing).

I believe Brandon's observation aligns with the impetus for this research project, namely that e-learning designers tackle similar design problems to UX designers, but might not have the same tool set to work from. There indeed was a concern expressed by participants for the needs of learners—the users of their designs. This discussion section will attempt to address some of the parallels in the field as well as some discrepancies.

Of note, Brandon's suggestion that e-learning designers could be formulating an alternative vocabulary for UX design ideas unique to the e-learning design field relates to the concept of design languages (Gibbons & Brewer, 2005). Large differences (or even minor discrepancies) in connotations can potentially confuse and confound the design process. Many participants of this study reported working with larger teams of instructional developers, programmers, and visual designers. Individuals in these complementary roles were not consulted for this research, but it is possible these individuals, potentially from backgrounds that might be more closely connected to UX design, could be more familiar with the language of UX design. Having a common design language could help close any potential gaps between these various collaborators. It could help instructional designers communicate better with design and development team members and produce stronger work.

Additionally, this research demonstrated a very diverse and meandering path by which participants entered the field of e-learning design. This will be discussed more in a moment, but

it would be interesting to understand more fully if the various collaborators on e-learning design projects (e.g., graphic designers and developers) have similarly diverse backgrounds or if they come from a relatively mature and established field of education and practice. UX design could potentially provide a source of design practice and terminology that could help e-learning designers converse and collaborate with a broader set of design discipline practitioners.

Usability studies. Usability studies were the most familiar subdiscipline to participants, which is in line with the literature reviewed for this study. Formal usability studies are a staple of the ideal UX design process by which members of the intended audience of a designed product or experience are observed and asked to think aloud while using the product or experience. By observing this interaction with members of the representative audience, designers and developers can see issues they had not considered previously (Krug, 2009). There were many usability studies reported on and discussed in the e-learning literature as well as work by others to create guidelines in the process of evaluating the usability of e-learning applications (Ardito, Costabile et al., 2004; Ardito et al., 2005; Ardito, De Marsico et al., 2004; Giannakos, 2010). The literature was not clear on how much practicing e-learning designers used usability studies in their work (as opposed to academics performing and reporting on usability studies). This study suggests at least that e-learning designers are familiar with the practice. However, the frequency of implementing usability studies in e-learning design processes was relatively low among participants. From the interviews, it appeared that none of the participants had directly performed a usability study themselves for e-learning work nor had they been trained on how to effectively conduct a usability study. The use of formal usability studies or user testing appeared to not be fundamental to most participants' approach to e-learning design.

In the working circumstances of many of the participants of this study, there is a layer of customer service or other intermediary in between designer and student, so the designer seldom gets feedback directly from students about the course or training. Penelope indicated that much of the feedback they receive is in regards to a specific error—like a test question being keyed wrong or a content error—rather than anything more fundamental with the design approach or interface. Others indicated receiving feedback from the subject matter expert or another client liaison. This feedback was also often about content rather than interface-level concerns.

With e-learning designers not directly observing the outcome of their work, systemic problems were less likely to be recognized or discovered. Assessments were sometimes used as an outcome indicating the success of a design—that is, if students are able generally to score well on the tests and assignments, then the course is assumed to be designed well—but, this form of evaluation potentially misses issues associated with speed, efficiency, and engagement. Without observation of learners using an e-learning application, it seems unlikely for opportunities for innovation to emerge. With no one watching for pain points, solutions to those pain points will not follow.

Time and cost constraints were suggested by participants as valid reasons for omitting usability studies as a form of evaluation for their design processes. This is likely something participants had little influence over. Indeed, evaluation researchers have indicated that, “few sponsors of instructional design are willing to pay for summative product or performance evaluations” (Williams, South, Yanchar, Wilson, & Allen, 2011, p. 900). This argument also appeared to be something the participants of the current study implicitly agreed with. As noted above, Katrina said she was able to get adequate feedback through ad hoc testing by showing parts of her designs to friends, family or colleagues to see if the design worked or made sense to

them. Similarly, Nancy indicated she would sometimes solicit the feedback of student workers on interactive experiences she had created or commissioned for the courses she was designing. As Morville and Rosenfeld (2007) suggest, “Even running an informal usability test on your mom is better than nothing” (p. 271). Performing some sort of test of the usability of a learning design is preferable to none, but it is likely not optimal. Krug (2005) suggested, making a website usable is often just common sense, but he points out that, “like a lot of common sense, though, it’s not necessarily obvious until *after* someone’s pointed it out to you” (p. 5). Usability studies aim to help designers see the usability issues that they did not notice in their design process. Buley (2013) similarly suggests that, “falling in love with your own ideas is an ever-present risk in design” (p. 209) and that taking steps to assess how well a design works can help a product “evolve, simplify, and improve” (p. 209). Like Morville and Rosenfeld, both Buley and Krug advocate for a formal usability study with members selected from the intended audience of the product or site if resources allow it, but each also indicated that something was better than nothing. The participants in this study also seemed to value usability evaluation with actual users, but also seemed resigned to the lack of resources to make it happen.

On the other hand, as leaders on design projects, e-learning designers are potentially in a position to advocate for additional resources to be spent on evaluation. Understanding usability research could help designers make plans for less costly or more efficient usability studies that can help improve their designs. Evaluation has long been a key part of the instructional systems design (ISD) process (Hannum, 2005) and evaluation has ostensibly been taught as part of instructional design curricula generally. Usability studies meet the definition of evaluation set forth by Stufflebeam (2001): “A study designed and conducted to assist some audience to assess an object’s merit and worth” (p. 5). They are especially relevant to e-learning designers because

of their focus on the observation of people using an electronic interface. Williams et al. (2011) also argued that improved training of designers in evaluation methods and skills would help “improve all the designs and tasks those evaluations could enhance” (p. 900). With more formal training, e-learning designers would be in a better position to advocate for and promote additional usability evaluation to improve their e-learning designs.

Visual design. Visual design was another area participants understood and could explain, although not necessarily in a UX context per se. Visual design is a key aspect of a user’s experience with a product. A visual design can elicit both an affective and a cognitive response and can impact a user’s trust of a system (Fogg, 2003). Visual design was discussed as part of theme three: *Beliefs about characteristics of good e-learning design cover a broad spectrum*. It was interesting to note that a few participants, although they accepted ownership of the visual design as part of their process, did not necessarily assume the responsibility for actual execution of the visual design. In fact a few did not want to have to worry about producing the visual design of their e-learning experience at all. For example, as noted above, Brandon advocated for a separation of responsibilities between visual designers and e-learning instructional designers. Additionally, Penelope suggested she had “probably more influence than I care to have, honestly,” over the visual design. On the other hand, many of the designers interviewed for this study were responsible for both the instructional design as well as the visual design—by choice or assignment. Since all participants also seemed to have a sense of ownership of or leadership responsibility for the design, it seems warranted that e-learning designers should be at least conversant in visual design principles to ensure any visual or aesthetic decisions would not detract from the designed learning experience.

This observation is in line with findings from Miller (2011) who studied the impact aesthetic design elements had on an e-assessment environment. Findings from that study suggested aesthetic elements had the “potential to enhance the nature of the learner experience, both in satisfaction and performance” (p. 333). More than just a visual design concern, Parrish (2009) suggests attention to an aesthetic experience aims at a holistic experience. “[A]esthetic principles can guide instructional design in all of its many levels and layers” (p. 525). Miller laments that “instructional designers and developers of distance education have largely overlooked aesthetics and the emotional influence of design” (p. 333). This same perception was reflected by Patrick and Katrina regarding their experience with e-learning design and e-learning designers. Consider Patrick’s assertion mentioned previously:

PATRICK: A lot of times the graphic design in e-learning, is kind of crappy, dated and old and the controls are weird.

A UX approach to design might help improve and overcome this perception. UX design embraces aesthetic considerations, but also steps beyond to ask if aesthetic and functional considerations fit within the context of the rest of the product or experience (Garrett, 2011). Decision makers in e-learning design settings could help bring visual design concerns to the table early in the design process, making visual and aesthetic design decisions a priority throughout the creative e-learning design exercise, rather than an add-on once the instructional design has been completed.

There is, however, one additional aspect to this situation that this study suggests might be at play. As alluded to previously, there were many references by participants to the lack of training of instructional designers in the field. Some participants certainly reported having had visual design training and some participants also spoke of their concern for and understanding of

visual design principles. However, Charlotte, for example, lamented the lack of training on visual design principles and tools in her instructional technology degree program. Katrina also, based on her experience in the field, indicated visual design training in instructional design programs lacked “precision.” This study suggests that the e-learning field generally could benefit from better visual design training at the degree program level, but also (and possibly more importantly), at the practitioner level for those who have not received the formal training in design that a degree program could offer.

With so many participants reporting that their colleagues were largely untrained in instructional design (and other fields of design, as well), it points to a deeper issue within the field of e-learning design: what are the circumstances that induce companies to hire under-qualified instructional designers?

KATRINA: No one else that works for this client for my company actually has instructional design degrees. They might have a graphics degree, or no degree but lots of experience and they vary in their ability to be able to do the work well and quickly. They are cheaper. So my company, not my personal company, but the company that I work for is all about hiring people at a reasonable rate and it has been their downfall.

Based on the conversations with participants in this study, the cost of professionally trained instructional designers is more than many businesses are willing to bear. That problem in itself can (although not always does) lead to a poor experience for the learner. As a field, there is an opportunity to explore this problem and design a solution.

Information architecture and interaction design. One related subquestion of this study was: *Do e-learning designers understand UX terms in a way consistent with how UX designers understand those terms?* Some of the terms were familiar (as discussed above). Most

participants could extrapolate meaning from the other UX terms discussed in the interview. They also could speak to how they might apply to their work; however, two terms in particular were potentially ambiguous. In UX design, interaction design and information architecture are two parallel aspects of the structure of a product, as outlined by Garrett (2011). The interaction design determines how the system responds to the user and the information architecture represents the arrangement of the content to best “facilitate human understanding” (Garrett, Chapter 2, Section 5, para. 4). Each of these areas will be discussed below.

Interaction design. As mentioned in the review of literature, interaction design was a term imbued with ambiguity and no specific meaning within the e-learning or instructional design literature. The participants in this study expressed the same level of ambiguity. The term itself is seemingly self-explanatory, yet it also refers to a specific design subdiscipline within UX design (Cooper et al., 2007; Garrett, 2011). As Garrett explains, interaction design as a practice came into existence in response to programmers’ practice of designing software systems with focus on technical efficiencies rather than on the interplay of the user with their software. Similarly, as reported by participants of this study, e-learning designers are often building their courses or trainings within the constraints of a learning management system or a software package like Captivate. This can lead to a designer focusing on how the system can accommodate their training rather than focusing on what anticipated interactions the learner is having with the software. There is certainly not a hard line between these two approaches to design; it is a spectrum of design practice. As mentioned by some participants, the tools can artificially limit the designer’s ability to create the best experience for a learner. Likewise, by relying on the constraints and affordances of a design tool, there is increased risk of not reaching a viable design as Kuniavsky (2003) notes:

[Designs] solve problems, and to build the right [design], you need to know what the problem is. . . . You can guess, using your knowledge of the target audience and what they're trying to do. This is fast, but it's fraught with danger: if you're not a member of the target audience (which, as a developer, you rarely are), your understanding of the nature and severity of your users' problems will not be the same as theirs. You could decide that someone needs a bigger hammer, when in fact, he or she needs smaller nails. (p. 159)

This is likely to have an impact similar to the misalignment of layers in instruction as discussed by Gibbons, Nelson and Richards (2000). Misalignment of layers impacts product speed, maintenance, and skill and effort required for construction. These authors said a “highly visible” (p. 13) example of layer misalignment is demonstrated through the nature of authoring tools, which led designers to “create designs that were easy for the tool” but subordinated other design principles. Participants in this study validated this claim, noting that their own instructional designs were sometimes forced into a particular format due to the constraints of the delivery medium.

Interaction design, as a part of the UX design process, seeks to get the designer to think beyond the tools, beyond the program, beyond preconceptions, to an understanding of individuals' needs and their actual interaction with the software or tool. Understanding user needs is fundamental to interaction design.

By contrast, the e-learning designers generally in this study reported a very infrequent interaction with the actual learners for whom they were designing.

BRANDON: It always happens to some extent on every project because in a corporate [setting] it is exceedingly rare that you are ever dealing with the learner themselves. You

are always going indirectly through some learning manager, which is not the learner, so you are always sacrificing something. . . . There are some cases where the client can't afford any impact on their own people.

To some extent, designers have to make assumptions about their audience. The more unproven assumptions they make, the greater the risk for weak, or even worthless, training. If there is no direct observation of or understanding of the learner by the designer—viz. through failing to perform user research with or evaluation of the actual intended recipients of the training—the designer's ability to make sound design decisions weakens.

Without continued interaction with the learner, there is the potential of building on a weak or false foundation. Some participants in this study seemed more concerned with what was the acceptable approach in the industry or in their own mind, rather than with actually being able to see how the learner is reacting to their training. Perhaps the tendency for any professional is to lean on one's own expert status. One feels empowered to make recommendations based on expertise gathered through education or experience in designing and propose solutions based on that information, rather than on an analysis of the learner and the situation that training has been requested for. A focus on past experience helps expediency, but not necessarily the right or best solution to the problem at hand. An approach chosen by a designer for an e-learning experience, while perfectly viable in other circumstances, might not meet the needs of the learners for the current experience.

Interaction design as a practice seeks to build an understanding of the user into design processes. Perhaps a stronger understanding of the practice of interaction design would help e-learning designers build a culture and process that would be more inclusive and more compelling to clients and would allow more access to learners in the design process.

Information architecture. Like interaction design, information architecture as a field appears to have much in common with the work of an e-learning designer. Most participants indicated that the structuring and organization of content was a primary responsibility of an e-learning designer. The more content a training or educational experience has, the more important that structure and organization of that content becomes. Since structuring and organizing content is the primary function of an information architect as well (Morville & Rosenfeld, 2007), it seems valuable for e-learning designers to be familiar with the field.

The practice of information architecture is a field that attempts to understand the user with the goal of helping people find the information they are looking for (Morville & Rosenfeld, 2007). The tenets and practices of information architecture provide foundational principles for structuring, storing, and providing information. E-learning design in general benefits from a strong sense of information organization. In spite of the commonalities, as far as could be ascertained, participants in this study were generally unfamiliar with the tenets and practices of information architecture. Given that there is a great deal of instruction happening through websites and also that other technologies are emerging that can be used for instruction, the field of information architecture could overlap easily with that of e-learning design. An e-learning designer would likely benefit from understanding information architecture principles to aid in creating better instructional experiences.

Roles of e-learning designers. The second theme outlined in the findings: *E-learning designer's role spans range of perceived responsibilities* is alluded to by the different points of design focus discussed above. It is also evidenced by the types of e-learning designers who responded to the call for participants for this study. As described above, participants included two designers of online high-school courses; two designers of online college and high-school

courses, one of whom specialized in language learning; two in-house e-learning designers at professional firms; and three employees of instructional design consulting firms. The expressed duties and responsibilities were different between the various participants of this study. E-learning consultants and those designing university-level instruction seemed to be the best supported in terms of team resources, whereas those designing training for high school and corporate audiences were expected to fill multiple design roles. Curiously, it may be the proximity to the end product as well as the increased responsibility across the various layers of the design that led these participants to engage in more UX-related tasks than by those in the well-supported leadership-type roles seen amongst university and consultant designers.

The designers of courses for the university continuing education program worked closely with course instructors to convert existing college courses into an online format. In so doing, they were converting established curriculum for a different medium. They augmented the existing curriculum with new interactions or media, such as videos or interactive quizzes. These elements were conceived by the e-learning designer, but generally crafted by media developers and visual designers. The participants reported occasionally being called on to write assessment content, but generally were able to obtain most content from instructors of the existing live courses who acted as subject matter experts for the courses. The e-learning designers were essentially the project lead for each course they designed.

In contrast, the designers of the high school courses reported they had been responsible for writing their own courses essentially from scratch. Their responsibility included writing new content in addition to planning for and designing media and interactive content. Among the participants, the high school designers reported the least experience with UX concepts. They also reported the least experience with traditional instructional design training. Ironically, these

participants reported the greatest ability to interact with course participants and gather feedback. Because they were able to monitor students' course interaction analytics continually and adapt for subsequent years, they seemed to approach a user-centered design more closely than other participants, in spite of the lack of exposure to UX concepts.

The in-house corporate e-learning designers reported being responsible for both designing and developing e-learning training experiences for their companies' employees. Both indicated feeling isolated to some extent from other designers. One of these, as a recent graduate of a master degree program, indicated she wished she had more training on e-learning design tools in order to create better training. These participants' responsibilities required them to have expertise in instructional design as well as the tools for creating the end product of the instructional design. Another of the in-house designers reported having a consistent audience for his designs. As a result, he reported having a clear understanding of the type of people he was designing for and a much clearer picture of their needs, which he said reduced the need for a priori user research.

The consultant participants reported a stronger separation between the design responsibility and the development responsibility. Their focus was on analysis and instructional design. Like the continuing education participants, they reported relying on teams of developers for execution of the designs. They also reported a leadership role and ultimate responsibility for the design.

These various responsibilities and approaches to design taken by the participants hint at the centrism introduced by Gibbons (2003) as well as the various layers of instructional design (Gibbons et al., 2000). With responsibilities that potentially affect various layers of a design, this study suggests instructional designers in some cases need to possess more skills related to

these various layers. Understanding e-learning design with reference to layers opens another similarity to UX, which could potentially help designers develop these additional skills. Garrett's (2011) description and diagram of the user experience design process is structured in layers spanning from abstract to concrete. Some of the layers have direct correlates: Gibbons' representation layer seems to align with Garrett's surface layer. The model/content layer aligns with Garrett's scope layer. Some layers appear to have similar names but different role in a design; for example, the strategy layer in Garrett's model appears more abstract than Gibbons' strategy layer, which seems to align more closely with Garrett's structure layer. A detailed analysis of the connection is not within the scope of this project, but it would likely be valuable to further investigate this connection in future research. The participants in this study appeared to be working along various points in the layer spectrum. It would be useful to see if perhaps the Garrett layer model could somehow inform the Gibbons model or vice versa. It is debatable whether e-learning designers are even aware of Gibbon's work in instructional design theory, much less how his theories correlate with Garrett's discussion of UX design. This lack of awareness constituted part of the essence of theme four of this study. The following section will address some of the impacts of lack of training discussed by participants.

E-learning design training and constraints. The final theme emerging from the findings was: *Constraints impact overall ability to attempt UX design.* This theme was elaborated on in the findings section; however, it is worth noting a connection between this theme and the final primary questions of interest for this study: *To what extent did their formal training include references to user experience design practices? To what extent has their informal or on-the-job training included reference to user experience design concepts or practices? What were their sources of formal or informal UX training? To what extent does*

that training impact their daily work? Basically, the short answer to these questions was: *very little*. Lack of training was seen as one of the constraints to performing UX design in an e-learning context. The degree programs participants had worked through had generally not covered UX design per se. There was some exposure to some aspects of UX design, but it seemed that most of the experience actually came through other channels—previous work experience or self-guided study.

Except in the case of Patrick and his company's use of Krug (2009), most participants indicated their formal and informal training experiences did not include reference to the books discussed in the interview. Generally speaking, the organizations these participants worked for were not in the practice of providing much formal training for their employees. Brandon indicated he had access to the training website Lynda.com through his work, but that he seldom used that resource as he said, "I don't find the approach is one that works well for me." He and Katrina both indicated they attended professional conferences paid for by themselves and using their vacation time to do so. Penelope also mentioned attending conferences for personal professional development.

It seems that designers had to be self-motivated to maintain currency in their own practice through attending conferences or seeking out other training opportunities without a great deal of support from their employers. Thus, the continued training of e-learning designers to improve their practice, while sometime supported institutionally, more often than not was not systematic. When coupled with participants' reported need to expand their knowledge of design tools and concepts on-the-job, this suggests a need for institutional awareness of professional development.

Conclusion

In spite of the calls for user-centered design in the literature (Baek et al., 2008), the findings of this study suggest e-learning designers are often either unable or otherwise inhibited from fully practicing a user-centered approach to design, especially in the form of UX design. A few participants reported a lack of ability to interact with the users of their learning products, in many cases, due to a variety of constraints. These constraints included time and budgetary constraints as well as a lack of priority given to users' needs by their clients or the companies they worked for. Additionally, the participants reported a general lack of training on the principles of UX design. What's more, participants also reported that many practitioners in the field of e-learning design do not even have formal training in instructional design theories and principles.

This last finding was unexpected. Many participants reported working with numerous e-learning designers who were not formally trained in instructional design, let alone UX design. Some also indicated it was at times a burden on their own practice to work with underqualified individuals. A reason for this lack of trained designers, as reported by one participant, was the overhead cost of hiring such designers. Companies were reported to be unwilling to pay for designers with advanced degrees or multiple years of experience. Relatedly, one participant suggested there is a dearth of undergraduate programs teaching instructional design and development skills. As a result, companies were reportedly hiring subject matter experts from within or others without a related degree. Participants reported varying degrees of success with this practice. Additionally, participants reported a general lack of training opportunities within their organizations and sometimes a lack of desire on the part of e-learning designers to pursue training opportunities on their own time. It would be interesting to discover how ubiquitous this

condition is across the e-learning field. If this situation were endemic to e-learning design, it would be valuable for training institutions to help provide a solution to allow the field to become stronger and more able to produce the value that training in instructional design could provide.

This study further found that, in spite of similarities in the fields of UX design and e-learning design, participants reported a general lack of familiarity with UX design practices as discussed in a few seminal UX design books presented to them. Some e-learning design processes reported by participants seemed to align with some of the subdisciplines of UX. For example, participants reported that content structure and navigation within a learning experience were both important. This is similar to the focus of information architecture. Similarly, some participants were familiar with the practice of performing usability studies and perceived them as valuable. User research was also prized as a means to understand the needs of the learners when performed early in the design process.

In practice, however, designers generally reported performing their designs without direct reference to the learner. Early learner analysis happened in many cases through an intermediary—a subject matter expert or other client representative—rather than through interacting with the learners themselves. Usability studies were also generally considered expendable, a nice-to-have feature, rather than something integral to the e-learning design process. Most participants also reported their content preparation and structuring was performed in isolation, without interaction with the intended learner. In some cases, design tools also dictated the form the learning experience could take in spite of how the user might benefit from a different form factor.

If it is true that approaching e-learning design with a user-centered approach is optimal, there appears to be some room for improvement in practice. It is certainly understandable that

trained instructional designers working as e-learning designers might not be aware of the principles of UX. However, given the similarities between UX subdisciplines and the practices of e-learning designers as noted in the body of this report, and given the implicit orientation toward the end user in UX design practices, it seems likely e-learning design practitioners and students of the field would benefit from a greater awareness of, or even formal training in, these UX practices. Combining the existing knowledge from practitioners in the UX design field with the theories and practice of instructional design could likely open new opportunities to advance the practice of e-learning design. Adding conceptual design tools and models to a designer's tool belt would provide them increased flexibility to perform great design and enhance their ability to navigate the myriad constraints that sometimes impede their design efforts.

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APPENDIX A: INTERVIEW GUIDE

Interview one

The objective of this interview is to find out:

What user experience design techniques, skills or heuristics practicing designers of e-learning are aware of, without explicitly asking about user experience design by name.

What do you feel are the characteristics of a good e-learning design?

What parts of the e-learning design are you most concerned about?

Please describe your design your process. Think back to a recent project and try to walk through what you actually did as you designed on that project, rather than what you would like to have done or intended to do.

How do you start to tackle an e-learning design problem?

How granular are the design problems you tend to solve through your design activities?

How important is navigation or the structure of content within your e-learning design work?

What makes it unimportant or important?

Where do you turn for guidance when you are dealing with design problems?

Do you have any specific sources you follow? For example:

- Blog
- Podcast
- Newsletter
- Trade publication or Journal
- Specific colleagues

To what extent have you encountered problems you didn't feel were strictly e-learning design problems while performing e-learning design activities?

How would you describe those problems?

Where do you turn for help to solve non-e-learning design problems? Do you have regular sources for guidance?

How do practicing e-learning designers use user experience design activities within their practical, daily design work?

How do you deal with the structure of the information within your application, site or product(s)?

What means or heuristics do you use to make decisions regarding site or product navigation?

What percentage of your time would you say you spend on navigational issues in your e-learning design practice?

What guidelines, checklists or other practices do you use to reach a final navigation or other structure of information within your product?

To what extent is it your role to ensure navigation and site or product information structure is sound?

How do you determine how you will approach the visual design of your product -- either yourself, if you perform that design, or with others if they will perform the visual design?

What do you think are the characteristics of a good visual design in the context of e-learning?

What are some examples of good e-learning visual designs in your opinion?

What is your level of training regarding the aesthetics and visual attributes of an e-learning design?

What is your understanding of each of the following terms with regard to design? What does each mean to you?: symmetry, perspective, typography, shape, contrast, color theory, gestalt theory, texture, and value

To what extent are the intended audience of the e-learning product included in the design and development cycle for the e-learning products you do or have worked on?

What process do you use to gather audience feedback prior to design?

To what extent do you seek audience feedback on the developed product?

Can you share an example of a project or product you worked on in which you gathered feedback from intended users? What happened?

Interview two

The objective of the second interview is to delve more deeply into the participant's design tools and techniques in context with an existing design they have worked on. At this stage it will be OK to discuss UX tools and ideas explicitly by name. Initial questions will center around the specific artifact and may return to questions previously asked during interview one. If participant is not familiar with UX terms or tools, interviewer will provide definitions and explanations at this stage as well.

Additional questions being considered during this interview include:

How often do you seek guidance from sources of user experience design practices?

What circumstances prompt your use of user experience design?

Why might you not use user experience design practices?

To what extent did the e-learning designer's formal training include references to user experience design practices?

What sources of formal UX training have you experienced?

To what extent does that training impact your daily work?

To what extent has the e-learning designer's informal or on-the-job training included reference to user experience design concepts or practices?

What sources of informal UX training have you experienced, perhaps on the job or through networking?

To what extent does that training impact your daily work?

Have you read or been exposed to ideas from any of the following books?

- About Face 3, by Cooper, Cronin, & Rainen
- Don't Make Me Think or
- Rocket Surgery Made Easy by Steve Krug
- Designing with the Mind in Mind by Jeff Johnson
- The Design of Everyday Things by Donald Norman
- The Elements of User Experience by Jesse James Garrett
- Information Architecture for the World Wide Web by Morville and Rosenfeld
- Observing the User Experience by Mike Kuniavsky

Are there any other books that you would consider to be instructive of or otherwise discuss UX design that you have read that you feel were influential of your design process?

How familiar are you with Jakob Nielsen's Usability Heuristics?

What is your understanding of what an information architecture is?

How do you design an information architecture?

APPENDIX B: AUDIT TRAIL

Memos

1	<p>There is a spectrum of skill across the varying iterations of the elearning designer. Three distinct categories seem to be represented here: Professionally trained teachers who have begun to teach online, Designers who have an advanced degree in instructional design or similar, and Professional designers who have entered the field without formal training in instructional design.</p> <p>It is interesting to note that all of the people I have interviewed, their first career choice was not instructional design. Even those with an advanced degree in ID or similar have entered the field in a somewhat round-about way. There is no standard path to instructional design -- no undergraduate degree in ID, much less a degree program in elearning design. But, perhaps there are programs that are beginning to teach about designing for an online learning experience in education programs.</p> <p>Anecdotally, a few interviewees mentioned that a lot of their colleagues don't have formal training in instructional design. Many people are promoted or transferred within the organization to become instructional designers. That was the path of at least one of the interviewees.</p>
2	<p>Concepts of what qualifies as a good design range dramatically. There were those who advocate that just adding imagery improves the design. Others suggest that you should not put imagery with a design unless it has a manifest purpose toward the end objectives of the learning.</p> <p>Of interest, I think is the idea that design aesthetics, navigation, and more of the traditional information architecture approach to design are deemed valuable only up to a certain point -- the point where lack of attention to those details begins to impede the learning.</p>
3	<p>User research in a discovery capacity was almost universally neglected and almost as universally lamented in the interviews. People seemed very attuned to at least a perceived value of engaging in analysis to understand the learner, but due to constraints they did not happen. Some of the constraints were systemic in nature, but at the same time one participant seemed to believe some systemic constraints were more-or-less laziness on the part of the designer.</p> <p>But there are acknowledged limitations -- a company will only pay you for so much of your time, the client will only pay so much for the service provided, at some point the designer has to call it complete.</p> <p>Knowing what corners to cut might be the key to a high-quality designer.</p>
4	<p>If elearning design is just a subset of instructional design, is there something bigger going on with elearning outside of what traditional instructional design entails? Does it require a more focussed approach to training for designing in that medium, that context? One individual said there's an element of elearning to virtually every training he designs now.</p>
5	<p>A design often undergoes multiple minor -- or even major shifts -- as designers negotiate with various stakeholders, including client, colleagues, and supervisors. This raises the question for me: What is design? Is it the proposal of solution and then the negotiation of a final solution as a variant of that? Is an ideal designer one who is able to best articulate their proposed solution, advocate for it, and result in fewest changes? Or is an ideal designer one who helps provide strategic guidance and a depth of understanding of theoretical application of learning that allows for a team to work together to create a better solution?</p>
6	<p>Sometimes the training we participate in creating is relatively minor. It has little complexity to it. Designer can safely assume that most users will respond similarly to a training devised in typical fashion. The difference in behavior change between custom solution and cookie-cutter solution is negligible, so selecting a pre-baked solution is better than attempting much of the user experience design process.</p>
7	<p>Regarding navigation, there are a couple of distinct perceptions of it I think. In some cases, designers are not too concerned with navigation; it becomes a minor issue in their design process because they are creating guided processes where the navigation is a fairly straightforward Next/Back interaction. [311] Other training</p>

	is more complex, less guided and requires more attention from the designers to allow it make sense. In the case of the continuing education courses, the content is much more deeply structured, which requires a more stringent and attentive design process to ensure navigation makes sense and guides learners as they go through the process.[626][77]
8	J. takes a goal-oriented approach, similar to that espoused by Cooper, et al. But the difference is she is working with a SME who's goals are not necessarily in line with learner's goals. This is an interesting conundrum within the instructional design field and I think marks a distinct difference between instructional design and typical user experience design, which is that the goals of the instructor or institution might not align with the goals of the "learner." For example, the goal of a learner might be to get an 'A' in the course. This could conceivably be achieved without actual learning taking place if the student is able to navigate quizzes through short-term memory cramming, etc. Similarly, a learner might have the goal to just pass the course, while the institution's goal is to give the student a thorough understanding of the course material. The course could be designed with such rigor that the learner would learn the material just by following the designed steps. But, because that requires work, the student might lose steam and stop attending to the course, making it so that neither the institution nor the student achieves their goals. Whereas if the design was more flexible so that the student could attend to some of the material and not give full effort they might still pass the course.
9	Content creation is one area where the work of elearning designers bleeds into other areas. Traditionally, the instructional designer receives content from a subject matter expert, but there are myriad roles now for the designer and one thing some of them find themselves doing is generating content.
10	[31] SMEs come in with a specific tactical request -- for example, they'd like a video to play at a certain point in the course. The instructional designer attempts to drill down to the pedagogical need of the situation to help them reevaluate how the tactic would or would not help the instructional objective. Their know-how should give them sound ability to select a tactic that aligns better with an overall instructional strategy. This pre-supposes that the instructional strategy aligns with the user and enhances their learning experience.
11	[442] Re-use existing concepts. The designers would rely on their experience to come up with a solution that fit the scenario. I suspect this is often a cost choice, where experimenting with an unknown approach would be much more costly with arguably less certain results. Going with trusted methods is like a crutch -- essential if the situation requires it, disingenuous and further debilitating if not strictly required. The problem is whether the trusted methods really are as valuable as a crutch. Can the client stomach a better way. Or can the vendor manage to eat some of the cost to create truly remarkable work? Does a UX design result in better designs than other processes? Is the ideal process already described?
12	Different companies structure their businesses differently with regard to how they accommodate the design process. Some have a single designer tackle instructional design, visual design, and development. Others provide specialized employees for some or all areas. The overlap of who is responsible for which part varies between organizations.
13	In many cases it would appear that instructional designers team up with media developers and/or visual designers to accomplish an overall instructional design for elearning. The primary concern of ID is for content organization and structure, that the content aligns to objectives and that the instructional strategy is sound, while visual designers are most concerned with aesthetics and developers with the interactions. When this collaboration happens, the ID seems to be the duck in charge of the overall strategy. With that in mind, they have tacit or even explicit ownership of the final product and should be attuned to user experience concerns in addition to their learner experience concerns. A couple concerns arise with this. First that UX and learning design might actually be at odds with each other, in some cases. UX is concerned with making the experience require little thought, while some instructional designs might employ a strategy that undermines that fundamental principle of UX. Second, it appears that most instructional designers are not equipped to talk about the issues associated with user experience design.

	Also, much of instructional design lives within the context of existing electronic platforms -- LMS, Captivate, etc. -- limiting their ability to address some UX issues in many cases.
14	In some contexts, elearning designers are taught to follow a process or model such as ADDIE. In some cases, I think it has been argued that the design part of the model is actually unspecified. But a few designers expressed that they enjoyed not being required to follow a specific model or process. [362][367] One participant suggested that by following a model you in some ways renege on your responsibility as a designer and become a "technician" instead. [512]
15	Concept of a really measurable course -- do most designers focus on that at the design stage? How can we not only present the material, but present it in a way by which we can measure success of the course -- not only in terms of learning, but in overall quality as well. Is there a difference between the overall quality of the course and the assessment of learning?
16	Teachers at the online high-school talked about designing to keep students engaged much more than other participants. Is this because they are more able to monitor student performance? That students not engaging with the class become a detriment to the company in general? Many of the other designers seem more concerned with what is the acceptable notion in the industry or in their own mind, rather than actually being able to see how the learner is reacting to their training.
17	In certain design scenarios, the designer can assume long-term engagement between the course materials and the student and, in some circumstances, the ability for student teacher interaction of some kind. This creates a dynamic of a different design approach, especially in the case where the designer is also the course instructor.
18	Some argue that aesthetics have minimal impact on an instructional design beyond any case where the design interferes with the user even being able to access the content. That the instructional design can still be sound and create behavior change while not being as aesthetically appealing as some might hope.
19	There's also a time dimension to the design that requires designers to juggle cost and time to spend on various aspects of the design -- aesthetics, content quality, content structure. [638-639] LMSes and tools like captivate serve to reduce time on some areas of that design process so more attention can be paid to the other areas. (Or those other areas can be done more quickly so there is more time to pursue additional projects.) But, is a dichotomy necessary between content and aesthetics? Can there be a "good enough" is aesthetics?
20	The tendency is to lean on our own expert status. We feel empowered to make recommendations based on our training, our experience in designing and propose solutions based on that information, rather than on an analysis of the learner and the situation that training has been requested for. By focusing on past experience, we get expediency, but not necessarily the right or best solution to the problem at hand. [465] Training needs might stem from organizational issues that need to be addressed that training will never change. Do instructional designers and their employers profit from the negligence of their customers? Is there a more ethical or appropriate way to work with companies to help them help themselves and find the right solution? Does following a process or theory described in the academic literature preclude a design team from acknowledging deeper organizational or structural or strategic issues? It's been argued that following processes like ADDIE are too time consuming or restrictive, especially at the pace of modern business and technological advancements. But, perhaps if we more fully embraced the analysis phase, but were able to do it in a more agile way, there might be value in the process still.
21	An instructional designer has to be able to work within a large amount of data and formulate a delivery solution for myriad data types and massive amounts of information -- often outside their area of expertise. What areas of UX design could help them cope with this sort of data? Information Architecture seems a good fit. [18]
22	Do we get hung up on words like "media" or "aesthetics" or "design"? Are we talking around each other? This is just a half-thought. Maybe there are semantic issues within the field, including roles and what is expected. What are deliverables called and what do they look like? [Inspired by 174]

23	<p>Competing priorities interfere with designer's ability to put learner first in the process. The company might not have learning as their priorities and so they won't pay for what it would take to make the training effective. They might just need to have it available and running to meet regulatory requirements. If this is the case, the designer can acquiesce or argue for more funds/time to do an adequate job, but perhaps the company doesn't value that. All they value is spending as little as possible to meet minimum qualifications.</p> <p>Conversely some might not want to spend because they can't picture the ROI on spending more on training, but if design team/company can articulate those benefits, the project can focus more on learner.</p>
24	<p>Interestingly, it seems that she more frequently runs into problems that require a tactical solution. It could be that she feels a measure of confidence in her ability to tackle the broader navigational, structural problems of a course rather than perhaps specific learning interactions on a very narrow learning objective.</p> <p>Is there a disparity between how one tackles learning problems from a big-swipe strategic perspective as opposed to a narrow individual learning experience perspective? [59]</p>
25	<p>The ordering of content seems to be relevant to successful learning to take place. But, it seems like most of the participants in this study were not able to evaluate how well their designs were succeeding. Are they relying on the established structure provided by the SME and not really worrying about follow-up evaluation to see that it is working as desired?</p>
26	<p>In the case of online academic courses, as opposed to performance change experience in business, the SME was an instructor. They might or might not have training in teaching, but they have a curriculum and a sense of what they would like to have students do. They provide guidance to ID, but instructional designer in this context would theoretically have some training background that would allow her to guide the design of the instruction for maximum learning opportunities. But how can this be done without a strong understanding of the audience? Are too many assumptions made in the process of designing a course? And what is the difference in outcome based on which approach is taken? If there is no monitoring of learning by the designer, does the designer lose ability to make sound design decisions? Is there an exponential factor of learning gain that is being missed by not evaluating the learner or is the difference negligible? Is the cost savings of not spending the time on evaluation sufficient?</p>
27	<p>There is an impression that assessments, regardless of whether they don't count toward a grade, induce anxiety and concern on part of the student. But, how does an instructional designer learn this? Is it assumed? Is it from their own experience? Would this still be the case if they were able to watch students use the course in the context of an actual class?</p>
28	<p>There is a possibility that evaluation and analysis and other aspects of a design process that are time consuming, but are also perceived as providing benefit, have to be instituted at the organizational level in order to stick. There has to be someone higher up in the hierarchy saying: "this is how we do things here" in order for some of these higher-level activities to be embraced. [438,439]</p>
29	<p>There seems to be a commonality across the variety of situations these designers found themselves in that they had to convince someone -- bosses, parents, traditional instructors -- of the value of e-learning, how best to implement it, why to embrace it. Online learning is still viewed with skepticism by some. Others seem to be clinging to outdated ideas of what e-learning consists of or what it should consist of. An e-learning designer should be able to articulate theoretical reasons for implementing a specific design. [170, 585, 530, 744-747]</p>
30	<p>Instructional designer has to understand a great deal of information and be able to represent it correctly as well as generate the material that will help others learn the same content. If we expect to create a training that would take others a week to learn, we should expect at bare minimum a week worth of effort just for the designer to understand the material and then another generous amount of time to prepare material that will help others understand it.</p>
31	<p>[bSN17] Students/learners using software often run into problems. Problems that could potentially be solved at the software level, but because of the expense or time associated with fixing it, the powers will elect to increase instructor interaction or tutorials or instructions to help mitigate the issues. UX tends to say, fix it in the software so it never rears its head again as a problem. There is always a balance of how feasible that is. But, often the approach taken is taken merely because it is the one perhaps most obvious as a possible</p>

	solution.
32	[bSN28] The design for an online course for school seems more complex and has to cater to more broadly diverse audiences in terms of overall skill level compared to a training that might be produced for a skilled adult workforce.
33	Teachers in the online school generally were unfamiliar with the terms of UX.
34	Even if the instructional strategy is sound, there might be implementation issues – the interface-level interactions could be flawed or confusing. The ID might not necessarily notice it if the team explains the implementation. [bPK30]
35	There is a certain level of truth to the idea that there is a sense of comparison between designs -- ID might look clunky next to expensive designs done for high-end clients, but they might be worlds above what came before them, so by comparison a clunky design might knock it out of the park. [bKA45]
36	Suggests visual designers often go with the first idea that comes to mind as they design -- a stereotype. Stereotypes become a form of language. Do we have instructional stereotypes? Do certain instructional designs become implicit and the first approach chosen because of familiarity? And, if so, does that mean there are similar negative consequences of using stereotypical representations of instructional design in any or most circumstances? [bPE9]
37	Online provides efficiency in courses through allowing people to go at their appropriate pace -- it has the potential to be self-contained, self-explanatory compared to the classroom, where a lot of instructor time might be spent explaining an assignment and answering questions, when most of those questions could be answered in the online assignment description. [bPE43]

Categorized meaning units. The following table contains my sorted notes from the analysis process with associated transcript text from participant. The first column represents the reference point in the full transcript. For the first interview transcripts, the notes were given a number, which was associated in a second table to the page number and paragraph of the relevant interview. The table key to that association follows this table. For the second interview, each note has the interview and paragraph number built into the code in the first column. For example, the number code bBN33 represents Brandon's second interview and the 33rd row in the interview transcript document. Category divisions are represented by bold and italicized text. Subcategories are represented by italicized text. To the right of each number or code in the first column are one or two rows of text. The first row is my note regarding the transcript portion of interest. The second row is the relevant transcript text. If there is only a single row associated with a code, it is the transcript text without commentary by me.

	Category: Evaluation
	<i>Subcategory: Designer evaluating course without reference to user/learner</i>
36	An instructional designer would evaluate an interaction or widget designed to meet a specific purpose by placing it in the context of the course and then determining if it is meeting the stated objectives.
	then taking that back in, putting it into the course and then taking a look at, saying ok, did that look right. Is that accomplishing what we think it is going to accomplish.
37	The first evaluation (and sometimes the only evaluation) is as the expert: Does it meet her vision? Is it better. "Can it do what I think it should do?"
	My opinion first, is this actually what I envisioned or is it better. How did it work out, can it do what I think it should do.
627	Way to judge whether her designs are progressing appropriately.
	Standards document for judging design in progress.
	So there are probably a couple of ways that we measure ourselves in terms of appropriateness or relevance or whatever, one would be in the course proposal process and then we have a standards document, against which we can measure am I aligning with our internal and external standards.
bBN33	Content and development happen at storyboard stage and ID doesn't get involved until time to review and then will provide feedback. He is watching for consistency, and appropriate use of media.
	This next stage is the storyboard stage and it is the sort of things I don't spend a lot of my time on, it is basically the developer, I am sorry it is the content developer building this out with assistance from the media developer. I review it once they have put it together but that was it. There were a number of places where he had put things in one kind of media element and I asked him to switch it to another one making sure it is appropriate and fits and making sure things are consistent. Very often they will use something that will fit the situation but doesn't necessarily provide consistency throughout the course. I will go through and review it make sure well this one is not bad for that situation but we also have this other one which is just as good and probably one that I asks for but just as good for this situation and would provide consistency. That doesn't happen very often, it is very irregular because they are very good at their jobs. It happens.
bBN36	Also reviewing for accuracy in assessments.
	The little knowledge checks you are showing the correct feedback and the incorrect feedback and all that stuff, which is the correct answer and all of that. It is very important that the feedback makes sense on; very often you basically give the same feedback for both cases. One of them starts off Correct! Because blah, blah, blah because the state governor blah, blah, blah and then that is incorrect because the state governor blah, blah, blah. It is the same exact thing just slightly different.
	<i>No strong way to measure if design is on track.</i>
628	She has some "soft ways" to measure whether or not her design is on the right track, but not a "good strong way."
	I don't think we have, I think we have a lot of soft ways of measuring that, I don't think we have a good strong way of measuring that.
	Evaluation by team members
38	After initial evaluation by the designer, the product is tested by a QA team. The QA team might or might not take the student perspective, but their primary goal is to make sure things work and there are no errors.
	After that we do have a quality assurance team so once we get finished with something we actually throw it over to them and they take a look at it.
39	A fresh eye from QA allows them to see application from a different perspective.
	They have not been involved with the development of it so they are kind of coming in cold.
40	The QA team receives no training on the course, but is always steeped in the LMS, so they are at least familiar with the general situational context of the course. But, without a background in the course, per se, they are able to watch for lack of intuitiveness in how the course functions.
	They don't know, necessarily, what it is supposed to do and then they get feedback.
42	Students work in close proximity and can act as user testers. Although they are not enrolled students in the course, they are of the same body and demographic generally, although perhaps a bit more experienced in interaction paradigms than the general student body might be because of their position.
	We also have around here a plethora of really great students so if we are wondering does this particular thing work, we can round up a couple of them and say open up this page and tell me what you think and

	we can get their reaction.
43	She feels comfortable to be able to go ask for student perspective on projects, even though student might not be a direct QA resource.
	<p>“How often are you able to do that on a general project?”</p> <p>Anytime. Anytime you feel like you have run...QC always happens.[00:11:47] So that team always gets a look at it, but for consulting we have a very much open door, if you want to work something out we go over and say "Do you mind taking a look at this?"</p>
44	She feels comfortable to be able to go ask for student perspective on projects, even though student might not be a direct QA resource.
	<p>“How often are you able to do that on a general project?”</p> <p>Nancy - Anytime. Anytime you feel like you have run...QC always happens.[00:11:47] So that team always gets a look at it, but for consulting we have a very much open door, if you want to work something out we go over and say "Do you mind taking a look at this?"</p>
45	Quality Assurance team members act as a student in the motions of the clicks, but are not necessarily taking the course as a student, so the mindset is slightly different.
	<p>And then what are the quality assurance doing, is it just them looking at it and testing it or do they actually bring people in to look at it.?</p> <p>they are supposed to go through click every link, read all the directions, just go through it as a student would but not doing the readings. They don't actually have to learn the stuff, they just need to make sure that things are acting appropriately, that they don't get lost</p>
47	Evaluation to make sure the activities function as expected and that student user can navigate the system without getting "lost."
	they (testers) just need to make sure that things are acting appropriately, that they don't get lost.
115	"Proactive review" of courses was a mini usability study on courses looking for areas for future improvement -- not by intended audience, but by students, the right demographic.
	The one that we have been doing recently is to have our assistants; our design assistants take a look at some courses. Another one of our designers, Jay, went through and he called it a proactive review. So he just said I have this portfolio of courses, some of them are quite old and what he asked the students to do is literally just go through and judge the course. Was this engaging, was this interesting, did this feel dated, did it need anything? In that case their point of view had been very helpful for pointing out, this section really got dull. Wow did you know there is a movie clip on this? So we have had some of their input that has been really helpful. But, no, I haven't really had occasion to do that.
610	Course assessment cycle happens approx every three years.
	Yeah, so we have course assessment, course health assessment meeting every other Friday and we have something like, I don't remember how many courses here, 500 courses or something, and so they are just on a cycle and essentially any given course runs through the assessment cycle once every three years.
	Evaluation by SME or client
570	Feedback comes from the SME
	<p>A little bit more of the solid feedback that comes from the actual subject matter expert, or the training contact I am making the course for so they basically give their analysis about how well the training is and whether or not it is usable to reach the goal that they have.</p> <p>Christijan "So do you get that feedback generally every time you do project.</p> <p>Every time, from those people yes,</p>
bBN40	SMEs have to be meticulous about checking wording to ensure accuracy.
	There were a number of cases in here where we had to review the wording and we had to get the wording just perfect and the SMEs were the only ones...they recognized this and very often they would be changing the wording in very small ways which once you see the change you can see I understand that is definitely important but there was also no way I was going to know that.
bBN29	Design feedback from client guides further iterations.
	Once we got the DOD filled out then the next deliverable would be. Let me see if there is anything in the design feedback that is interesting. They gave us about four pages of feedback on that detailed design document. Of that there were 12 items and one of them got rejected, one of them got put sort of on hold for later review and then rest of them were very easily actionable and we did act on them. Let's go into

	development.
bBN31	Early feedback was related to specific detailed design. Different client reviewers also gave conflicting feedback.
	let me go back and check, I don't recall. Yeah it was some of the things that were formatting, style types of things. Instead of having name of the program change it to "The" name of the program. Which again, if it hadn't been done in this way it wouldn't have been a big deal. [00:33:51] there were some conflicting messages and we resolved those. Two of the reviewers had gone different directions and we resolved that. One said basically move this, one said this is great so we went with the one that said this is great, pretty obvious. Describe the background and purpose and then it said we need to name the policy so again that is another style thing, if this hadn't looked like the course itself, it is our standard policy the first time you introduce an acronym you expand it and then you show the acronym so they can recognize it later on, it is standard practice. He was sort of following that standard, he wasn't following that standard because this wasn't the finished product so it was... What would be a good example? Describe the background and purpose of the CIA. We need to name the CIA, we need to name the CIA, we need to expand the CIA. Well yes I agree and in the final product we would have but he had to basically say yes you are right that was a screw up on my part but the screw up was making it look too finished. In answer to your question, it did wind up hurting. Not a big deal, we got through it, it was not like they were upset about it, and it just didn't focus them in the way we wanted to.
bBN32	Client concerned with in-process filler content -- commenting on obvious problems that were representative of the in-process nature of the design.
	There were also issues, this course needed special imagery. We needed to find special imagery, a special kind of imagery. We needed to do a lot of searching in order to obtain that kind of imagery. That was an early thing in the course, we had to remind them a number of times that yes this will be happening, that we are going to have this content later but we are not going to have it right now. That was another thing that kept coming up, they said well this image you are using over and over again, yeah that is because it is a sample we haven't found all the images that we are going to use. I get it; I understand why they were concerned about it. It is the way things go.
bBN41	There was a lot of iteration between client and designers.
	Yeah I think that is about everything on this one. We handed that off and like I said we had that back and forth on whether it is was going to wind up being branched or not branched and we had, let's see let me look at the dates on this. We had a bunch of feedback in a lot of different forms as this whole thing went through.
bBN42	Tried to automate the design feedback process through script to capture track-changes in word documents.
	Different people put in different brought it across in different ways and actually I asked one of our developers, a guy by the name of – it doesn't matter, this was about a year ago now – to build out a ... so we asked the reviewers to document their issues in an Excel spread sheet that we call a point sheet, the points that they are trying to make or the points of contention and they will send those across and that is fine. The issue is that they will sometime, working those Excel spread sheets are kind of pain in the neck because you have to copy, which page number, which page in the module, what is the text or description of where this occurs, what is the problem, how should we resolve it? All this other stuff is just a pain in the neck. So a lot of them will make their changes using tracks changes especially if you are using a word document but you can even do that in power point, you can sort of add in comments or you can even do diffs between two documents so I asked one of our developers to do was to build out an Excel point sheet out of tracks changes and that really saved us on this project because we were sending things across and they were coming back and they were not using the point sheet they were just making changes right there in the document. It was nice because we were able to pull everything out and attribute everything to everybody pretty easily as a result of having this tool. I guess that is about everything.
	<i>Post-launch evaluation</i>
568	Post-launch evaluation is a new as of a month ago.
	It is a very new thing for us, which is sad to say, but yeah, it is new as a month ago, we are going to start focusing on that, we have been.
	<i>Evaluation based on achievement of objectives by students // analysis of metrics/analytics</i>
606	Course is working if students achieve stated learning outcomes. But, this presupposes that the assessment is good and that the learning is happening because the

	assessment says learning has occurred.
	I would say if students are able to achieve the outcomes that are set in the course then the course is working,
609	She uses analytics to gauge the success or strength of a course.
	I do refer to the analytics quite a bit, the analytics how the mean and median scores, the difficulty and discrimination of every question. So I do look at those analytics to decide is the course working as it should are the students learning what we wanted them to learn and I think all of that stems from clearly defining what you want the course to achieve so regardless of what type of learning model you use if the outcome is when a student exits this course we want them to know A, B, C, and D, then that means that it is clearly defined at the outset of the course and carried throughout. Seems like I am really beating that drum.
611	She monitors her courses more frequently, but sounds like only when complaints or concerns come in from students
	I end up evaluating a course more frequently than that because maybe a call comes in with a concern that this is not working, so I will dig deep to find out is it not working or is it working but the student is not reading the instructions, or now I see the difficulty is actually off the charts, probably we do need to reevaluate this or whatever. When things like customer comments come back or shortly after a course goes live I usually check in after a month and then after about six months just to kind of see is this playing out how we thought it would play out kind of thing and then the regular, supposedly we get to all of our courses at least once a year. I am close to that but not quite there.
612	She's trying to end self-paced, independent language learning courses -- their standards are outdated.
	Yeah, so in the language courses in my portfolio there are in the high school level these self-paced, totally independent courses which I am actively trying to end, just because all of the research in language acquisition points to you need to speak it and interact with humans and of course actual standards require this too so they are courses that used to really be effective for whatever the standards were and whatever the market demanded.
	<i>Data monitoring suggests areas for improvement</i>
751	Instructor has ability to see student needs without direct communication from them by referencing data from the LMS. In an online school context, there is an instructor intimately concerned with the progress of learners. Often there is probably a smaller ratio of students to instructor in this scenario compared to what might be expected from the training team at a corporation and the workforce that needs training.
	I think the other thing that is just absolutely beneficial is the ability to see data right away so I can tell, I am not teaching anyone currently, well I am actually doing kind of a pilot class, but you can, I can look and see what kids are struggling with right away without them even telling me and either approach them or fix it, I can see if it is maybe a bad question on a quiz or I didn't cover it as much as I thought I did and I can go back and fix it right away.
752	Data not as clear or quick in brick and mortar.
	You could do that in a Brick and Mortar classroom but I didn't get that data as quickly, I mean I could tell by looking at their face of other kinds of question but I didn't have that data very quickly in my hands even using like computer based grade books and things like that.
776	LMS provides ability to see whether or not a student has gone through the material. It is a secondary measure of engagement, but perhaps one of the easiest to access.
	We can track clicks obviously, so looking at student engagement which is hard to quantify in an online setting but we quantified that as clicking, because students will sometimes not work through the material.
	<i>Gathering learner feedback</i>
bMS61	Regional training managers would interface between design team and call center managers. Feedback about employees and training would come back through RTM
	They used to be called RTM's, regional training managers and basically they were the face of our training to managers for the call centers so we would get our feedback through them.
338	Right now only focus on feedback, not much on initial analysis or research.
	C - "To what extent are you able to include your intended audience of your eLearning product in the design and development cycle?" "Well right now we really are focusing only on their feedback."

340	Learners can provide feedback via form at end of course
	We also have feedback at the end of our courses that they can fill out. That is how we include them.
728	Students provide feedback through feedback form for course.
	The students definitely, like we have the feedback form that is for all of our classes, where they get to rate how much time they spent on it and then they get to leave comments.
729	Feedback is anonymous so students can be frank.
	The course evaluation form is great, students really do, because it is anonymous which is really important, they will leave you feedback that is totally outright.
276	Will get feedback from pilot. Always ask for feedback from learners, but rarely get it.
	Do you ever hear back from learners about what went well and what didn't or do you seek that out specifically?" We always seek it out. Sometimes we get the feedback on the pilot. If we are doing a pilot then we will get feedback because they will want us to apply that feedback but we always ask for feedback from the learners, we rarely, rarely get it. It is just not something that companies are willing to give up.
730	Student feedback can be negative and by opening it up anonymously, you put yourself at risk to some degree for what they might say. Even though the feedback might be from someone who didn't do the work in the course.
	It is scary obviously, because your admin can see it, and you are like oh no, what if like one student like rips the course and they didn't even do the course. I feel like there is always one comment from a student who is like, you can just tell that they didn't do the class. There is always a portion of the students that didn't do the class or I had one student who had 2% in the class and took the final exam and wrote I don't know on everything. Like I don't know why he took the final exam but you know that student could also have left feedback on the course evaluation form about how it was a terrible class.
bPE45	Instructor gets feedback from students and then can provide revised instructions in the online course.
	Right, in the blended courses she gets that feedback and the next time she sees them they'll be like, "this assignment didn't make any sense" or whatever. In the online course, where they are not meeting with the professor regularly, if there is something like we don't get this or whatever, they will email the TA or they will call our help desk and then a ticket is logged and eventually when it comes to the designer, ok so let's reevaluate these instructions, they didn't get it or whatever.
	<i>Gathered feedback shaped course, which led to less feedback, which is perceived as successful changes</i>
654	Spring and summer term a lot of feedback. Fall term not so much. She feels they tightened up the course a lot.
	Yes, so we started this in spring term and spring and summer we had a lot, so it was like the first semester that the blended course was out, or terms or whatever, and this semester we have had one or two. I think that means we have really tightened things up.
731	Opening yourself to feedback provides opportunity for growth and improvement in your course.
	But opening yourself up to that is going to help you so much. I got some really good feedback, I do video critiques at the end of each quarter, with my art students, where they get to show me their individual works of art and we get to talk about their creative futures or like what they have taken from the class and how they can apply it to their life and then I always ask them about feedback on the class or individual assignments that they like. I get good ideas and I love hearing it from them in that way too because we can almost brain storm together about ways that it could be improved.
732	Example of change made from feedback from a student -- making blog for student feedback into multiple groups, so more feedback will be provided to final students in list
	You know like this, I have like blogs where they are all on the list where in my critiques I got the idea, from a student, to make it into smaller groups so now there will be like 15 students in a group and they will comment on each other's work. But otherwise if you are at the end of that list you will have like two comments on your work and if you are at the top of the list students will, just naturally, have like 15 comments on each work or something like that.
655	examples of feedback received.
	Both, both so their end of course, they had a mid-course survey. Kind of like how do feel the experience of the course is, you've taken all of your other German courses on campus, how do you feel about having this online element. Do you feel like we don't need to meet in class at all anymore, or should we still meet in class sometimes but have the online elements too? The mid-course and end of course survey and then we did that in fall, in fall semester we did that with Korean blended course as well. There has been some

	<p>really great feedback, and in a way it is exciting, especially with Korean a lot of the feedback has been I can access like when I get home from work at midnight I can still work on stuff and I can read a lecture that maybe I was falling asleep during today in class. There has been some good feedback, there has been also been some interesting feedback, kind of like there are so many resources in the online course and I feel guilty if I don't access them all. I don't like that! There is too much I have to wade through to get to what I really want to do or need to do. There has been some really good feedback that has helped us evaluate and think about what we want them to achieve. Maybe we want them to wade through all that and maybe we don't. Yeah, it is pretty neat.</p>
bPE47	<p>There is a layer of customer service in between designer and student, so designer seldom gets feedback from students about the course and if they do, it's generally about a specific error – like a test question being keyed wrong – rather than anything more fundamental with the design approach at all.</p> <p>The assessment is assumed to serve an evaluative function -- if students are able generally to score well on the tests and assignments, then the course is assumed to be designed well. What this leads to, with IDs not directly observing the outcome of their work, is that systemic problems cannot be recognized or discovered. Similarly, it seems likely that innovation is also not going to emerge because no one is watching for pain points. But, perhaps the instructor is watching for those problems – are they in a position to do anything about it?</p>
	<p>Not very often, sorry I forgot you are recording. It depends, I shouldn't say that. With university courses it is very rare, partially because I think university students work more autonomously than high school students and they have a mentality of working to earn their grade whereas high school students tend to have a mentality of spoon feed me my grade, a little bit, and so with high school courses, more frequently but even still only comes to me if, hey this is the fourth time we have gotten this this week, I feel like I should call you and you should look at the ticket items. But otherwise customer service could get a call, they can file a ticket that goes directly to corrections, they can look at it and resolve and it might never have to involve me. But if it happens multiple times they would probably involve me or if there are any questions like hey they say that this is keyed wrong but I don't speak Japanese, could you look into it and see if it is keyed wrong or if they just had their answer wrong.</p>
	<i>Usability testing</i>
438	<p>Part of the vocabulary and culture of the current company.</p> <p>It seems like things like usability have to be baked into the culture of the design to be systemically embraced.</p>
	<p>I have only been there long enough to see one usability test so far and it was for our marketing website but it is definitely more of a concern now I would say. It is more formal, it is a more formal part of our process where I am now. It is definitely something that we consider and we conduct regular usability test and it is something we think about and we talk about.</p>
439	<p>Follows process from Rocket Surgery Made Easy.</p> <p>Patrick - We follow, what's the guy's name, Steven Krugg I think is his name. We use the, He has got a book that is called... Christijan "Rocket Surgery made Easy" Patrick - Yes, so that is what we use.</p>
46	<p>Testers test the software, but not the learning per se. Is it possible to do a usability test of the experience that allows you to see how the interface actually affects the learning independent of the quality of the instructional design?</p>
	<p>they are supposed to go through click every link, read all the directions, just go through it as a student would but not doing the readings. They don't actually have to learn the stuff, they just need to make sure that things are acting appropriately, that they don't get lost.</p>
114	<p>Fellow designer had student assistants go through course -- evaluating -- probably not like a usability study where participants are observed, but more like a remote usability where tasks are provided and feedback in returned.</p>
	<p>The one that we have been doing recently is to have our assistants; our design assistants take a look at some courses. Another one of our designers, Jay, went through and he called it a proactive review. So he just said I have this portfolio of courses, some of them are quite old and what he asked the students to do is literally just go through and judge the course. Was this engaging, was this interesting, did this feel</p>

	dated, did it need anything? In that case their point of view had been very helpful for pointing out, this section really got dull. Wow did you know there is a movie clip on this? So we have had some of their input that has been really helpful. But, no, I haven't really had occasion to do that.
bPK46	Approach they took with the design, looking back, doesn't seem intuitive.
	I feel pages like this we had to workshop something on it. I still feel like even this activity here I think it is a little weird in that it doesn't look like a typical multiple choice question and people wouldn't necessarily know what to do with these controls down here. I guess what I am saying; looking back on it now I can see it would be like not the most intuitive interface.
bBN47	"in most accounts they never tell us anything about the course after it has been deployed." Partly due to time, but partly due to brand issues if the training is a failure.
	No. I think in that particular case we do get some insight into that in most accounts they never tell us anything about the course after it has been deployed. It is very rare that we get any information about... you know we always ask but most organizations A. don't want to take the time to tell us and B. It is proprietary because say I am doing work for Apple and I do training on the Apple Watch and the training is a miserable failure and they have tremendous problems with the roll out as a result, they might come back to us but they don't necessarily want anyone to know that they totally botched the roll out. Regardless of whether we were responsible for it. Especially because we collaborate with the client.
bBN48	Evaluation from client looks like keep providing business if it was a success, no continued business if it was a failure. "there is little in it for the organization to actually perform and disseminate a meaningful evaluation. That is what I find across the board."
	Clearly this is not an Apple course that I am talking about but we collaborate with whoever it is and they are reviewing and approving it along the way. So there is very little in it for them to come back to us and tell us how it went. If it went well then they are fine and will keep giving us business and they will move on. If they are not OK then they will probably just stop giving us business but they are not going to tell us hey you totally screwed this one up and cost us a million dollars because then we could go on the market and say Oh, it looks like they totally screwed up that release and you know...you see what I mean? [00:49:42] there is little in it for the organization to actually perform and disseminate a meaningful evaluation. That is what I find across the board.
bBN49	Success of the project was unknown -- ID felt their team had created something great, but he found out later that it did not succeed due to situational factors. Not the training, per se, but the circumstances in which it existed. Faulty assumptions played a factor -- they didn't clearly understand the circumstances in which the training would be deployed. Could a tighter process have prevented that?
	We maintain relationships with a lot of the LC's. There was one project that I worked on that I loved. I was very happy with what they let us do on this project and we deployed it and about a year later I had reason to reach out to that LC again or somebody on that project again and they told us that actually it wasn't very successful because of certain things that we could not have predicted and certain technology issues that they never got around to...they didn't blame us for any of the stuff. It is not that it was an issue; again it was a situation where I only learned of it because I had a legitimate reason to ask this person about it because I was trying to coordinate something that related back to it. So this LC told me that, although to a certain extent it was successful it also had these drawbacks, I think that it was timing out because of the way these, because of the amount of time these people actually had to do this thing, and the interruptions and basically and the lack of sort of dedicated time to complete this task and technology and all this other stuff it was timing out and people were not able to pass on their first try as a result of this sort of weird thing. The expectation was that yes they are going to be dedicated to this for that hour or whatever and they were not able to do that and so not exactly our fault, if we had it to do over again what would we be able to do different, not much. The stake holders still loved the project, still loved the solution and did not want to change it in spite of these problems so it is just like one of these weird situations, how do you know what to do.
	<i>Evaluation as process for improvement of training/course</i>
259	Will review content before it goes out to ensure it is on message.
	I will definitely review the content before it goes out. I will definitely review the materials before they go out to make sure that everything is on message. But there is a lot of trust.
629	She has some "soft ways" to measure whether or not her design is on the right track, but not a "good strong way."
	I don't think we have, I think we have a lot of soft ways of measuring that, I don't think we have a good

	strong way of measuring that.
784	Design process different than reviewing process. She has to undergo an evaluative process for the courses, attempting to streamline and improve it.
	So that is kind of how I do that although I will say the process looks different when I am reviewing a course, which is what I do now.
792	Must edit self -- excitement over available options causes experience bloat
	In fact, there is usually so much that you have to be very, very, use an editing eye.
778	Individual teachers bloat courses as they are passed from instructor to instructor
	Right now we find that we teachers bloat courses, because we allow teachers to change things and so we find that they bloat and just they pass from hand to hand a different teacher is teacher is teaching that and we need to go back through.
379	Phase of project makes a difference. Once a training is created, designer might be tasked with going back through to evaluate, edit and update it.
	It kind of depends on the phase of the project. Right now a lot of the projects that I am working on are not starting from scratch. We are updating courses that already exist and so the concerns of, a lot of the thinking about objectives and activities has already been done so it is a lot just about like is this well written, is it clear, is it organized, is media being used in ways that make sense? Do we have videos about things that make sense to have a video about? Do we have graphics in the right places and talking about the right things?" It just kind of depends on the phase of the project but I would say at the beginning definitely objectives and go from there.
758	Over time instructors helped put together instructional content that then became part of each course -- instructions on how to do things within the course and the school in general.
	So that is how we set that up, each class has some very scattered across the board how to navigate that departments have put together and then they post those at the top in a module and students always have access to the how to's kind of frequently ask questions in the course.
	<i>Evaluation</i>
bMS28	Training well received by employees.
	It took a while to do it but it was well received amongst employees.
bPK44	One piece of the approach was tested on colleagues and changed, but it was because designer had doubts it was making sense.
	It was difficult because we wanted them to be able to; really this is kind of two types of pages mashed into one. It is like a swap but then also multiple choice questions and it was kind of tricky to do that. At first we were going to have them click on the answer options and when they clicked on a different option this picture would change but that didn't really work because that is not like ...Conventionally clicking on an answer option is like you are selecting it, it would be your answer.
	So we added these over here, these links up here to look at the different strategies, the different maps and camera layouts. We found a lot of people didn't even see these. Not a lot of people but a couple of different people that I showed them to didn't even see those. Maybe it was where we had them originally; we may have ended up switching these down to the bottom. In fact I think what we ended up doing; the final course I don't think looked like this.
	We did end up tweaking these buttons here, making it more clear that this was kind of like its own little interactive element on the page. We moved these over here and connected everything so it was like one box and made it look more like this is something you need to click through and answer the question.
bPK35	Client is first responder to design concepts.
	That is a good question. I feel like, I think a lot of changes that would happen OK like we make these mock ups and then we put them in a document and send them to the client. The client would use them and suggest changes.
bC50	E-learning training cut 40 minutes off live training and is anecdotally more effective.
	For if I remember correctly the previous instruction was an hour, the instruction, the training I made, my team made with me, 20 minutes. We were able to cut 40 minutes of instruction out and get to just the meat of what really makes this training consumable and easy.
bMS40	Evaluation was limited in scope, but learners apparently marked that they were able to walk through the app with customers due to the training.

	We were, really at the time, just starting out an evaluation process as well so the only questions that they were asked before you took this how much knowledge did you have and then after you took it what do you think your knowledge of the topic is now? We didn't have a lot of metrics on it but we did see people beforehand have no knowledge or a little knowledge and afterwards they felt like they could walk the client through. We didn't have any actual comments. We didn't have that sort of feedback back then.
bC41	She was able to have new hire technician and colleagues test her design in progress.
	So I actually had a lot of my colleagues and one new hire technician that was part of the actual audience that we were designing this for. They played around with it while I was developing everything to 1. See if it needs to be more intuitive and 2. If it makes sense to do the training the way I made it. There was a lot of interaction and feedback during the time of development and design.
bSA21	Administration has teachers fill out quarterly evaluation form to help them learn how to do data analysis of LMS data themselves.
	"So we are trying to teach them how to go beyond the obvious and dig for additional data and find things that are working and things that are not and then make changes based on that data." one of the things that, and maybe I can show you this, let me see, I think you would like to see this. [00:16:35] One of the things that we ask our teachers to do is look at the data generator from their courses on a regular basis because we are trying to teach them how to do this too. I am going to go to the end of quarter of quarter two and if it is not there I am going to pull it up a different way because I want you to see what, so there is a course evaluation that we provide as an administration that gives us some student feedback but we also do this, let me see if I can remember the name of it.[00:17:28] As part of our work flow at the end of the quarter we ask the teachers to fill out this quarterly evaluation form. This is where we get them, we start helping them to learn to look at the data and tell us what it means, so this is what it looks like. Um, it walks them through looking at their grade distribution, defining what was successful and giving evidence for that, then we walk them through how to look, actually how to pull reports to be able to do that. So we are trying to teach them how to go beyond the obvious and dig for additional data and find things that are working and things that are not and then make changes based on that data. They do this for every course for every quarter except for, like a teacher is teaching three or four courses; we let them choose what course they want to do because they only need to do one because it could get overwhelming. One of the things I love that we get from them is we get the average hour times per class, this is very interesting, it lets us know if the class is right on, too heavy, too light, because we get a really good cross section of students.
bSN44	Getting students involved in the process.
	and the only way to get to a point where you are happy with it is getting others involved, getting students involved in the process even, just to improve it that much more.
bSN58	Monitoring questions -- they have a feedback loop with students, allowing them to hear problems that software developers might not know about.
	That is what we do as teachers, honestly, like any question that you get 100 times or any question you even get like 10 tens I am either going to create a video about it or I am going to change it in my course. I am going to create a resource or I am going to talk to other teachers and see if they are getting the same question and then we will bring it up the line to see if we can get something made that can be implemented school wide and help all students out.
bSA47	Teachers feel like they don't have time to masquerade as students to understand what they're seeing, but if they take the time up front to check it out, they can avoid problems that actually end up taking more time dealing with multiple students who are confused or not progressing because of a teacher error.
	It's harder because teachers have not time. There is always something for them to be doing, however what we try to help them understand and what we have come to understand is doing that upfront as part of a weekly prep for your classes is so much easier than spending time, after time, after time, you know answering questions from the students and thinking why don't they understand this? Why is this not going well? Well usually it is our fault. It is usually teacher error and some directions are poor in the tutorial, something is going on and so our older teachers know this and our newer teachers are still learning. It does take more time, it's time intensive. But it is in the front-ending that it is much smarter in class than [during delivery of the class].
bSA20	Uses data to track student progress -- in this case observing that student might have cheated
	Absolutely. Absolutely. We also use it to, um so for example right now we are working with a student

	<p>who's disputing a grade. We pull all kinds of data to see when he was working, where he was working. I mean we have grades, we have the grades, but we want to see what is behind those grades, to know what was going on. For example, it looks like this morning a pupil was cheating. We cannot 100% prove that but that he was only looking at the tests, and that it is a course that, It is a (?Florida?) virtual course that all the answers could be controlled, we are wondering if that is what happened, He didn't look at any of the resources. And we do have that data; we don't have the data to accuse him out right. She regular(ly) does things like that.</p>
bMS39	<p>Employees get credit for training through evaluation form registered in LMS.</p>
	<p>Markus - We just attach an evaluation to the training. At the end of it in order to get credit in our learning management system they have to take an evaluation and so it received high marks.</p>
bSA16	<p>Data-driven decision to add check-marks -- ability to mark assignments or activities complete by the student. Anecdotally, students love the ability to check off assignments to keep track of their progress.</p>
	<p>I want you to notice one of the things that we do too, and again this came about by, you will notice again short, you won't find things much longer than what you see here written, and then I want to show you this thing at the bottom after you have completed this part of the lesson you can check the associated box, so we put that as part of the completion settings so that when students are done with something, if it is a grade, when it is graded it is checked off, other than that they can check it off themselves like I just did. This is a way for them to work through the course without getting lost of forgetting where they have been. And again that was data driven, we would find that students would miss things and come back and say "Oh my goodness I missed this I didn't know" or do poorly during the week. We looked from week to week and we compared data from before when we did this and afterwards to see how students were doing and they were able to work through material more consistently. And again clicks in the LMS that is how we can take a look at things. [00:14:09]</p>
bSN71	<p>Part of their organizational process is to write up a report regarding analytics associated with course, assignments, etc., quarterly. They adjust their course based on the findings of that report.</p>
	<p>No, one thing in regards to our views of the user experience is we, at the end of every class and during the classes we are constantly looking at reports, like I am checking what assignments had the poorest activity on it or what assignments had the least amount of clicks or completion and then we actually write up a quantitative and qualitative report that we submit every quarter for our course. That report is kind of nice in regards to seeing the users experience through the data, rather than maybe necessarily that survey, that is more the broader you know, then I go in and improve my course from that data and also from that feedback that I got from student. But really it is from those jewel reports and what assignments did best and then coming up with plans.</p>
bSN7	<p>Reformatted contact information to side of screen based on how students used the system and what they needed to see, but change came after implementation had been in place for a while.</p>
	<p>This is my Art 1 class so for our formatting we have, we used to have office hours at the top of the class but then students would have to scroll up, usually we have it so they are in one week so the students couldn't even see the office hours, so we moved them to the side of the window here which is kind of nice.</p>
bSA54	<p>As they set up the school early on, they made everything and then had to take a different perspective to see what wasn't working and then by taking the new perspective, they found that it didn't make sense from the student perspective.</p>
	<p>"and think well no wonder they are getting stuck, this doesn't work."</p> <p>That is interesting and I believe that happens a lot. I think we initially did that as we were growing and learning and just creating materials and then we sat back and looked at it from a different perspective and think well no wonder they are getting stuck, this doesn't work.</p>
bSA43	<p>Teachers have to be reminded to log in as a user to check on how what changes they're making will look to the student who is using the course.</p>
	<p>And one of the things that we, and it is interesting because our teachers have to be reminded to do this. This is where we feel like we came across the fact that our students would work things and not have specific enough instructions. Or in Moodle would change something and they do do periodic updates and because our teachers are not logging in as a student they would miss little things that would make the student experience easier and more clear</p>
bSN48	<p>Feedback comes at end of quarter and end of course in form of an anonymous evaluation.</p>

	<p>So for me the first feedback is in an individual critique which is here at the end of the quarter. And in the end of the class, so at semester break then we have a course evaluation which is here and they are anonymous. I actually, I can't view what they look like but I can show you what the responses are. So the question is, well you can see what the question just by the response. This course makes me think and work but it is not a bad thing. This course is a cake walk basically. This course is just right, not too hard but not too easy. So these are the things as a teacher.. read the quality of the assessments, discussion forums, assignments, projects and then the majority of 31 students said the assignments were making sense, testing exactly what I learned and then the one student who said once again on the lesser extent. This is for extra credit that they end up taking this survey. Rate the course on organization, clarity. Rate the teacher on communication, availability. How many hours a week did you work on the class. I think that is a fun thing to look at as a teacher, you know, it is really hard to write a class and have it be the right amount of time. You know a lot of times when the students are saying 4 to 5 hours in my class it is because those are the students that love what they are doing so they are spending a lot of time, where the amount of time spent varies I think is really interesting always every year to look at. And then this is where they can leave individual ideas on what can be done to improve the course. You know you always get a lot of, it's great, or classes are always very good, but then you get some good things in there.[00:28:33] That is the feedback form beside actually just talking with every student that shows up for their individual critique.</p>
bSN52	<p>Feedback on the concerns, things like navigation, etc. would go to tech coordinator, not necessarily course designer.</p>
	<p>That is a good question. That feedback wouldn't come to me I guess, it would something that would go to the technology coordinator but I honestly don't hear it too much.</p>
bSN77	<p>Quarterly evaluations provide metrics to evaluate the course. There is a form they fill out to capture all the relevant metrics and they can compare year over year.</p>
	<p>I will just pull up, so we have our quarterly evaluations. So as a school we sort of track all of this data, but this is our quarterly course evaluation form. This was from my last year's class, all of my students passed but basically it asks you for all of this information. Average minutes spent in class. Then we have a document that has all the classes at the school that we implement. We put in the minutes spent in class, the number of enrollments and the grade distribution. So that is all on one spread sheet and then you see from year to year you can easily access all the years that the course has been taught and how the course is improving.</p>
bSN31	<p>He makes adjustments to the course as he notices them throughout the year and then will refine or revise the following year as he preps for a particular class, seeing the changes he made the previous year.</p>
	<p>Yeah that is the way they will show up in their grade book, the one thing because I have switched my classes, like this year I have been kind of moving things around and really honing in on that after that class is done so some of the assignment numbers are switched up but it is really easy to back and put them in order and then they would line up in the grade book. So you have 17 here because I thought this weekly drawing went better with what we were doing there. That stuff will all be, because this class has been taught already so right away when I get done teaching it I make the changes that I want to for sure have done by next year and then I have a list of things that I would like to get to but with the idea there might be another class that is way more important to me to make a bunch of changes to over the summer. That is something that has kind of been, because at first I would always just make a list of changes and then when I got to the end of summer I would be trying to make all of those changes and it was just totally overwhelming and almost impossible and now I am at the point that I make the changes that I need to make in regards to the structure of it and then as I go through and prep each week I can easily just update certain aspects of it.</p>
bC35	<p>Anecdotally though from what I can tell from the trainees and trainers this has been a lot more helpful in getting the knowledge across and actually implemented well. We haven't had any, anecdotally, problems seen yet with it.</p>
	<p>We are doing that right now. The only data that we have is one that pre-exists this training. What we are going to do is wait for enough need to have the technicians install this in order for us to get data on the new training and how it affected performance but that is kind of in progress. Anecdotally though from what I can tell from the trainees and trainers this has been a lot more helpful in getting the knowledge across and actually implemented well. We haven't had any, anecdotally, problems seen yet with it.</p>
bMS42	<p>We have really changed totally how we do our training.</p>

	You know we have really changed totally how we do our training.
bMS43	Trainings have become shorter because call center employees don't have a lot of time for longer trainings. Awareness of the learner's situation allows them to tailor their instructional design to the situation. This is easier in this type of situation, where the ID team is in-house and provides training for the same internal client consistently.
	Just because the nature of our business was being, our particular division of focusing on training were the call centers. They don't have a lot of time to do training, getting off the phone, so we don't do a lot of long trainings like this one was. We pretty much now have our documentation team will document all the steps out and every now and then we will put together little videos that don't have any audio or just for them to watch while we demonstrate the steps out and those videos are generally less than two minutes long.
bPK40	NO user testing and feels it is a gap in process.
	Patrick - No, no I feel like that was one our weak points and one of the gaps I think in our process is that we did not do user testing.
bPK41	Would get feedback from colleagues and not users.
	We would have like informal, we would run it by a co-worker be like hey look at this or be like...but it would be pretty, it would be pretty informal and definitely not like a set process. We wouldn't bring in people for user testing; it was more like everybody looked at it and said "Yeah that makes sense."
bPK43	Test on a colleague would happen infrequently.
	Patrick - Yeah, yeah I think so. It wasn't for every single thing we did. Again it wasn't like an explicit part of our process to do that. If you were going to do that you would have to grab someone and be like OK look at this. So I would do that with some things but not everything. Even now looking at this I feel like I would actually, I know one thing I remember specifically doing a user test with this one with a couple of people because people would come in, we had this kind of tricky...
	<i>Design choices – Examples</i>
bC26	She created an interactive simulation of the actual rewiring procedure. 10 activities per section.
	Ok this is going to be a little bit more difficult to explain but, let me see if I can do that. Just to give you a quick look into this. Like I was explaining, so this screen is part of the practice activity for the first part of the instruction. What the learner will need to do is move all of these wires that are yellow over to the takeover module which is this little device here. All of the yellow wires on the very top, there are about eight or nine of them, all eight or nine of them will need to be moved to this device here, in the correct order and to the correct terminal associated with the wire of the mother board up here. The trick here, in this instance, is learning how to read the mother board panel based on what needs to be done. Just like in the live environment, once a technician needs help in identifying what wire goes into which terminal in this device they would be able to gaze over to the panel instruction, which would be this. What you would see here is what they would see in their live environment if they were to need some assistance in looking at what wire goes into which terminal on this device to the right. Once they feel comfortable in knowing how to read it, and they should after the instruction is given they should be able to do that, they will be able to identify OK, well if a wire needs to be in port five of that device, which would be this, they know they need to install wire 15 into that port. They would go throughout the entire practice activities which is about ten of them and do that. Once they reach ten they have finished that cluster of instruction and they would advance to the next cluster of instruction which would be grounded the wires they already rewired. Just like the previous one I would go over the information, talk about what wires affect what terminals and why we are needed to ground it and then show them through video how to do that. Once they have those two parts of instruction then they will be advancing to the practice activities and immediately implement what they just learned. Once again, in a live environment they would have a chance to play around with the wires that have been grounded right here, ground the module that we just completed in the previous activity to the power supply which will then be connected to the grounding supply. Essentially which I am doing is just breaking up all of the facets of the content into three consumable parts and each part is made of, depending on which part, two or three different smaller sections. This slide or this instructional part talks about just that, how to ground it in those two to three steps.
bMS9	Included demo of actual app in video format

	Also you see to the right that there was actually a spot for a video and this is a demonstration of the actual app. At the time it was only for iPhone, so what would have popped up there is an actual picture of an iPhone and we embedded a video in the actual screen of the iPhone. It would be a working demonstration of that particular page within the mobile app.
bMS10	They could see the app customers would be calling to ask questions about.
	They were actually able to see what the customer was going to be seeing, how they are going to be scrolling and choosing those features on that particular page of the app.
bMS35	Judges liked self-navigation approach, simplicity of graphics, embedded videos.
	Markus - They liked the ability for the user to move around on their own. The simplicity of the graphics. One of the comments I remember was the embedding of the videos. How along with the information they were getting on the screen, actually getting to see it.
bKA6	Used theory to help participants recognize patterns in their work, to avoid overwhelming them with broad range of scenarios.
	We tried to base a lot of things around actual scenarios, trying to position it within the story. Using cognitive apprenticeship, scaffolding-kind-of mind set, the stories hold the details and allow us to make sense of it and a new MSR is overwhelmed by the variety of story and don't see the pattern. In the training we wanted to bring those patterns of stories to the forefront.
bKA8	Wanted to pattern training actions after on-the-floor behavior patterns they were trying to instill in new employees.
	Where you can have dual monitors when you are going through the training, you can have this in one system and you can have your knowledge based performance system in another window so they are highly encouraged to look things up to be able to answer the material. We want them, on the floor, to get used to when I have a question that I cannot answer, how quickly can I find the answer. We are trying to train for floor performance as well as for knowledge delivery, if that makes sense.
bKA12	Training included games to allow practice on concepts being taught.
	So we have play which is just another way to talk about practice, scenarios. Here is the folder on the information on the sergeant what can he do, what can't he do? Scenario reminder pops up. There is context-dependent set of questions based on scenarios that will take you through. Learning journal, reflection pieces, timer stats. A card-sort game. I was just thinking what else was in here? There are a bunch of things that they have to classify and categorize and they get feedback on.
bKA1	They were not teaching content as much as they were teaching how to gather content while in conversation – soft skills, not knowledge per se.
	Katrina - Let me tell you a little bit about this piece while we are waiting for this to load. This is one of like 28 modules in a set of content that has a larger system wrapped around it. This isn't designed to stand alone in any fashion. The strength of this design is not so much in the WBT but in the role play practice so for this particular module where they are looking for valuable personal property insurance in the PNC casualty arena there are so many details, just a multitude so think of trying to teach someone how to classify a piece of jewelry and classify a chain, so it is a gold chain and then they need to know what kind of link style and there are 50 different styles and qualities of gold and blah, blah, blah, so the amount of detail in there is just astronomical. They don't use that detail more than once every five years so what we are trying to do is teach them a way to be able to systematically work through the 80/20 principle, what's the 20% content that I use daily, weekly. We paired these units down to very small units that typically didn't have more than 30 slides designed to be done like in a half hour to 40 minutes but with this larger system of role plays wrapped around it so that they could get into the cadence of the conversation. Nobody cares how the person in a call center actually gets the information, the only care is that they have a pleasant experience, that it is social, that they get what they want at the end of the day and so can you carry on a conversation while you are looking up details was one of the primary skills that we are teaching them. So we have a bunch of really boring stuff to get them started but this is explaining the concept that there is so much information in valuable personal property that is it too easy to get lost in the details and we wanted them to know that we were not teaching them the whole shebang. Now you are not hearing the audio that goes on with this. Just trying to grab their attention, get them set up with the right mind set, introduce them to their guide who is an expert MSR. Walking them through,
bKA27	Type of imagery used affects learner perception of credibility.
	Katrina - Well the client had very strong feelings, they wanted to keep it realistic with the kind of age group and people that might actually be hosts and managers and trainers. We went for variety of

	<p>ethnicities and a few different age groups. But there are definitely some units that come across as more credible. We have a middle aged blond women that just does; she actually looks like a trainer, looks like one of their trainers. But the students perceive her as less credible so there are definitely issues with age and gender that sort of play a role in that. You can only do as much as the client will give you room to do. They liked real people, they liked these Avatars and they work. They are little bit repetitive in some of the units where the designers were not as adept at using them well. They sort of felt like the Avatar needed to be on every slide which is boring.</p>
bKA48	<p>Audio designs can impair user from going at their most comfortable pace. She likes to make audio optional.</p>
	<p>Katrina - Personally when I go through WBT I turn off the audio because I can read faster than they can talk and I feel like I am chained to the speed of the reader. If the audio is well done and adds new information and doesn't restrict me from clicking through, like I don't have to wait for them to finish talking, I can decide whether to stay and listen or whether to keep going. Most WBT's at least for this client are not built that way and so I would rather develop without the audio and make the audio optional. I would like to put a little scenario button where they can click on it listen to the scenario if they want to or not.</p>
bKA50	<p>She used audio as a specific training need -- getting closer to the full fidelity of the experience learners were being trained for.</p>
	<p>Katrina - Most of the units that I have the audio is part of the introduction, or it is part of explaining a best practice or something that you would want to have judicious use of audio and I have a bunch of actual call center calls so I don't need someone to read to me the slides, I can read faster and decide where I want to go with that stuff. I don't want to read a long scenario that is a call, a real call. What I am concerned about, as the learner, is so what have I got to do when I am on the phone, what am I supposed to sound like. How am I going to be graded upward, downward, sideways, whatever so I want to know what that standard is and what it sounds like so I can begin to develop my own cadence. Most of my audio for WBT's are focused on those call simulations.</p>
bN50	<p>Truck surfer example.</p>
	<p>Nancy - That happened back at the early stages of this process when we were working over at the center for instructional design and we had a team of animators there and the instructor had wanted, this was not Lorelei, it was another instructor at the time. They wanted to show the idea of momentum, you know frictionless momentum and inertia so they started chatting with our head animator at the time which was Rob Allen, he is still over at, now it is called the center for teaching and learning but they were talking about this and he and his guys got to fooling around and said Hey wouldn't it be funny if and they were just riffing on it and came up with this truck surfer idea. I faculty member at the time was a little bit hesitant because the guy is flying out of the truck bed for crying out loud and they apparently had him land bloody and stuff and they said no we can't go that far. He can go ahead and fly out of the truck bed but he can't get damaged so they said OK and they went back in and re-edited that too, (side comment from across room "with much sighing") yes they were very disappointed. Yes that was something that Rob came up with as the head animator.</p>
bPE39	<p>Designer recommended modeling as a way for students to better understand assignment.</p> <p>Instructor provided examples and now has students sign a talent release so she can use submitted assignments for the course in the future.</p> <p>Online opens up a need to be more careful with copyright and privacy laws.</p>
	<p>Penelope - Both. So, I told her, you know in other courses where anytime there is a speaking assessment we like to provide, you know a rubric is a great start but if we can provide a life model it helps them get an idea of what they can do and she was like actually I have some really cool ones where they got really creative and you know where the girl is play _____ and the other one where the guy is playing the character opposite, his character is this baby and it is cute. She has them sign this talent release form at the beginning of the course so that when other really cool ones come in, she can post them into the course as examples.</p>
bBN22	<p>Used scenarios to tie together the concepts.</p>
	<p>So on this one, one of the things I worked hard to do was to try to incorporate scenarios and so I would just sort of sketch out the scenarios and those he represented very nicely. Basically we would have an</p>

	<p>initial summary page and then we would have a scenario, a summary page is you are going to learn about this and then I don't remember exactly how _____ the initial summary page for each module. I think we had learning objectives and then the introduction of the scenario or maybe we went into the scenario in order to introduce the learning objectives. I don't remember exactly. We will get to that. The Scenarios were an important part of it and one of the things that I had him do was take, so you have got a module which is maybe three or four slides, maybe ten whatever but a relatively brief number of slides and you post this thing and you want them to see the scenario and then at the end of the module you are going to have a summary. I wanted to make sure he was mentioning the people we were introducing in the scenario and just mentioning them in order to bring up the thinking, in order to bring up what the problem was and say to the people now you know how to respond to the problem, now if Jose comes in to visit you, you know how to respond to him. Or now when your mother-in-law is complaining about mortgage payments and how they are evicting you from your house you can explain a little bit better why it is better to be a fast process versus a slow process. That kind of a thing. That is not the content of this course but that is sort of the...trying to tie it together.</p>
456	<p>Design example</p> <p>B - One design, one of the first projects I worked on. Someone else kind of designed it but I ended up executing it and I used kind of similar things throughout. It was for training administrators at English Language schools. They just had a lot of policies that they needed to know, HR policies, just all the admin stuff that you can imagine. Housing for students, setting up schedules, hiring teachers and just all that kind of stuff. We did this kind of curriculum of courses. The design of it was the learners would come into the course and this was definitely one that didn't have kind of your traditional click forward to go next navigation. You would come in and there was kind of a main menu on the side, on the left side that had main topics. You would go into one of those and then probably 2/3 or 3/4 of the content area would have like real world scenario questions and then underneath there were tabs with information and just general content and you would access as you needed to answer the scenario questions. So rather forcing learners to click through page after page after page of all this content they are presented with activities and questions right off the bat and then they access the content as they needed in order to answer the questions. Then there would be like five questions per module or something like that. There would be like a quiz or assessment at the end. I really liked that design because again because it was interactive, it was focused on real world scenarios and the learner had a lot of control basically. They accessed content that they needed when they needed it rather than having to go through it themselves.</p>
bKA27	<p>Type of imagery used affects learner perception of credibility.</p> <p>Katrina - Well the client had very strong feelings, they wanted to keep it realistic with the kind of age group and people that might actually be hosts and managers and trainers. We went for variety of ethnicities and a few different age groups. But there are definitely some units that come across as more credible. We have a middle aged blond women that just does; she actually looks like a trainer, looks like one of their trainers. But the students perceive her as less credible so there are definitely issues with age and gender that sort of play a role in that. You can only do as much as the client will give you room to do. They liked real people, they liked these Avatars and they work. They are little bit repetitive in some of the units where the designers were not as adept at using them well. They sort of felt like the Avatar needed to be on every slide which is boring.</p>
bKA48	<p>Audio designs can impair user from going at their most comfortable pace. She likes to make audio optional.</p> <p>Katrina - Personally when I go through WBT I turn off the audio because I can read faster than they can talk and I feel like I am chained to the speed of the reader. If the audio is well done and adds new information and doesn't restrict me from clicking through, like I don't have to wait for them to finish talking, I can decide whether to stay and listen or whether to keep going. Most WBT's at least for this client are not built that way and so I would rather develop without the audio and make the audio optional. I would like to put a little scenario button where they can click on it listen to the scenario if they want to or not.</p>
	<i>Awareness of UX</i>
	bSA35
	Hasn't heard of UX
	Christijan "Great, I want to take a different tack now for the last few minutes here. One of the things that I am interested in, to understand to what extent those people who are designing e-learning materials and

	<p>classes are aware of user experience design as a field and some of the practices that are done within that. Have you heard the term user experience design?"</p> <p>You know, I haven't.</p>
bSN61	Hasn't heard of user experience design.
	I don't think I have necessarily heard that exactly.
bPK96	Learner experience.
	I would say the term user experience didn't come up so much. If it did come up it was more like learner experience.
bPK59	<p>Instructional designer and team doesn't always have control of the experience because they are hired to just complete a part of the puzzle – the bigger organizational training picture.</p> <p>Learner experience – What is the course of experience as learner moves through the training?</p>
	We talked about learner experience. I feel that in the sense that we used that, I would say that it was similar to user experience in that it was like what was the entire experience the learner is going to have with our training. And one of the tricky things is that we didn't have control over a lot of those things. A lot of times the company is contracting with us to build this one little course that is part of this bigger curriculum and is already this big thing that is part of this big company and we have this tiny little piece. That was always one of the struggles because we couldn't always control the learner experience as much as we wanted to but within the course when we talked about learner experience it was more like what happens when they open the course and kind of really like the sequence of events that they are going to hit as they complete the course.
bPK60	Learner experience is the broader context too.
	What is the learner's path and what do we expect them to do and when are those things going to happen. That is kind of what we meant by learner experience and kind of broader too, if we did have a little bit larger product that had a web based component and an in person component and performance support. How does that whole thing work together kind of holistically? Figuring out how they all work together.
bPK62	I would say when I hear UX I think about user interface kind of stuff but I feel like user experience would be a broader thing. Like a more holistic thing
	I would say when I hear UX I think about user interface kind of stuff but I feel like user experience would be a broader thing. Like a more holistic thing, how do people feel when they are doing this thing? What kind of path do they take? It is not just about usability.
bPK63	Goal based design as user experience.
	It is about the broader, more than just buttons and where they are but kind of where are they coming from, why are they coming, how do they feel, what are their goals, how do they reach those goals. So again kind of more like a holistic look at a person's interaction with some thing or some process. I don't know if that is like an official definition in the industry or what but that is kind of how I understand it.
bC54	Dabbled in UX
	I have dabbled in some of the ideas about it but I am not too familiar about it from academic perspective but if you want to go ahead and give me the questions I will do my best to answer them.
bC58	ID doesn't collaborate with UX team at organization for training purposes.
	We do, we don't collaborate with them for training purposes
bC64	Hasn't read academic book about UX.
	No really I think where my knowledge comes from are small articles that I pick apart, that I see online with eLearning guild or a different kind of ____ association. I have never read a novel or academic book about this very topic.
bPK95	Design map was closest thing to experience design.
	Good question. I feel like later, like maybe 2/3 of the way into my time there we had more emphasis on, like as we were designing courses we had to create what they called a design map and that map was supposed to here is what the learner is going to experience when they take this course. Here is the main order of... so like here is an introduction and this is what is going to happen here and then we will have activities here and then we will have these things here and then we will have these things here. And that was kind of like a training to figure out like how to visualize that. How to create graphics that would communicate that to the client. We did have some training on that but that was the closest I would say. When it came to the usability kind of stuff it was like the design manager would look through stuff and

	say you know this isn't really intuitive, the conventions would be like to this, or when I do this I would expect to do this. Or our graphic design would have those same kind of one on one conversations as you were running things by and remember.
bC74	She's heard of information architecture. -- Applies it more to instructional design scaffolding, building on existing knowledge.
	Kind of the scaffolding of content. I am not sure if that is what it is meant to be defined as, but to me it is building on knowledge that is already known and then further expanding that. Making it easier for learners to consume new information. [00:32:31]
bKA60	Artificial academic lines drawn between user interface design and instructional design. You have to come above a certain level of usability, but beyond that, the lack of usability won't necessarily hurt the learning potential of the design. Especially in the context of being able to explain to users how the training functions so they don't have to figure it out themselves.
	From an instructional design standpoint we tend to say we can overcome bad user interface with good instructional design. From a user interface perspective they say if the experience is not good then they are not going to learn as much from the material. The reality is I think it is somewhere in the middle and we have sort of drawn artificial academic lines for it. If there are specific user interface issues that are barriers to access and you have to overcome those to make them accessible. You know, color blindness for colors of text makes your course inaccessible to some segments of the population. If there is not a way for a smart screen reader to be able to read your slides because of the way you coded them you are setting the client up for some meaty lawsuits for discrimination and access kinds of issues. But if my buttons are not very intuitive and it requires a thirty second explanation at the beginning, yes they are annoying but they are not impeding your ability to learn the user experience is not as good as it could be, it might be a 6 or 7 out of 10 but it doesn't actually get in the way of actually seeing the content. Once you have done the first two units you kind of have the interface down, it is still crappy, it is still not good but it is not getting in the way of your learning material.
bPE49	Has a vague sense of familiarity with terms of UX design, but says her design approach is more by intuition than explicit or formulaic approach.
	I would say that I am familiar with them. I wouldn't say that anything in my design that would approach with Now I need to think of these things formulaically, no I don't think I approach it that way, so maybe someone who had a real instructional design education would but I feel like I have familiarity and awareness of them, yes. And in some regards I feel like I may have intuition that way with having run a school before where I worked with the students and so the user attraction was one of my number one priorities as school administrator that I wanted to make sure that my students could complete their courses and achieve their credits and you know had a successful and rewarding experience, that kind of stuff.
email 5/7/15	I am familiar with Nielsen's work (not sure if I've looked at that one specifically), but I don't know any of those other ones. I am familiar with the concept of UX and I view it as attempting to take the user's entire experience of your product into account during your design process – not just of what you're putting in front of them, but how it might potentially affect them and/or interact with them from the moment it enters their consciousness until the moment it fades from same. To me it's taking a holistic approach to your product and how it integrates (or doesn't) into a person's life, versus viewing it as a primarily a means to an end. However, as I said, I have only some passing familiarity with Jakob Nielsen's work and none of the others'. There was a course I'd been hoping to take on U/X, but it didn't fit into my schedule.
	Role
	<i>Curriculum design vs. performance change</i>
166	Designers don't necessarily aim at a change in users specifically, but are content to design and be paid with little or no concern with the overall outcome for the client. making a difference
	Most instructional designers are more corporate in their thinking in that I would like a nice, safe, secure

	job and I will design you some cute little training materials. Ah I am a little bit pessimistic today. They are a little bit like curriculum designers; they don't feel the same compulsion to do performance improvement.
167	Curriculum designers aren't held accountable for whether their materials make a difference or not. making a difference
	Yes and that is not disparagement against curriculum designers but curriculum designers aren't held accountable for whether their materials make a difference or not.
168	Curriculum designers are responsible for organizing and laying out a course or instructional experience. They follow good principles, but their practice is built on an assumption of where students are at and doesn't have to know whether or not it worked. At least in practice. Evaluation steps in the design process would ultimately reveal that a design wasn't working.
	They are responsible for organizing it and laying it out, following good principles. They are not as concerned about saying where are the students at and how do I move them to where I think they should be.
169	IN academia, she heard from students that they were just required to make slides. "I guess I come from a perspective where I heard in Academia for ten years, "Well you don't know what it is really like out there and my boss just wants me to create cute Power Point or cute Captivate or cute fill in the blank, whatever the tool is that they are using to create it. I just create slides or I am just the trainer in the front of the class. I wanted to be an instructional designer but I spend most of my time just delivering cute little HR classes that we designed." making a difference
	I guess I come from a perspective where I heard in Academia for ten years, "Well you don't know what it is really like out there and my boss just wants me to create cute Power Point or cute Captivate or cute fill in the blank, whatever the tool is that they are using to create it. I just create slides or I am just the trainer in the front of the class. I wanted to be an instructional designer but I spend most of my time just delivering cute little HR classes that we designed.
176	Designers sometimes are not very thoughtful about what media they choose to add to their designs.
	Seldom do you see instructional designers when they go in at the analysis stage say, "what interactions, what things are required to understand this content?" So I can do a sim(ulation) or a demo or a little movie of this piece interacting with this piece because if you don't see it you don't really get it and then I am going to have a bunch of content that I am breaking up with visuals, not because they particularly need a graphic but they become more memorable.
671	Writing classes was first part of job.
	So that first year I basically wrote classes, and that was the biggest part of my job just writing my classes.
	<i>Designer vs. Developer</i>
246	He is an instructional designer, which means he doesn't do content development or media development The way that we do our design and development as an instructional designer at option six you get hired to actually do instructional design. I say that because it is important. We also have content developers and we have media developers. That means that I don't have to worry about developing the content, I never have to know the content. I don't have to touch the content. I will work through it in order to gain a feel for it but that is it. Unless I am interested in it or unless there is something particularly complex about it or whatever. I don't need to internalize it or really work with it. I need to understand how it flows and how it fits so I go through and I will do my analysis and then I will do my design and then the content developers work together to develop a solution and I don't really play a part in that.
247	Compares ID to early software field where early developers were backend and frontend developers. We're trained to be jack of all trades, we still think it makes sense for one person to do it all. For him it doesn't make any sense. The role of instructional designer should be more focused and less inclusive of other fields.
	We are basically trained to be a jack of all trades and do everything but I think that is because we are basically in a really immature field, if you look at the software development field, which started off a little bit earlier, if you look at the software development field you had software developer sort of an

	undifferentiated software developer. They were generally, (computer down for a second) so basically software developers were undifferentiated they were basically math geeks and engineers that were considered to be unable to hack it as math geeks and engineers and so they would build the software and they would build the front end and the back end. There was a reason for this, the front end, they were the only ones using it at first and all they really cared about was that it was fast. As computers became more powerful and we had a better tool set, you know we went from coding machine language to coding in assembly language to coding in third generation languages or high level languages and as that happened there were more capabilities. There was data base and there was a separation of concerns and at the time your back end developer was sort of the high end. If you were a developer you wanted to be the back end developer and you were upset if you were left as the front end developer. If you were any quality at all you always wanted to be the backend developer at least that was the assumption. Nobody ever focused on the front end. Well today you know that we have UI developers and you wouldn't consider a UI developer to be even a programmer, right they are generally working with sketching tools and they are using, they are setting up wire frames but they are not programming it. They are not doing the java script; they are building the user experience. We as instructional designers never did that, right. We as instructional designers still think that it makes sense for one person to do it all, for one person to go from soup to nuts and it doesn't make any sense, we handled it all and I don't know what we handled it. This organization has, and that is what I am saying we have media developers so that, yes am I helping the developer, absolutely. We are not limited by what I can and cannot do. I am not a visual developer, you know, I don't do graphic design, that is not my thing at all. I know what I like and I also pretty confident that most people don't like what I like and that is fine because I don't have to worry about it because I have a media developer who takes care of it. I don't have to worry about my grammar or the fact that I don't really like to write because I have content developers who love to write. All I have to do is structure the content; make sure that it is not going to put the learners to sleep. Make sure that it is structured in a way that they can actually internalize it and hopefully transfer it and apply it on their job and then I hand that off and they build it. They build it to my specifications but they are the ones who get to do the actual building and I do the actual design.
248	Provides as little as possible to developers. He references sources of content for the developers but doesn't generate any himself if he can help it.
	When you talk about structuring it, how do you go about that process and what is it that you provide to the content developer and the visual designers to put in? Brandon - Personally I tend to provide as little as possible.
258	The heavy lifting of instructional design so content and media developers can focus on their expertise.
	Just making sure that they know what is important and what is, so that I am not leaving it up to them to determine where emphasis belongs and to determine the sequence and the flow. Instead I am leaving it to them to do the things that they really enjoy doing, which is doing the writing and sort of fleshing it out into a story or fleshing it out into, or following the guidelines, making sure that it is all syntactically and stylistically correct.
268	Does feel responsibility for the high-fidelity, the look and feel of media objects, but doesn't do the actual creation
	I define how high the fidelity needs to be. Or how high the fidelity on a particular media object needs to be or how high fidelity we can support and I will certainly suggest solutions for meeting those criteria, ways that we can actually meet them. Ultimately the media team is going to do it and not me but I will certainly sit there and brainstorm with them ideas for how they will potentially meet it. So it is not like it is just left up to them, that is part of what I do. I will review a media object and say this doesn't really convey the right tone or this doesn't convey the right message or it is supposed to trying to say this and this really says that and stuff like that. The same thing would be with the text and the everything else that the context developers will put together. Sometimes they will put things that I have not defined sufficiently for them and they wind up being off message and I will have to go in and make recommendations for changes or subsequent text changes.
181	As consultant she has her hands in many parts of the process from analysis, to design, to development
	Because I am a consultant I tend to be involved in all aspects of it which I really like. I do a lot of analysis work, I do a lot of evaluation work, when I am not busy doing either one of those for different projects, then I will help out with the very granular instructional development.
bBN27	"our field of instructional design has reinforced this jack of all trades type of mentality and we have not

	yet matured past that."
	So one of the problems, I think I talked to you about this last time, but our field of instructional design has reinforced this jack of all trades type of mentality and we have not yet matured past that. My organization has matured past that but that doesn't mean the rest of the world has.
bBN28	Instructional designer is a distinct role and the shouldn't have to build the media, even if they know how. That can be done by a professional developer who can focus on the development, rather than the instruction per se.
	We currently have a division of labor and that means that the instructional designer gets to be an instructional designer. They don't have to build the media, they don't have... it is good for them to have a good idea of how the media gets built but they don't have to do it which means if they don't know how to do a branched course it doesn't mean that they can't design a branched course. It just means that they are not going to be the one building, but they wouldn't be building it anyway. We will hand that off to Michele or to John or to any of the media developers who are very skilled at that and they are very specialized at that and they don't really care about, they care, but they are not focused on instructional design, not in the way that I am. They are not focused on the learner learning. They will often ask questions especially, you get some media developers who are much more concerned with the learner than other media developers but it is not a pre-rec.
476	Current job entails many things. Project manager, liaison between departments, designer, developer, analyst
	"Will you describe in a general sense what it is that your current job entails now that you have been here a few months[00:01:49] ?" Charlotte - Yeah, so it is a lot of different things.
477	Instructional designer playing project manager, department liaison, designer, developer and analyst. Project manager, kind of liaison between this department and other departments making sure that our department grows in reputation positively. Then of course designer and developer along with analysis, not just in the ADDIE phase but analysis of overall programs that we produce in general. It is a lot of different roles for one title.
478	35% design, the rest is development The actual design? The design part become pretty easily to me so the time I put into that is not as much as I put into development, so I would say the design part would maybe be 35% if that, the development really supersedes that.
402	The roles on a design team can often be a work in progress. Defining who is responsible for which piece is probably an ongoing refinement process. Typically that was, when I left there that was something that was kind of being figured out, it was in flux.
508	Role of the designer shifts based on past expectations and the growth of the organization. Our department is a little bit more used to just receiving the content being thrown at them. We are developing our team a little bit more. We are in the stage where right now it is going to be ok, because we want to have other departments feel like they have control over that and then slowly go into the idea I was saying about action mapping. Actually piloting taking control of that conversation.
739	I do a lot of student services, lots and lots of student services but I also do curriculum review and development so I wear a lot of different hats which is per Charter.
bMS14	Got content from SME and T did the development and instructional design. Markus - The responsibilities were pretty much broken out of, they provided the content and I did the graphics and all of the intelligence behind making it work.
bKA43	She was responsible for eight of the modules -- around a third of the project. Katrina - Yeah and a couple of those modules were inherited from folks that I had to fire. They are not the most beautiful but they are very functional. Trying to go back and reengineer someone else's mess is always tricky. [00:25:18]
bN22	Import word document into Dreamweaver. OK off we go. So from the editing design to word doc we go into making the HTML file. We have a template set up that we all use. We don't have to worry about what are my margins going to be, what are my fonts, what are my styles. It is set up so we generally just open it right up, go through and import the content in, making any necessary tweaks between the word and HTML and save it as HTML files. So happily a lot of that hard work is done for us. So go ahead and program that HTML and lets jump over to actually show the course because it makes more sense to look at this than the code. We can look at the

	code if you like.
bPE6	Designer did not do HTML formatting.
	Christijan "Did you get involved with the actual HTML formatting"
	Penelope - No we just had a template.
	<i>Designer vs. Technician</i>
513	If you're only following steps in a process, you're a technician rather than a designer
	One thing that I don't like that some instructional designers is go in linear systematic process where they go ok let's do the analysis, let's do the design, let's do the development. It works often enough that I can see why they do that, but to me a designer is only a technician if they only go through those steps in that order.
538	She sees thing being created as a training module that should really be a job aid. People will come with requests for an e-learning module that she feels would be better served as a job aid, so she makes that recommendation.
	A lot of what I see doesn't have to be a learning module to have the learners learn the content. What is usually needed is a job aide. So a job aide are what I see usually pop up, you know this would be better than just the eLearning course. Let us go ahead and focus on the job aide, something on hand that learners can use. So that is what I have seen the most.
165	Most designers don't feel compelled to follow their work to ensure it makes a difference.
	Most instructional designers are more corporate in their thinking in that I would like a nice, safe, secure job and I will design you some cute little training materials. Ah I am a little bit pessimistic today. They are a little bit like curriculum designers; they don't feel the same compulsion to do performance improvement.
	<i>Designer vs. SME</i>
630	Responsibility can be dynamic based on the expertise of the so-called SME
	"No forced rubric or anything like that. How much is that your responsibility vs. the subject matter expert or instructors?"
	... It seems to kind of be dynamic depending on the personality of the SME and how much of the subject matter expert they actually are.
400	Specialization in SME, programmers, graphic designers,producer/developer
	We would have people-part time employees -- or whatever -- would do a lot of the actual scripting and then we had a dedicated programming team and so they would do, and it is the same at my company now. We have SMEs and then we have programmers who actually build stuff and we have graphic designers who create the videos and graphics and all of that stuff. Those were definitely segmented, but at the company where I was, it was segmented even more. There was a design lead, we would go and do the upfront analysis with the client and then come up with the design strategies, and then, partnering with a design producer (what it was called there), it's kind of, I would say synonymous with developer, and they would then be responsible for overseeing that design and bringing it to life and working with the artists, programmers and the writers to make sure that it gets developed. That was how it worked there so it was definitely specialization in those areas.
579	Primarily designing course ideas then evaluating how to make it an effective online course or blended course.
	Most of my time, I would say is spent really kind of designing course ideas and then working with faculty to evaluate how to make that effective online course for them or blend it. I also work with blended courses on campus.
bBN4	Initial interaction was with SME and SME-like person who was a liaison between team and SMEs
	We had a kick off call where we engaged the learning consultant on the other side, basically the learning team on the other side and there were two SMEs and then we had a sort of a learning. I am not sure exactly what she was called but she was sort of liaison and it was her job to sort of protect the SMEs, she was sort of a SME-like, she knew a good amount of information. She was certainly not authoritative but she could give us a good deal of information and she was able to sort of defend their time. She was more dedicated to this project than they were and that is sort of how it went.
bBN7	SME will sometimes weigh in on learning strategy, but more often they are verifying content or correcting content.

	sometimes they will say yeah I don't think they are going to learn things this way but for the most part they are just verifying that the content is correct and correcting where the content is not correct or pointing, and sometimes that will point us towards something that is incorrect or that we don't have content on.
bPE9	SME also has opinions about what visuals can be used. Suggests visual designers often go with the first idea that comes to mind as they design -- a stereotype. Stereotypes become a form of language. Do we have instructional stereotypes? Do certain instructional designs become implicit and the first approach chosen because of familiarity? And, if so, does that mean there are similar negative consequences of using stereotypical representations of instructional design in any or most circumstances?
	Christijan "Did you make any recommendations for the art work itself?" Yes, just from the professor. She said don't do stereotypical German stuff like Beer Steins, Lederhosen, because in Germany they are not putting, on the front of their textbook putting a little man in Lederhosen. So she just wanted something that would focus on the content of the course and that would look just as appropriate here as it would in Germany. So don't make anything like the color scheme of the German flag, whatever, things like that. So yes there were some guidelines, so when they came up with the idea of just using the kind of Cinema stuff she loved it, yes this is great.
	Team leadership
1	Team lead
	I am a senior instructional designer in Independent study which means I am a team lead
2	Instructional designers are often tasked with leading the project, with support from others, including visual/graphic designers, developers, and writers.
	I am a senior instructional designer in Independent study which means I am a team lead
51	Most positions at IS are student positions, but instructional designers are full-time positions. at Independent Study is to give students experience in their fields.
52	In some ways their leadership is project based as opposed to organizationally based. They rely on teams that are managed by others.
	"Do you have teams of students under you as well?" Nancy - We don't necessarily, directly have because we use the other team's students. For instance we have an editing team, we have the art team, we have the layout team. We do have the capacity to hire assistants, instruction design assistants for doing things. Like Ok I need you to go through this and I need you to make sure the objectives are met through the questions. Stuff that an instructional designer might do but is kind of a lower level task. But those are more on an ad hoc basis. We don't really have, I don't have two assistants that are mine full time. [00:15:06]
275	ID is often at top of food chain and is best to have respect for other roles.
	In an Instructional Design company as an instructional designer you are kind of at the top of the food chain, sort of, so I could how it could potentially be easy to lose track of another role of value but any ID that is worth anything will recognize that and does recognize the extreme value provided by the rest of the team so there is a high degree of respect and gratitude, certainly on my part because I don't want to have to do all the crap that they do.
399	One person designs and then oversees development.
	Yeah, so where I used to work it was one role where kind of one person would be doing all of the design work and then oversee the development throughout.
403	The instructional designer is responsible for the design document, which is the project guide, thus the designer guided the strategic direction of the project. But, at this particular job, once the document was approved, the designer was expected to move on to the next project, leaving the developers, graphic designers, etc. to interpret and execute on the design outlined by the designer.
	But the main idea was that the design lead, out team that was going to meet with the client and do a lot of that up front design and was primarily responsible for that upfront design, after we wrote the document and it was approved by the client we were supposed to move on.
404	Moved on, but remained as reference and reviewed major deliverables prior to client review. He did not spend time in the minutia of the design.
	We were there as a reference, if the producers needed, if they had questions, and we were still expected to review major deliverables before they went to the client to make sure that the design was being realized the way that it was intended to be. Definitely not involved in the minutia ideally.

bKA52	Trained ID set in motion a pattern for less experienced designers to follow.
	Katrina - They are probably in the top 10 to 15%. Let me see what else I can load up here. Paul the other PHD did some great stuff. So Greg, Paul and I developed the lion's share of the modules after we got rid of the designers that couldn't perform and then we put in place a system where the other designers mimicked what we were doing and just replicated.
bPE7	Visual elements of course were developed by design team, ID would review initial mockups, then SME/professor as well. Once approved, remaining designs would be created.
	And the art was developed during that time that the HTML was developed too. So I review the art and they would do like their first two mock ups, or something and send it to the professor. The professor would look at it and send back comments and they build the rest of the art.
	<i>Designer as facilitator</i>
453	As designer, his responsibility is to try to understand and capture the needs of the client and provide an initial solution. He relies on input from the team to make a good decision. His collaborative process was not a free-for-all brainstorm, but a guided discussion seeking specific input.
	The thing that I would typically do to those would be to go through all of that stuff myself, go through the statement of work, see what we know and then come up with some kind of focused design, like some focused questions that I wanted input from the artists and the programmers. I would come with those questions and basically I would ask them and then say, "Everybody take a couple of minutes and write down your ideas" and then we would come back together and share. We would go around and share ideas, so it wasn't like a free-for-all brainstorm where everybody was saying things, everybody was expected to come up with things, everybody was expected to share and contribute and once everybody got their ideas out we would choose one and then take it further.
170	ID bears the responsibility to point out to supervisor or client what should be done, based on the research. In order to speak from authority, you have to know the theories. You have to understand what works and what doesn't given the context. You have to understand the context for the design.
	I think that it is a big cop out; it is not that you have to be rude or super assertive. You can always default to doing what you manager, or you client or your boss asks you to do but if you don't educate them that what they are asking you to do from the theories, and the research is unlikely to make a difference to the bottom line and that you have another solution, like how about we take the Power Point and we add some role plays, we add some group exercises, we add a more rigorous assessment than a smile sheet; did you like the workshop; I don't really care if you like it, can you do something that you couldn't do before you came to the workshop. Well if the answer is yes then it was worth your time and money right. How do I help you actually use that back at your job?
585	Sees her role as communicating value of online e-learning to traditional educators. She becomes more of a facilitator and advocate, but still has to get content into the system, but that is of minor concern and interest to her. She wants it done right, but doesn't necessarily have a passion for the design of the course, per se.
	just when I first came here there weren't really relationships with the language departments on campus and that kind of tied back to what I do, is probably building relationships and talking about ideas and then a lot of time goes into just that aspect. Helping faculty see the power of instructional design,
530	You have to sell details based on organizational goals, how much those goals matter to the organization. Then explain how the process you recommend can help them reach that goal, then they are more open to adjusting timeframes or other costs. You kind of have to have a salesy approach to it. (Sure, it is more of having them identify what they want in the training and if that is going to be in the training then a lot of accommodations will need to be made depending on what their expectations are. You kind of have to have a salesy approach to it. Have them, work with them to have them identify where they want to be, where they are, why they want to get there and see how much it matters to them about their goal. If they care a lot about it then they are willing to make some changes to the time frame to have those interactions more or to further develop the look of the product.)
633	Interactive pieces come from media and art teams.

	"I bring the concept to [the media team] and say build this."
	On a very low level I would say I build the live interactions in the course but that is very low level stuff like connecting with our web conferencing software creating the features in that room that we want to exist, you know super low level. The other stuff I don't actually build but I just help, I bring the concept to them and say build this.
72	Design becomes a battle of wills between differing opinions. Sometimes the loudest (or most passionate) voice wins, or the voice of the person who has the strongest opinion about it. I guess it comes down to who cares most.
9	Instructional designers generally only have advanced degrees. This fact leads them to be a fairly expensive employee. Many companies seem to transfer comparatively unqualified individuals into this role. It seems likely that this reduces the effectiveness of training and probably has long-term destructive consequences. The idea was that they had the instructional designers; they had been working with a team of instructional designers whose job was to go and take the classes, take the courses and then create the training software that they wished that they had had before they took the courses. At that point they were saying this is great, we have instructional designers but we need someone who can pump out a lot of material, let's go with technical writers. I went in there as a technical writer but my job was just the same as the instructional designers.
bBN3	Instructional designer wants content development done by someone else. I would have a content developer very early because quite frankly want to push my work onto as many people as I possibly can.
bBN2	Team members: media developer, content developer. Brandon - Alright, so we started off, we had a kick off. This was I think this was my first standard project on this particular account. This was also the PM's first sort of standard project on this particular account. I am actually walking through my emails; I am finding that so we had a media person allocated. I want to say we had the kick off probably the very end, the 28th of August and at that point I think we already had media, a media developer was already allocated to it, a content developer, I believe, had already been allocated at that point although we may have been, we may not have had enough to know at that point to know how many people there were at that point or exactly who was going to be doing content development. <i>Designer as jack-of-all-trades -- or specialist</i> <i>Jack-of-all-trades</i>
350	"Now as far as the graphics we are kind of a one man show. We create our own graphics or go out and get them ourselves." Now as far as the graphics we are kind of a one man show. We create our own graphics or go out and get them ourselves.
184	Process for instructional design consultant touches all phases of the design cycle. Because I am a consultant I tend to be involved in all aspects of it which I really like. I do a lot of analysis work, I do a lot of evaluation work, when I am not busy doing either one of those for different projects, then I will help out with the very granular instructional development.
185	An example of what the development process might include I have two infographics to design, I have 14 WBT's to put together, all of the practice and all of the assessment that go with that particular module. I mean it is my module to design and develop.
298	Used Captivate 8 to create project from assets and content gathered. Development is part of his job as an instructional designer. I used Captivate 8 for this particular project, so once I had all the content and the layout I just went in there and plugged it all in and create a functionality for it.
398	Client approves design document and then they begin building the training. This is in the context of the instructional designer proper would be responsible for the design document, but the actual building of the training would be largely off his plate after the document is approved. Then he is brought in for consulting and approval. After that got approved we would start building it.
183	She enjoys the ability to touch all aspects of the design process. Because I am a consultant I tend to be involved in all aspects of it which I really like. I do a lot of

	analysis work, I do a lot of evaluation work, when I am not busy doing either one of those for different projects, then I will help out with the very granular instructional development.
89	The role becomes somewhat muddled for an instructional designer in contexts where employer doesn't have means to allow instructional designer to focus on specific role.
	When I was at Test Out, when I was getting into instructional design that is what I did. I created the content, I wrote it and put together the questions and put together all that kind of stuff.
	<i>Specialist</i>
452	He would review all content, brief, etc. and then formulate questions for additional input from team. Brainstorm would not be free-for-all, but would have everyone write down ideas independently, then share and discuss.
	The thing that I would typically do to those would be to go through all of that stuff myself, go through the statement of work, see what we know and then come up with some kind of focused design, like some focused questions that I wanted input from the artists and the programmers. I would come with those questions and basically I would ask them and then say, "Everybody take a couple of minutes and write down your ideas" and then we would come back together and share. We would go around and share ideas, so it wasn't like a free-for-all brainstorm where everybody was saying things, everybody was expected to come up with things, everybody was expected to share and contribute and once everybody got their ideas out we would choose one and then take it further.
405	Instructional designer became reference point during the development process, but was not steeped in the day-to-day.
	We were there as a reference, if the producers needed, if they had questions, and we were still expected to review major deliverables before they went to the client to make sure that the design was being realized the way that it was intended to be. Definitely not involved in the minutia ideally.
253	Developers put in boilerplate stuff based on design document and "make it into something coherent" to present to the client.
	then they will take that and sort of beef it up. They will put in all the boiler plate stuff. They will also make it into something coherent.
254	Spends time on the phone explaining the outline to the developers.
	I will also spend a lot of time on the phone with them explaining and walking through the whole thing because they will capture what I am saying better than I will capture what I am saying.
257	The heavy lifting of instructional design so content and media developers can focus on their expertise.
	Just making sure that they know what is important and what is, so that I am not leaving it up to them to determine where emphasis belongs and to determine the sequence and the flow. Instead I am leaving it to them to do the things that they really enjoy doing, which is doing the writing and sort of fleshing it out into a story or fleshing it out into, or following the guidelines, making sure that it is all syntactically and stylistically correct.
	<i>Accidental Career</i>
	<i>Non-deliberate entry into instructional design / e-learning design career</i>
7	It seems like many people land in instructional design without formal training or introduction into the field.
	How did you end up getting into this field?" J - Well, through the back door really. I started out in library science, then I ended up writing documentation for Word Perfect
206	Really liked research and teaching
	I found that I really liked doing that research part of it and I really like the teach the team part of it. I kind of figured I wanted to do something in education
207	Came to ID master's not really knowing what the degree was, just thought it was related to education.
	I wound up going to Syracuse University but I wasn't really sure what the program was. It was Instructional Design, Development and Evaluation. I was really sure what it was, I didn't really know
208	Thought he'd end up in K-12
	and I thought I was going to wind up being in the classroom teaching as part of that
209	Taught English in Korea for 2.5 years.
	I went to South Korea to teach English for a year and then as it turned out I loved teaching English over there and I extended it for another year and a half and then I got married
210	Worked as curriculum manager for software company

	I wasn't sure what to do and I was working as a curriculum manager, lead curriculum manager for JAVOSS which is a division of Red Hat which is an open source software development company and based in their _____ division and I wasn't real happy with that
280	Through that I discovered that I enjoyed interacting and teaching adults a lot more than I did kids so I made the jump to adult learning that way through teaching continuing education at one of the local colleges.
370	Very non-direct entry into ID field.
	I did an internship at the Smithsonian and did a lot of social media stuff for them too. So, I kind of started to develop an interest in the intersection between technology and education and different things like that. I worked for the dean's office in the School of Ed. at BYU, that was probably the first time I had heard of something called instructional design. That is how I started to hear about it. When I graduated my wife and I were planning on teaching English in Korea so I just needed a summer job. Because I had started to become interested in instructional design I took the foundations course at BYU while I was still doing my undergrad, just to kind of see what it was like. During that I had to interview a professional instructional designer so I interviewed someone at Allen Communication Learning Services here in Salt Lake and then by the time I graduated, I had a friend who was working there as a contractor and so kind of between those two contacts I started working at Allen as a contractor instructional designer. After working there for a few months I was offered a full time position so decided to take that instead of going abroad to teach. Moved up to Salt Lake, worked at Allen for a couple of years and then I just started working with Invest Tools, they do investing education online and in person. They are kind of the investment education arm of TD-Ameritrade. They are based out of Draper and I have been working there since December.
587	Path to instructional design is convoluted.
	What got you into the instructional design, you were doing administration of an online school before but what path got you here? Penelope - That is a great question, especially because it is a little bit convoluted,
588	Came from curriculum design career.
	I was involved in curriculum review and curriculum development in my prior job and before that too I was involved in curriculum development quite a bit.
589	Had worked with byu and given a lot of feedback on their courses. In looking for a job someone suggested byu.
	around that time I had been working with BYU as one of our many course providers so someone here said there is an Instructional Design position opening up, maybe you would be interested. It is probably because I gave them a lot of feedback about their courses.
590	ID Not the path she would have chosen, necessarily, but "this is good."
	I mean Instructional design honestly is not really something I would have pursued I don't think, I think I would have either stayed on the administration track or gone further on the curriculum development and design track and gone to work for a publisher or something. This is good.
330	People not trained in design will be put in charge of the design. "They are kind of brought into the role because they are knowledgeable about the subject but when it comes to the actual designing of a subject they are lacking in that and so they will put graphics in there that have nothing at all to do with the subject."
	Even on my team there are some folks and as you probably know and have experienced, a lot of people in instructional design aren't trained. They are kind of brought into the role because they are knowledgeable about the subject but when it comes to the actual designing of a subject they are lacking in that and so they will put graphics in there that have nothing at all to do with the subject.
bPK89	Fairly loose hiring criteria.
	I felt like a lot of the training there was they just tried to hire people, they cast a wide net and brought in people on as contractors and people they saw who had a knack and good taste and were good writers they would then hire them full time or those are the people who would kind of excel. It was kind of like get lots of people and then they learn on projects and then whoever does well sticks around and those who don't, don't stick around.
	Training

171	Some programs focus heavily on tools, or specific theory, but how is that really helping students change performance for clients?
	I think some of the instructional design programs are focused very heavily on tools, or very heavily on a constructionist's theory approach. I am not critical of those except to say how are you helping folks change performance. You taught them a tool, that is nifty, but what are they going to do with the tool? What affordances does that tool have?
192	"I think it is really critical that instructional designers stay current."
	I think it is really critical that instructional designers stay current.
625	Recent introduction to new learning model: present, practice, assess model from Bednar.
	And most recently we were exposed to a learning model that Elder [David A.] Bednar had developed, I think at Idaho and it is just kind of different words for basically the plan, develop, assess, right, or present, practice, assess, or you know that, I would say that's probably the strongest model internally here, or most pervasive.
104	Took introduction to instructional design as only formal instruction. This was after having been hired for her position, as a way to acclimatize, perhaps, to the new instructional design environment.
	introduction to instructional design
112	Designer was a humanities minor, which suggests an appreciation for aesthetics. Those who enter the field with ties to or training in design or visual aesthetics perhaps have a stronger desire to claim responsibility for visual aspects of the design.
	Humanities minor
187	"We are just not taught, I don't think with enough precision, as instructional designers, on how to choose or create our own graphic to communicate the instructional intent of what we are creating."
	We are just not taught, I don't think with enough precision, as instructional designers, on how to choose or create our own graphic to communicate the instructional intent of what we are creating.
193	Goes to conferences and feels it is critical that you go, but not necessarily to a specific one.
	I attend professional development conferences and I still attend the academic ones like ACT, occasionally AERA, ISPI, ASTD, pick a conference, gaming there are some fun gaming ones out there. I am not sure that where you go it that critical only that you go.
198	Prof. development conferences are fast-track way to get exposed to latest technology, esp. with vendor fair
	To me professional development conferences is like the fast track way to get exposed to the latest 20 things especially if they have a vendor fair where they are hawking their this is cool and you should use my data pen or my this thing or instant response system or whatever they think is the new sexy thing. You can do a quick evaluation and say gee I would like to try this out or I want to see more data on this or tell me about the clients who use that and who can I talk to at their company at the instructional design level that will tell me what this is like to work with.
213	Didn't feel like degree was providing enough opportunities to design. Formal training in PhD is not practical to the design experience.
	my professors were pushing me to go on for a PHD so I went and looked around and I ended up at Indiana University doing my PHD while I was here, I was here for about two years before I started getting, feeling like I wasn't getting enough opportunities to do design
278	Company subscribes to Lynda.com. He goes to AECT each year on his own dime. He did ISPI last year. Feels like company is moving toward more organized sending of people to conferences, etc.
	He takes ownership of his own instructional design training by attending conferences that he pays for himself.
	The organization does have a subscription to lynda.com and I actually did watch a video that was recommended to me the other day that was on neuroscience but I am not generally a fan of lynda.com it is not any of that but I don't find the approach is one that works well for me. Then I have gone to, I go to AECT every year but that is on my dime, I take off to go. They did ISPI last year and I will be going to ISPI again this year, but that's all so far. Occasionally they will send people to conferences and I think there is more of a concerted effort to sort of move in that direction as near as I can tell. We generally do have people that go at various times to various conferences but I do think we are in the process of sort of formalizing that but it is not quite formalized yet.
282	From there I did a couple of courses on instructional design, on the weekends, from the University of

	Georgia. At the time they had really a kind of class for business people to come in on the weekends and get brushed up so that is where I was really introduced to instructional design.
284	From there I started my Master's program from the University of Georgia in instructional design, during that I transferred, changed jobs from Verizon Business and went over to where I am currently to ADP and where I have been for the last five or six years.
324	Used to listen to Princeton Review podcast called as part of his degree coursework.
	Also one of my professors at the University of Georgia used to have us listen to web cast called Princeton Review.
325	Princeton review podcast made him look at world from new points of view.
	I don't know if you are aware of those or not but they are little five minute long little blurbs on getting ready for the law exam so it makes you look at different aspects of what is going on in the world and look at it from different points of view. For me, that was very powerful because it got me out of what I like, it might not be what other people like and so that was definitely something that changed the way I looked at how I designed.
326	Princeton Review podcast made him think about his designs in terms of other people.
	Princeton Review. I got it off of iTunes, that is where he would link us to it. So you know it would take every day different topics. Let's say a kid got beat up over his chocolate bar, that might be the headline in the paper but through the analysis of the facts you find out that there was a lot more going on. The kid with the chocolate bar was actually throwing the chocolate bar that provoked those kids to retaliate. That kind of a situation where it gets you to look a little bit further at a subject. Just that kind of thinking has really changed my instructional design a lot. Back then when I was a little greener at doing this, that helped really make me think of my design in terms of other people.
334	Master's courses included course on design of eLearning. Had a background in web design that carried over.
	Did you get training about those visual types of attributes in your instructional design program?" Markus - I did. At the University of Georgia we had three courses that made up what they called a studio where we actually spent all of the time designing. So we were always creating something in those three courses. We had a course on the layout but we had a pretty thick book on the design of eLearning that really went into things. I also learned a lot of the visual from my background in web design, so a lot of that carried over.
353	Previous job more formalized ID process because manager was trained in ID.
	My last job, the big difference was that my manager was trained in instructional design. Everybody on the team were trained instructional designers and so we did have a more formal process of designing
371	Working on Masters in ID
	Yes I am also working on my Masters through Utah State and after this semester I will have one more semester so hopefully will be done in August.
421	"we have like a design research and development meeting where we come and share things that we have seen during the week that we think are interesting or that would be good for inspiration bring design problems that we have and collaborate on those."
	we have like a design research and development meeting where we come and share things that we have seen during the week that we think are interesting or that would be good for inspiration bring design problems that we have and collaborate on those.
474	Western Governors University.
475	It is an online school which is pretty interesting for the degree you have. A lot of it is do at your own pace, learn how quickly you can or how slowly you need to and then progress once you are ready to move forward.
488	Her degree helped her learn design models, not content development or LMS use, etc.
	Well everything conceptually, regarding design models that go from Dick and Carrie to Bloom's taxonomy is heavily reflected from the Masters degree I completed.
489	Degree more from a conceptual standpoint than a practical one. Training for this position is limited to conceptual tools, which empowers here on the design, but leaves here untrained on the development side of things.
	it was solely the concepts behind getting to that point. Yes, my experience is more on the conceptual point of it.

558	Feels like aesthetic/visual design would have been learned already by professionals who were in the field already. Assuming broader training experience in visual design for practicing instructional / e-learning designers
	Yes. The problem with my degree program is that it was for professionals who were really into this field already and should have already known some of those basics and branching on from there.
559	Started her degree without any design training at all. "I started from ground zero and I didn't have that opportunity to have that experience already going in to it. "
	I started from ground zero and I didn't have that opportunity to have that experience already going in to it.
560	Feels like any instructional design program should include visual design training
	What I would like to see a little bit more is to have all programs focusing on instructional design, whether you are going to be doing curriculum for a university or design for a corporation, to incorporate some visuals. Learning a little bit more about the basics of Photoshop, basics of illustrator. If you have that down it makes it so much easier to create a graphic quickly. That is what I would like to see.
561	Mentions training of using design tools like illustrator and photoshop as useful trainings.
	Learning a little bit more about the basics of Photoshop, basics of illustrator.
594	Attends conferences
	So I have gone to a lot of conferences
596	Lectures in ipt program
	We have had some good lecturers come to the IP&T program, I have guest lectured there and I have also met some people who came and guest lectured, who then presented at other big conferences that I have been at, I
692	Receives training and has resources to instruct him on HTML.
	At our school we do enough training on editing the HTML code or there are enough resources there that you kind of able to figure out what you wanted and how you wanted it to look.
709	Faculty retreat for sharing ideas with other teachers.
	My school has a really good faculty retreat program where you know it is kind of like you take all these great ideas that you see on TED and things like that and then teachers will propose basically like, in the faculty retreat they will have like a half hour to talk about some certain idea and then like how you can implement it in your class.
710	Some help for technical knowledge of the LMS
	For some ways it is that and like learning from faculty retreats. That is important to me in regards to getting new ideas or fresh ideas on how to use the LMS
711	Faculty retreat: Some for actual pedagogical help.
	how do you access getting the most out of your students and stuff like that.
715	School advanced in professional development.
	I feel like our school is really advanced in regards to that professional development aspect of it. It is one of the coolest parts about it.
716	His master's program is online and he feels it is "badly put together"
	I am in my master program, and when I am like looking through it there is no visual aspect at all, like none at all. It kind of makes me giggle. That is one of the curses of being an online instructor is you have definite opinions when you are taking a badly put together online class. Directions are different, all over the place, I can never figure out what I am doing and there is never any visual element to it and I am like AH come on.
	<i>Informal training</i>
57	Seeks sources from industry more than academia. Training sites specific to e-learning industry can be more useful for her tactical problems day-to-day.
	these presentation/training sites a little bit more than I tend to go for academic literature articles necessarily
58	Needs practical, tactical help rather than theoretical help.
	just because they seem to be more practically focused.
194	Conversation with fellow designer about not going to conferences.
	So I was having this conversation earlier this week with the designers here on the team. We work remotely wherever we live three weeks out of the month and then we come together with client for a

	week. The conversation came up as to what we do for professional development and I started listing off where I went last year and what I did and as contractor I take it as a tax write off and that these are unreimbursed work expenses and the folks around the table looked at me like I was from a foreign planet and it was really interesting. One guy said he hadn't been to a professional development workshop as an instructional designer in ten years. I was just shocked and I said surely you must follow stuff on line, I mean there is other ways to get professional development. He said yeah I look around on Pinterest or I do this on Facebook but yeah not really, I mean work doesn't pay for it and I found it a very intriguing concept that if work doesn't pay for it then you don't do it. Just a different way of approaching it.
55	There are certain problems that have likely already been solved and she turns to Google to find those solutions. She doesn't have a specific site or resource she turns to regularly.
	if I run into a problem that I think this is probably an industry standard or a subject specific then I hit Google. I take a look, best practices, and other design.
54	Seeks team member help as a priority over reaching outside her circle to the broader internet, at least for more troubling problems.
	Well, first, as most people do I go to my colleagues. You know, just for a, I have just hit this problem, I don't know how to approach it and so we kind of pool our brains together.
56	Seeks help from Google - web search, rather than a specific blog or site.
	if I run into a problem that I think this is probably an industry standard or a subject specific then I hit Google. I take a look, best practices, and other design.
105	The process by which she received training was largely informal, including simply learning by doing and watching peers.
	Mainly it has been learning by doing and learning by looking at what other people have done. We have got a good; I think we have got a good foundation here for the way we are doing our courses.
107	Having a strong organizational foundation of a systematic approach to design helps new designers come up to speed on process.
	I think we have got a good foundation here for the way we are doing our courses.
108	Learned with the instructors what was expected as they shared expectations with instructors.
	Working, for instance, at the center for instructional design we just kind of emphasize that as part of our model and so when we would go out and prepare information for the instructors, OK you are going to do an independent study course [pause]... here is how. So I learned along with them about what kind of principles we were trying to follow.
110	Has used Google to find website design fundamentals.
	Many, many web sites out there will give you what are basic web design principles, how do I lay out a page, where do I put things, you know. If it is important you put it up higher and to the left so that people see it first.
111	Google is my very best friend in the world. Good web page design, oh look there are six different sites and then just buzz through. I don't really have a place I go except for main topic searches. [00:39:00]
195	Follows the work of innovative designers and is on the lookout for quality work (work she likes) from other designers.
	I mean I follow some of the work that David Wiley does. I find an innovative designer and then try to go from there. I am always looking to see what other instructional designers are doing that I really like.
196	Conversation about designer who sold a start-up and she picks his brain about his approach to design etc.
	There is new designer on our team; he just sold a company that he started as a startup dealing with millennial education apps. I swear this whole week I have been picking his brain as to why does this app work this way and not that way and what's it going to do and why did he choose to come back as an instructional designer having just been acquired by another large instructional design company. I just find this an intriguing concept and where does he get his ideas from and what's his next direction.
197	You have to constantly learn or you become a design dinosaur who has been doing things the same way for 20 years.
	I just think if you are not constantly learning from the people around you and what they are interested in you are going to have lots of problems, you are going to become stale and you are going to become sort of that dinosaur in the instructional design industry still doing everything the way it was done 20 years ago.
263	They do internal design show offs occasionally.

	"We do internally show off, periodically show off some particularly interesting or novel approaches to problems, or particularly interesting training solutions that we put together. We will do that, some of that."
	We do internally show off, periodically show off some particularly interesting or novel approaches to problems, or particularly interesting training solutions that we put together. We will do that, some of that.
264	Doesn't listen to instructional design podcasts because hasn't found any specific to instructional design that are good.
	In terms of looking for, I don't listen to any podcasts that are related; I listen to a ton of pod casts but nothing that is instructional design specific. I haven't found any that are any good that are in instructional design specific.
267	Seeks guidance from colleagues.
	I will certainly look to others for input. I will certainly run ideas by other people and ask for ideas from other people but that I do a lot. I tend to be a very social learner and I guess designer and so I will definitely actively reach out to others, you know, generally in the organization and run ideas past them and people whose solutions I have respected in the past or people who have done interesting things in related areas in that past and or people with responsibility for the account, often looking for an idea of what will the politics of that account support or what will the politics of that particular situation support. That is pretty much it.
316	Follows articulate blog from time to time.
	Something I do every now and then, just to keep up, the articulates web site, on their blog. I do look at his postings every now and then. I don't know if you are familiar with that or now. Articulate the manufacturer of Storyline, they put out a nice little newsletter and they have a nice little blog with staying up, current, so I do look at that every now and then.
336	Informal self-training on blogs also helps.
	Also the Articulate Blog that I was mentioning to you earlier really focuses on the graphic aspect. Those are where I kind of got my training from.
416	Turns to internal resources for guidance and feedback. There were formal meetings where lead graphic designer would review and critique proposed designs. Graphic designers were the "word on usability" of the design.
	"Where do you turn for design guidance and the things that you feel like you need to have control of in your designs, where do you turn to for inspiration, guidance or instruction to help you understand what you need to do or do better?" Patrick - Where I am now and where I was before it was my supervisors. We would have pitch meetings. In my last place before we sent anything to the client we would have a pitch meeting where the director of graphic design would review things. He was, our graphic designers, especially our director of graphic design, they were kind of the word on usability typically. [00:24:25] Then instructional, our director of instructional design would be kind of the, from a design perspective would give feedback and then our chief learning officer and just different people would. Then there would be feedback from peers, you know we would use team meetings and stuff to get feedback. So a lot of just using people within the organization, people that had a lot of experience and talent to give feedback.
417	Mentions Cathy Moore as source of guidance Also blogs, like Cathy Moore's blog like I mentioned.
418	Internet as resource for good designs Just always keeping an eye out for things on the internet.
419	Use Yammer to share interesting articles within company We would share interesting articles through yammer
422	Always on the lookout through online channels for inspiration. Using social media, quora, and Reddit, Facebook, twitter. etc. etc. always looking for ideas of inspiration just throughout daily activities. Using social media, quora, and Reddit, Facebook, twitter. etc. etc.
423	The Cathy Moore stuff is pretty popular. The Cathy Moore stuff is pretty popular.
424	Connie Malamed elearning coach as source of information

	Connie Malamed has like the eLearning coach blog.
425	Doesn't follow individuals "super closely" but has them in his feeds and will read if they seem interesting
	I don't know if there any like people that I follow that closely and I do feel like a lot of the eLearning industry and a lot of stuff that is out there, I guess there is like Christopher Poppas who has like the eLearning industry blog site. I don't follow any of those things super closely.
426	Sometimes what comes across in feeds/newsletters he follows is basic stuff. It seemed from the conversation that he was suggesting there wasn't much that came across that was useful.
	They just kind of come through my feeds and I will read things if they look interesting and I will get their email newsletters and sometimes I will read them but sometimes it is like really basic stuff. Kind of common sense.
427	A lot of what he has seen has been geared toward working within specific authoring tools because the industry tends to be focused "within those boundaries."
	I feel like a lot of eLearning that is done is kind of more in the using the authoring tools that are out there. Like Captivate and Articulate and kind of being stuck within those boundaries and lots of eLearning just because of budget or whatever, it is kind of limited in a lot of ways. I feel like a lot of stuff that is on the internet is geared more towards that kind of work.
428	His work tends to be custom, so will seek inspiration from non-eLearning sources.
	The work where I was before and even what I am doing, a lot of it is a lot more custom and so I would try to take inspiration from all kinds of places. We would look at websites and stuff like that to get inspiration so I guess not necessarily any specific person and not just eLearning sources, just everything that is out there.
459	Being on the job and seeing enough designs helps you "develop taste."
	On the job, not anything formal but just seeing what is good and what people think is good. Being on the internet and seeing what people are doing there. Just kind of seeing enough stuff that you start to develop taste.
532	Relies on team for guidance.
	A lot of what I do, where I turn to is my team. My team is amazing. My manager, in particular, has a lot of experience on his end too. The development and working with subject matter experts particularly. I work a lot with my colleagues. A lot of graphic designers. Graphic design products from this guy, I get a lot of inspiration from visuals and then that further helps me figure out the way I want my design to be and the way I want the development to be.
533	Will read abstracts of articles.
	Visuals help me a lot. Even reading abstracts about what has worked before and what hasn't, the type of products that I am creating help me a lot as well. Academic and personal I focus on a lot.
535	?e-learning guild?
	I love the Learning guild.
536	E-learning guild has good studies.
	They have amazing, amazing depth of studies that they have conducted themselves. That is a great guide for anything academic.
537	Also references ATD and Cathy Moore
	Those are the two that I follow most and of course ATD, that is kind of a standard but anything outside the standards I follow Cathy Moore and the Learning Guild.
544	Read article stating 100/1 hours of development time for training
	There is this article I just read on ATD where about one hour of eLearning with a moderate amount of interaction about 100 hours of creating it and that it only the development process
557	Self-taught on visual aesthetics from observing co-workers and other self-training
	Not much, it is all self-learning. I learn from watching the graphic designer. I learn from a few others that I see around here create a few visual arts. It is not anything that I was professionally trained on; it is more independently trained on.
592	Uses theory has learned a lot since starting about instructional theory and learning theory.
	since I started this job I have learned a lot about instructional design theory and learning theories and all that kind of stuff and I fell like pulling from that and pulling from research and then kind of pulling from, you're a pedagogue so I know that some of the theory you really trust heavily can also be intertwined in

	here and you know.
595	Seeks out learning.
	So I have just kind of continued seeking those out I guess.
597	Networking at conferences
	and then one at UNLV where I really met a lot of people who helped me understand like where should I go to learn more about this
598	A lot of time spent in feeds to get her up to speed on current practices in the field, but less now.
	Yeah, I do follow a number of feeds. Probably too many. That is probably another large portion of my time. Less, now but it was a lot early on, when I was getting my land legs I guess.
665	Took 6 months to get up to speed on the technology to allow him to do what he wanted rather than the minimum possible.
	I think at first I was like some of the technical things and the technology behind it obviously it took about six months for me to feel like on was on my feet running quickly and able to do the things I want to rather than just figuring out what I could possible do that would make it sufficient enough.
677	Mentorship from David Wiley
	I got a lot of those ideas from Dr. David Wylie who is the founder of our school, who is also a professor at BYU.
708	Follows some on twitter
	I follow some people on twitter, maybe I will just check out occasional tweets here and there.
712	Conferences are good not for the content itself, but rather for the ideas in conjures up in his mind.
	Conferences too, usually in conferences it is very little to do with what the person is talking about because the person, always, it seems like so often is talking about this broad theory of education and they are using all these key words to really sound fancy but then like my mind will wander and I will come up with some other idea.
713	Educational setting of conference puts him in the mood, so to speak.
	Like just being around that sort of educational setting I feel like I get a lot of good ideas.
809	Follows organizations specific for online schools
	I use a ton, professionally as a school we use ENROCK so the National Repository of Online Courses and INECO, both of them have teacher standards for online content writing and also for being an online teacher so they are two of the organizations we belong to as a school and I personally belong to, in addition, we attend conferences and present and do our piloting for them and they provide us with those kind of things.
810	Source of standards
	National vetted standards and then they do a lot of publishing and it is very helpful.
811	FreeTech4Teachers -- source of online tool reviews
	Free Tech 4 Teachers, it is a man, Richard Byrne and he is phenomenal in his ability to review online tools. For example when I think ok what students do this and I don't already know an online tool for it, I go and look at his.
812	Big list of their sources for lesson content and material
	Christijan "What was that called again" Free Tech 4 Teachers and his name is Richard Byrne. Christijan "How do you spell the last name" Byrne I believe. And he is like Google certified and does a lot of that kind of stuff and so I am very impressed and often there is quite an option from him. There is also, I participate in a lot of twitter PD with teachers, this is both online and brick and mortar teachers, you know I could go find it if you are interested in seeing it. It is a page, where I can do seek and PD that I want. So if I want to do some working with History, I can go and participate in a History and it happens every Thursday from 6 to 7 and teachers bring resources, share ideas and that is helpful. We do some of that. I am trying to think of, I mean I do use some of Utah's resources, so the Pioneer Library, not all of it is creative comments. We do have OER Commons that we use IKSME and they do a lot of stuff with online content. They are also just curators and so we use a lot. We have a big document that we use with teachers when we are teaching them how to Jury online courses that is openly licensed and we do a lot of work with them upfront on how to do that. It takes a while for it to stick, which is why we have to go back through the courses. Then I have a document, I don't think Sarah would mind if we share it with you, we share it with teachers. It has _____ places that we look, the most common places to look for content, for ideas or

	tools.
813	Learning from peers.
	I can go and participate in a History and it happens every Thursday from 6 to 7 and teachers bring resources, share ideas and that is helpful.
177	Instructional designers are not trained on the visual design that would allow them to make effective infographics.
	The instructional designers on my team do not know how to design an infographic and their grasp of what makes for a good infographic is really obscure.
bN91	"We are thin on training here."
	Nancy - We are very thin on training here, we have got a course, we have kind of got a brain hungry course set up that is a reference guide, if I need to remember what are our standard directions for a quiz, I can jump in there and find a quiz that has been set up and copy the instructions, so it is kind of that level but as far as actual training, it is pretty much here have a course, ask people if you run into trouble. So we do not do a good job on training.
bN93	Most important training would be process and communication and getting along. "we run into more barriers or attitude, than we run into barriers of technology or not understanding how to reach a student."
	Nancy- `Well as far as the actual user experience design goes I am open, like this Design of Everyday Objects, I'm like hey maybe I should look into one of those, that is great. I think our most pressing need here is actually training in process communication and getting along. As we talked about before just briefly, we run into more barriers or attitude, than we run into barriers of technology or not understanding how to reach a student. I would actually say that that leadership and followership are more needed.
bPE86	Formal training Penelope - Probably the most formal instruction we receive has been from this guy, right over here. In one of our previous design meetings. So the guy who moderates our design meetings is trying to integrate more training on design principals. We do get regular training like on tools or templates but not so much into the theory or philosophy but he is trying to incorporate that more, general design principals or design challenges. What types of theory or applications can address those.
bPE88	Informal training Penelope - Yeah sometimes people will be like I read this book and send it around and we will talk, obviously, and I'll bounce ideas and some will say oh I read this theory or I am working on this that ties to these design principals. So there are definitely conversations like that and that is one of the benefits of working with people who are from the IP&T program or other instructional design programs, they have some of that in their experience.
	<i>Value of training for performing instructional design</i>
bPK87	Employees felt more training was needed than was provided. Patrick - That was kind of a point of contention at my last company I would say. People felt like there wasn't enough training sometimes. There was definitely emphasis on more training by the time I left.
bPK88	Didn't know how to do a needs analysis or had never done one, so was learning on the job. It was really kind of you learn on the job. You get a project, you figure it out. Like that first needs analysis that I did, I had never done a needs analysis before and I didn't really know what I was doing. I had support, I had a manager that would kind of help me answer questions and talk through stuff with me but I didn't really know what I was doing. We had a book on needs analysis, some of it was relevant.
bSN86	Training in an educational setting would never have been as effective as on-the-job learning. Every LMS is going to be different. Like it would be nice if you could practice and like train for this like you were going through school but I mean I learned way more about my job right now that first six months of teaching my job than I could have probably ever learned in an education setting. It is just because every LMS is going to be different. I didn't have any instructional training on teaching online.
bSN89	System is used as a course for instructors, where management can review material that they want teachers to know. Teachers access and then mark their completion of information each month. So this is what our teacher's commons looks like, and we have basically each month you have different tasks that kind of work correlating with what it is. Each month we have reflections of the month on something that was a success and something that wasn't successful. This is just part of our teaching life is

	to go through and make sure you have check marks by everything every month.
bSN90	They created a quick link in the system to help teachers access instructions / tips for completing their responsibilities quickly.
	In regards to accessing resources, anything you would need to know is going to be on this quick click resources tab on the right here. So what you have got to do at the start of the term for every one of your classes, before a student will get in and do it. End of term how do you complete your classes once you are done, grade them and things like that, and get your grades into the school system. Examples for instruction. Mountain Height Academy tutorials, so this is tutorials on all the different programs we use. Account set ups and passwords, so how to get into the school accounts as a teacher. Then just like course tutorials.
bSN92	A link for tutorials for teachers.
	We have tutorials for everything here, Moodle tutorial, School year tutorials, Sites to bookmark, best practices.
bMS50	Manager of ID team does not have an instructional design background, but ensures the team has tools for performing their jobs, including access to repository of books for reference.
	Markus - We do. My manager is very, she doesn't have an instructional design background but she ensures that we have the tools that we need and also we have access to, I am not sure what to call it but it is called Books 24-7, I don't know if you have heard of that at all?
bMS52	Encouraged to continue instructional design training "and keep up with the latest."
	Markus - It is just a repository of thousands and thousands of books online that we can read and they have tons of instructional design books in there. We are encouraged to continue to training, our instructional design training and keep up with the latest. She is very supportive in that.
bPK91	Semi-formal training "where learning occurred."
	Sometimes people would bring design problems from projects they were working on and we would workshop them together. I would say that is where a lot of learning really occurred. Now that I think about it, those weekly meetings we had with our peers, that is where a lot of the training happened. It was a lot of on the job stuff.
bPK93	Designers had to seek out time to bring their questions to the meeting.
	Patrick - So the organization kind of shifted, like the hierarchy and stuff like that all shifted around a couple of different times while I was there. Most of the time we had these two managers who basically oversaw and worked with a lot of the instructional designers and were kind of their go to person for questions and support. They owned the meeting basically. If you had a design problem or something you would want to work on you would talk to them ahead of time because they would plan those meetings out every week and so it was a time for us to use for workshop but it wasn't like, we would kind of like have to talk to someone beforehand to make sure we had time to do that and that they could work that into their plan.
bMS71	Most of the team doesn't have background or degree in ID. They worked their way up through the years to training.
	Out of thirteen people on the team, until a couple of new people and one of them has a degree in instructional design, I was the only one on the team that had a degree in instructional design. Everybody else came from the call centers and just worked their way up through the years to training.
bMS72	Whole team would not have background on ID, let alone UX.
	So I am kind of fighting a losing battle because they don't understand the need for instructional design so that is why we haven't heard of a lot of that stuff. It is more like if I haven't heard about it they haven't heard about it.
bMS74	A lot of companies, once you have a lot of experience with a particular topic or specific job, then they will promote you to a training role. From there, they move to the design role.
	Markus - It is. A lot of it is just as you get a lot of experience with a particular topic or the job then it seems that you have a chance to move to a training position and then from a training position it just seems like it is a natural fit for companies to move you over to the design process of it.
bMS75	Manager with MS in ID hired only IDs. The environment included more formal approach to ID.
	Only one company, when I was at Verizon Business my manager actually had his masters in instructional design so he only hired instructional designers. We had more of a formal process there.
bMS76	Companies lack background in instructional design.
	Overall, two out of the three companies that I have been with, they don't have any background in

	instructional design.
bC99	No formal training at company. But they allow for personal development time on tools and techniques.
	Charlotte - That is a good question. No formal training at all. I think training is given and provided by my manager, he provides me _____ on my team sometime every week to self-train us or self-train ourselves on the products or software we are working with so we can become better, but no formal training.
bC101	Self-training tends to be around specific tools rather than theoretical fundamentals.
	Charlotte - My self-training comes along art skills, like learning fundamentals of illustrator for example or learning how to layer in Photoshop to get a more realistic feel with a stock photo on an image that we shot a few days ago. A lot of the self-training is more hard skills associated with software rather than theoretical base in instructional design.
bKA62	Having a student take an online training of some kind would help them understand what it's like to be part of a crappy training course online.
	Katrina - Oh absolutely I think they all should, actually I think it should be a requirement you can't be admitted to be an instructional design student unless you have taken at least one online class. You have to know what it is like to be a student in a crappy course.
bMS33	Early on, their team was putting out designs that "weren't very sound in instructional design" because the team members had no ID background.
	Markus - Really we were looking to, prior to myself and a couple other designers, nobody on the design team had instructional design background. They were just putting out things that weren't very sound in instructional design and nowhere into graphics. This was kind of our first attempt at saying you know this is kind of what training is supposed to look like.
bKA30	Instructional designers by assignment lack breadth of understanding and ability to perform on the job.
	I don't know if I have mentioned this before but I have a pet peeve about working with instructional designers that are designers by assignment. They sort of used to be something else, never been properly trained to be an instructional designer they just do instruction design and they tend to have a much narrower scope of skills and ability to write good instructional materials. It can be quite challenging when your team is made up of predominately designers by assignment. Not that instructional designers by training automatically make them great instructional designers, hardly, but they at least understand what it means to write objectives or to write good assessment questions and they are not just relying on the templates that come with Captivate or whatever software you are using.
bKA32	70 instructional designers who don't have instructional technology or related degree at client.
	Katrina - [00:18:10] Well there are 70 as in 7 0 instructional designers at the client that develop instructional materials for the client and not one of them have an instructional technology or closely related degree, not one, and there are 7 0 of them. In the company that I work for as contractor, I am just trying to think how many of us have instructional design or closely related degrees of any kind. There is one other fellow who has a PHD and recently hired one of my former students so that is three of us. I think there are two others on a team of 30 and we do a variety of projects. On the project I am currently working there are just the three of us. No one else that works for this client for my company actually have instructional design degrees. They might have a graphics degree, or no degree but lots of experience and they vary in their ability to be able to do the work well and quickly. They are cheaper. So my company, not my personal company, but the company that I work for is all about hiring people at a reasonable rate and it has been their downfall. The reason we had 12 instructional designers on the project that I was talking about previously is that we had to fire six of them at some point during the project for gross incompetence. I mean they were cheap but they were not competent, nice people but you know how many times can you have somebody rewrite objectives so that they are actually measurable, I mean really.
bKA34	Only one feeder degree for instructional design at bachelor's level that she knows about.
	Katrina - Most of the people at the master's level come from somewhere else because there is not feeder degree for bachelor students for the most part. UVU has a great distance education bachelor's degree but it is one of the few in the country that actually prepare undergraduate students to work in this field. I take any of their undergrad students and hire them in a heartbeat because I know how they were prepared. But I don't know of another undergraduate program anywhere. Florida State tried to put one together; Indiana State tried to put one together. It is a hard sell and UVU latched on to the right idea that they made it a distance education degree that makes them marketable with a lot of programming skills for very little money.

bKA89	Most businesses don't pay for professional development, unless it is for a specific tool they want you to use.
	Katrina - Most businesses don't pay for professional development. They want you to learn this tool so they send you to that training.
bKA90	She invests in herself, her own training. Uses vacation time to go to conferences.
	I am sure it is because of my academic background, I invest in myself. I go to professional conferences because that is where I learn about different ideas and different ways of approaching stuff but it means that I take my vacation to go to a professional conference and that is unusual. I usually take my husband and kids with me and they go do fun things while I am at the conference and then we go play in the evening. To me professional development is very critical. As an academic you die if you don't do conferences and trainings and read broadly because you have got to stay current.
bKA91	Instructional designers don't generally try to take on additional learning at night, after work hours.
	Somehow the instructional designers in the field, their work is so demanding that they really don't want to read about it at night for some reason. They are not intellectually stimulated that way as a general rule. They are not closet academic.
bKA57	Interface design class wasn't in-depth, but was an introductory course for instructional designers.
	Katrina - It wasn't a big chunk of my class. There was a unit on it. We actually had some really good user interface classes available at Utah State. Mine was sort of a preliminary warm up; these are some of the issues you should pay attention to. Go take some of these classes and you will learn all of the other stuff about it.
Email	There was a course I'd been hoping to take on U/X, but it didn't fit into my schedule.
	<i>Design process</i>
	<i>Gathering, organizing and structuring content</i>
bPK29	For some of this training, there is a great deal of content and a lot of configurations to learn and understand.
	The way we did that, here we have the scenario questions. We have a fictional character here, in this case, he is someone who worked for a hospital and so for basically we give them the vertical market that they are working with, the industry, and then based on that industry they need to figure out from a list of needs which need is most likely to match with that industry. I don't have all of the slides in here but basically when you click on one of these boxes right here, if you kind of think about on an Apple device, how you change the date, it is kind of like that roller bar. That is what it was inspired by, so they click on one of these and they get different options to complete the sentence. They would say health care providers, their needs; they need to insure patient's safety. Other options may be things that would be a surveillance need but not something that would be relevant to health care providers. Based on that need then they have two more choices to make to complete the positioning statement. The second option they have to choose like from a variety of products or solutions that the company offers, so in this case they are end to end solutions so right from camera to server the whole surveillance system. This one company can provide all of it in one package. That is kind of the product that matched with the need and then they have to choose the benefit that is associated with that product. That is where they completed these positioning statements.
75	Content comes in multiple forms/media
	As I am going through the course we generally get the content from the instructor and that may come in in text, it may come in as an outline with media pieces in, it may come in as a series of video tapes or PowerPoint lectures or voice overs.
77	Arranging / organizing content is half of her work
	So arranging all of that is probably about half of what I do.
18	An instructional designer has to be able to work within a large amount of data and formulate a delivery solution for myriad data types and massive amounts of information -- often outside their area of expertise. What areas of UX design could help them cope with this sort of data? Information Architecture seems a good fit.
	Well for example, one of the things that we recently did was a physical science course and in this course it is a lot to know. It covers literally every one of the physical sciences.
626	Spends a lot of time on building framework, structure, navigation.
	"How much of your time would you say you actually spend doing that process of the organizing of the navigation structure, how things are organized vs other aspects of the design."

	I would say that was one of the largest portions of the design. Really building the framework up front, I spend a lot of time on it.
441	Time would be spent on navigation as part of initial phase of look-and-feel and such which was about an eighth of the project time.
	As for a percentage it was kind of wrapped in the kind of look and feel and the kind of the initial interface and design stuff. That was between like getting a statement of work and like going and meeting with the client and that was like a few days, maybe a couple of weeks, a week to two weeks sometimes. A typical project would be a few months maybe like an 8th. I don't know what percentage that would be.
81	Designer thinks about transitions between chunks, to help maintain a cohesive experience. How do I break this up, how do I transition, make sure that the bridges are all there.
92	Her design process includes organizing content in Microsoft Word, noting needs for interactions, noting specific structural elements, and then send to editing team for proofread. Provided content is placed into the structural format with noted design elements that will be needed.
	Partly that is institutional because, we do have a team of editors and what the expectation is is that we get the information from the instructor, we lay it all out, like in word and make sure we have all the pieces, all the bits and pieces there, we make the notes. We need a media piece here, we need this to, this is the first chunk, this is the second chunk, we kind of get that all going and then we send it to the editors and then editors are supposed to go through it, proof it, make sure all the tangles are gone, make sure that its sources are checked and they give it back to us and then we build it in the LMS.
251	Provides outline, brief description of training and how it flows.
	I usually provide an outline, a brief description of what it is and then an outline of how the thing is going to flow. That is usually for the high level design document and then they [content and media developers] will take that and sort of beef it up.
80	Designer thinks about breaking down content into pieces that are consumable for intended learning audience. How do I break this up,
256	Design process: Organizing concepts, pointing content developers to source material, explaining pieces that require emphasis. saying this piece is going to come from chapter 2 page 6 or this content is going to come from this other book or this other article and make sure you emphasize this line or the message of this line because this is really the crux of the whole thing. Make sure, then we are going to have an opening scenario for this module and then at the end make sure you mentioned the names of the people we used in the [digital garble] the details of the scenario, I don't care what you name the people or whatever, you need to flesh it out into a paragraph but these are the details, this is the message we need to get across and then make sure that you reference that at the end of the module so we can sort of tie it together and those sorts of concerns.
296	Get content and make sure it is accurate. Constantly changing business can mean training can be a moving target. definitely get the content, went through several reviews for accuracy in the business world. Those reviews can change based on product development. What was accurate last week might not be accurate this week so I went through several iterations of the content to get that down.
447	Instructional designer responsible for logic and strategy of navigation. "So would you say that the actual responsibility for that navigation flow through, the experience fell on your shoulders?" B - Oh, yeah. Definitely in partnership with the graphic design team but it was more like they were more in charge of how we would execute it specifically, how it would look but like the overall strategy and logic of it would be my job for sure.
	"So would you say that the actual responsibility for that navigation flow through, the experience fell on your shoulders?" B - Oh, yeah. Definitely in partnership with the graphic design team but it was more like they were more in charge of how we would execute it specifically, how it would look but like the overall strategy and logic of it would be my job for sure.
297	Gather assets and content knowledge. He is responsible for the content.

	Once the content is down I had to go out and get all the screen shots that I was needing, getting access to various systems that the eLearning was going to be about. Getting all of that information. Going out to the vendor's website to get more help information on how the program functions.
782	Research is required to find content not subject to license.
	Then what I do is I start looking for open source materials and I spend a bulk of my time doing that. If it is an English course then I consider if we need to be reading a novel and how I can tie in all the things I need to there. I spend a lot of time doing research.
507	Seeking to take control of the content conversation via action mapping
	Our department is a little bit more used to just receiving the content being thrown at them. We are developing our team a little bit more. We are in the stage where right now it is going to be ok, because we want to have other departments feel like they have control over that and then slowly go into the idea I was saying about action mapping. Actually piloting taking control of that conversation.
603	Organizes content to match the LMS format.
	then I try to organize it in a way that will be easy to plug into the LMS once it comes back from editing.
93	Fine tuning happens within the LMS itself for this designer.
	So just getting all of my flow in word in place and then as I move it over into the LMS is where I do the fine tuning.
741	Uses open education so a challenge to find curriculum content, often have to write their own.
	We use open educational resources, you probably already know that, and so we are a little more challenged in finding resources to develop curriculum and often have to write our own.
83	An instructional designer is not creating content.
	I don't create the content.
85	She will create some content -- especially assessment items -- for courses where she is more qualified.
	For some of the High School courses the assumption is that you are probably pretty good with 10th grade biology just because you passed 10th grade biology there is a little bit more content creation. Especially like we need more questions, we need more chances for students to practice.
bN2	Instructor (SME) sends material over as a PPT or Word doc.
	Nancy - Let me show you kind of where with start with. We work with a subject expert on courses. This is the physical science 100 course. The instructor sends us the information that applies to the course. This is generally in Word docs, could be Power Point but it is the information that they want to do go into the course.
bN3	Prior to gathering material, have a meeting to gain overview of the course, how long it will be, it's general scope and intensity, the type of media involved.
	We have generally talked to them before, kind of said "what do you plan," "what is your vision," kind of tried to get their information and capture that in an outline, that very, very briefly talks about here is the layout of the course, here is the kind of media you are going to need. Here are the textbooks; you know all that kind of broad stuff. Once we have got that done, so we have the plan, we kind of know how big this thing is then we work with them and they gather up all the information they want to include.
bN6	Converts content from SME into format better for the process of development used by the organization in creating a new course.
	Nancy - I go ahead and take Lorelei's original and I put it into a format that is easier for us to deal with. This is really where the design part comes in. So I put it into our model. Sometimes the instructors to a better or worse job or remembering you have to have outcomes, you have to have an introduction. This is kind of the things that we do. I go ahead and take Lorelei's information and I put it into a nice word doc, for instance I do a little rearranging, like here she had glossary at the end, we felt like key terms up front would probably be a better heads up for the students. I also make notes about the programmatic allowance that we are going to need to add. So how they have their course set up for instance is they have a little introduction and then they have a pre-quiz, it is a little reading quiz. You have read the chapter now see how well you did. Now go on to the lecture. As you can see I just put reading quiz in here.
bN13	Creates word document annotated with interactive needs. She gets the whole course basically organized, structured, and annotated with additional needed elements.
	So that is what I do, and I basically go right through her entire lesson, I just make sure that it is formatted. I put in my notes, like here, down here there is a little interaction, a little swift file, a little flash game, I put in put in this flash game here. So, pretty much for right through.
bN15	She creates storyboards to explain to student technicians what is needed for the interactions.

	Nancy - Those are things we made. That would be another part of what I would do at this point, I would come down here and say we are going to need a little interaction, right here, what I would then do, I would create a story board for it, just a kind of quick, explanation for the students, how to do it.
bN17	Sends doc to editors, has back and forth on questions with SME, then she ports it to HTML.
	After I finish the word doc it goes to editing. They go through, they proof it, they source check it, they you know just handle the whole thing. They give it back to me with their comments. I go through their comments, accept the changes. If there is anything that I can't answer like if they are saying OK did the instructor mean this or this, what were you talking about and if I can't figure it out I go back to Lorelei and say OK we have got a question of this concept, can you clarify? So by the time, the editing is all done now. A lot of the media has been started, done, at that point then I go in to create the HTML.
bN27	Course instructors are asked to map quiz questions to outcomes, but sometimes the designer has to do it.
	Nancy - We asked the instructors to. A lot of times we end up doing it because they will say "Oh I just have to get this off my plate." and we will say OK fine but we do ask them to do it because they are the subject matter experts and they should know which one this maps too. It also helps them as they are putting their content together. That is like asking people to write an outline before their paper, some people love it and others "Ah too much work." Just put it together right there in Brain Honey. And then quiz is in, ready to go. Then just go on to the next page, there is the HTML, there is the graphic, there is the copyright information, everything else we need to know.
bN102	SMEs in many cases are open to suggestions from ID for how the course should go, or what would help it be better. Others want greater control.
	Nancy - It kind of depends on the teacher, some are really wide open, are really excepting of ideas. Others just pretty much say no, I got this assignment I just pretty much want to do it my way and let it go. But most of them I have found if you do come in and say this is a really cool bit, how about if instead of you trying to explain how this changes every time we do an animation that shows it change every time. And they will go "You can do that" "Yeah absolutely" so most people really are open to suggestions. [00:00:00]
bPE3	Worked with SME to understand structure of course. Discussed assignments and assessments and expected outcomes of each, then discussed how online components could be created that would reach the same goals.
	Penelope - When I met with her we outlined out how the course would flow and she kind of pulled from her syllabus to help have an idea what her structure is in her on campus class and then we talked about what types of assignments and assessments existed in her classroom invironment, how we could create something online that would assess and provide practice of those same, whatever the outcomes were of those activities.
bPE4	SME sent content, designer organized it to match the established outline, then sent to editors. Then she sent me word docs with all of the stuff and links to movies or audio clips or whatever. Then I went through and formatted it so it matched the outline, sent it to editing. They went through and edited it all, it came back.
bBN57	Assessment content comes after finalizing the detailed design document. And then, of course, the assessment content, that's sort of how to band. Usually we will build out the assessment after the detail design document is finalized. Once we are confident that we know what the content is for this course then we will start building out the assessment questions because you want to make sure that you are hitting all of the performance objectives but you also want to make sure you are hitting them with the right content. We don't want to duplicate our work. <i>Aligning design decisions to goals / objectives strategically</i>
bKA3	Learners skip objectives. It's voice over. She says, I am clicking through it faster than the audio would allow for but it gives you some additional contextual information, she is not just reading off the screen. Like this screen there is no audio, everybody can read objectives and typically you skip them anyway.[00:03:20] I mean designers create people who, if you want to know their point and this phrase here How long you take is not nearly as important as how well you master the content and the conversation skills. Is on every single objective page in the entire course. That is kind of drilled home to the point where they don't read it anymore.
bMS12	Wanted learners to be able to intelligently speak to the features of the app and how to get around. That is correct. This was for our call center employees just so they were familiar with the app, and that

	way they would be able to; as the client would call in asking questions about this app they would be able to intelligently speak to the features and how to get around.
531	Designer must communicate the importance of time spent in designing interactions, by helping stakeholder feel the importance of committing to more time spent on design details, that increases opportunity to spend that time.
	Have them, work with them to have them identify where they want to be, where they are, why they want to get there and see how much it matters to them about their goal. If they care a lot about it then they are willing to make some changes to the time frame to have those interactions more or to further develop the look of the product. As long as you make them feel the importance of what they want then it is easier to have them sway a little more towards the designers end.
bBN17	Design document states performance objectives, outlines the target audience(s).
	The purpose part of the detail design document was fairly standard. Executive summary, sort of has a high level view of performance objectives. Here are the target audiences. It was line of business specific. And then we need to figure out does this line of business even have anybody who is affected by this, you know by these changes. They were saying technically every line of business could have somebody effected by this but the scenarios in the assessments may or may not be relative based on who you are. Does that make sense?
161	Conversation with client has to be about where do they want to be rather than how much money do you want to spend.
	if you want this kind of change that here are the instructional strategies that will take you from A, where you are, to B where you say you want to go. So if you don't really want to go to B that is fine we can cut back on role plays, we can do it different, here are your options. We can do it cheaper blah, blah, blah -- whatever the client says they are willing to accept but if you really want to go to B this is what it is going to take to get from here to there.
509	Design process is thinking about the content and analyzing the learning goals. "I am not thinking about the visuals, I am not thinking about, even necessarily the interaction, but analyzing the goal, analyzing the content."
	So the design process to me is about what come from that meeting with the subject matter expert. I am not thinking about the visuals, I am not thinking about, even necessarily the interaction, but analyzing the goal, analyzing the content.
485	Goal oriented design. She selects a design model based on the goal of the training experience. C - Do you have a design model, like repository things that you have learned about that you use to guide that or is it more thinking about the content and you structure the model to make sense for that content? Charlotte - It is not so much the content as it is the goal. If the goal is more behavior, then I am going to focus a lot more on Dick and Carrie model.
487	Designing for knowledge sharing, design is quicker. Content doesn't dictate design. Goal does. If it something more about solely knowledge, like the ladder safety, it is easy to do just a quick, I forgot the name, Wiggin's backwards design. So it is not the content that dictates that, it is really the goal.
29	J. takes a goal-oriented approach, similar to that espoused by Cooper, et al. But the difference is she is working with a SME who's goals are not necessarily in line with learner's goals. This is an interesting conundrum within the instructional design field and I think marks a distinct difference between instructional design and typical user experience design, which is that the goals of the instructor or institution might not align with the goals of the "learner." For example, the goal of a learner might be to get an 'A' in the course. This could conceivably be achieved without actual learning taking place if the student is able to navigate quizzes through short-term memory cramming, etc. Similarly, a learner might have the goal to just pass the course, while the institution's goal is to give the student a thorough understanding of the course material. The course could be designed with such rigor that the learner would learn the material just by following the designed steps. But, because that requires work, the student might lose steam and stop attending to the course, making it so that neither the institution nor the student achieves their goals. Whereas if the design was more flexible so that the student could attend to some of the material and not give full effort they might still pass the course.
	This first step is to really talk to them about what they want to accomplish.
779	Starts with standards to write curriculum. This is very similar to goal-oriented design. The curriculum is

	designed with an end result in mind.
	Well, I guess the first thing that I do, is I pull up the standards. Most of our classes have Common Core standards. Electives don't but even if electives don't have Common Core ones usually UEN, I can find standards on the UEN website so Utah has standards for them. I start with that, I do this on paper by the way, before I ever get online.
449	Project manager writes up creative brief as a description of the problem at and and the goals of the sponsor organization. It is based on a statement of work provided by design consultants who do "high-level" analysis with the client – "Just enough to get a scope"
	project manager would write up a creative brief, based on the statement of work that the sales team, we had some kind of design consultants who would go meet with the clients and just do some very initial high-level analysis. Basically just enough to get a scope, so they would have some basic ideas about this is kind of generally what the client is looking for. These are what we know about their business needs so far
605	Example of course content not properly aligned with syllabus objectives. The elearning designer's primary responsibility becomes to realign existing content, to trim or augment as necessary to bring course content back into alignment with course objectives.
	But sometimes, especially in university courses, there is a great syllabus with all of their ideas and what they want to accomplish in the course and everything and then as they get to writing the content they kind of forget that and so you end up with something like Oh, here is this lesson about a German fairy tale but I don't remember anything in the Syllabus that says you're going to study German fairy tales, this is funny, and incidentally this is the only place that we are studying a German fairy tale intensely and there aren't any outcomes tied to it. Maybe they just thought OH, this is really cool; I am going to put this in my course so just aligning the syllabus with the course content. U guess that still goes with aligning it to the outcomes anyway.
482	Performed backwards design to base content design on specific questions in assessment.
	With the assessment it was really easy to do a backwards design model and from there discern what should really be in the content and what could be removed. Once I developed that I made sure that for each of the sections or segments of the module was going to follow one portion or question that we were doing the design on. So for one portion of the module I will have a quick content analysis or quick content overview about the type of ladders people will be using for their job and right after that the assessment question that is associated with that content.
740	Backward design -- starts with objectives/standards to then develop out a curriculum and then a course design.
	So I use backward design and so when we work with curriculum writing and write segway obviously we start with the standards.
783	Part of the instructional designer's obligations is to align assessments to learning objectives.
	going through and make sure that my assessments align with my objectives and that is how I work through that,
392	Break down from goals to behaviors into knowledge, skill, motivation.
	just kind of back track from that. What were their ultimate business goals, what behaviors do the learner need to exhibit in order to reach those goals and then breaking down those behaviors into different components, Knowledge, skill, motivation?
396	Start to think of activities based on goals of knowledge/skill/motivation needs
	From there, based on the knowledge, the skills and the motivation, based on that we would figure out what content needs to be in there and that what activities can we design that can help the learners get the knowledge, get the skills that they need and also motivate them.
397	Wrote up design document aligning design plan with objectives.
	We wrote up a design document where we would outline all of those behaviors and kind of show how we had activities and strategies aligned with all of the components of the behaviors.
510	Thinking about assessment and then activities/practice and then moving to development after that is completed.
	Developing assessment items, developing practice activities and then figuring out the development process.
377	Main concern -- what are the objectives?

	"At the very beginning of the project the main concern is what are the objectives? What do the learners need to be able to do after this training?"
	At the very beginning of the project the main concern is what are the objectives? What do the learners need to be able to do after this training?
378	What activities and content will allow us to reach those objectives?
	What are some activities that I can come up with to help obtain those skills? What content do I need to put in there so they have the knowledge that they need in order to do those things. I think that is where it starts.
381	Beginning focus on objectives at the beginning definitely objectives and go from there.
391	Started with discussion with client about business goals when it was time for me to come in, I would go and meet with the client. We would have a discussion about what the business goals were and then just kind of back track from that.
486	Designing for behavior change is more difficult to map out a quick design for While some designs are relatively simple, some require more work to map out. It is a little bit more difficult to map out a quick design when it involves behavior.
600	Top concern is alignment of content and assessments with stated learning objectives. Number 1. I am concerned with clear objectives, content that align with those objectives and assessments that align with those objectives, so that the student learning outcomes are really very well mapped. That would be one of my biggest concerns.
601	Wants to ensure content being assessed is the same as content being presented. that students are only being assessed on content that has actually been presented and that there is not a bunch of superfluous content just for the sake of content right, so if we are trying to help students achieve certain outcomes then yes there is a lot of content that can be _____ or even peripheral but it should still lead to achieving that outcome and the only way to know that is to measure that, so if we are not measuring that then maybe it is not actually leading or maybe we just need to measure it.
30	It is quite possible that many teachers and instructional designers think very tactically. There is not a lot of attention paid to the strategy of the full instructional design. Some people come and say Oh, I just really want to put a video clip in here and
31	SMEs come in with a specific tactical request -- for example, they'd like a video to play at a certain point in the course. The instructional designer attempts to drill down to the pedagogical need of the situation to help them reevaluate how the tactic would or would not help the instructional objective. Their know-how should give them sound ability to select a tactic that aligns better with an overall instructional strategy. This pre-supposes that the instructional strategy aligns with the user and enhances their learning experience. as you get talking to them maybe they don't really need a video clip, maybe what they need is an animation of the process or maybe what they really need is a diagram or maybe you know, so talk to them about what they want to happen.
32	As the instructional designer, she moves from the strategic guidance and discussion with instructor to a possible tactical approach, which she takes to a programmer or artist to shape into a product that will achieve the strategic learning objectives. Once you have got that down then figure out kind of from a student, user point of view, how might that look and then for me it is usually going to a programmer or artist or somebody and saying ok, here is what the goal is, here is what we want the experience to be how do we do that.
bSA3	Must keep course oriented to a goal -- state or federal standards. Then, this class is a little different. We obviously have the core standard; you will see that that is hidden. This is where teachers track what standards are met during the week and that way if they take anything out they know that they need to make sure that they meet that standard when they are rearranging curriculum. All of our classes have these learning objectives, that is relative new. That has been the last two years that we have gotten these in and in student friendly verbiage that they know what they are doing that week.
bSA5	Had to train teachers to state how course activities and materials would aline with standards and objectives in student-friendly language, rather than in the formal language of the standards themselves. Those are created by the teachers by looking at the standards that are there. They tie back to show that

	things are met, they are kept in a spread sheet. The one thing we did have to help them learn how to do is to dial down that verbiage so that they were student friendly, so that the students wouldn't just go what's that.
bSN27	Designed according to standards
	Shawn - Every single, so let's jump to this week, week 7 here, once again I put learning objectives here but there are always learning objectives that relate to the state standards. <i>Working with SME to obtain/understand content</i>
354	Part of their process was to help their trainers (SMEs) become more proficient at creating their own training based on ID principles and also part of my job as an instructional designer those subject matter experts were our trainers but they were also, we eventually taught them the instructional design process in adult learning and they were helping to create their own training.
357	Having SMEs tackle content with ID mindset simplified design process. We were able to have that content being written by them and we were there just to put all the adult learning aspects, making it flow well and all of that.
359	SMEs put the content down "on paper" which made their process easier. We were able to go directly to the source, get all of the information out of their head by them putting it on paper themselves, if that makes sense.
360	Now he has to tease the information out of the heads of the SMEs and then try to regurgitate it back to them. Now it is strictly on me to pull all that content out of the subject matter experts head and hopefully get all of that correct when I write it out and then send it back to them. So quite a big difference between my last job and this job, more of a one-man-show now.
591	Likes the challenge of helping faculty achieve their goals in moving their courses online. So I think what I really like is kind of the creative challenge of understanding, especially with university courses, understanding what a faculty is trying to achieve and is achieving in a non-campus classroom, what the challenges are or the things they wish they could do and then finding ways to create that,
349	SMEs provide the content and review the work. Pretty much, now we do have our subject matter experts on the team that we get the content from and as I mentioned earlier they are the ones that will do the review of it.
501	First time meeting with an SME, she uses action mapping to try to help figure out what they need. She references Cathy Moore and action mapping. When it is the first time around you don't know what they need in order for them to help you. The way I am trying to steer my subject matter expert meeting more now days is using what is called action mapping. Have you heard of that? Do you know Cathy Moore? Well she has an amazing blog; I forget the blog name right now.
659	Investing in the up-front time working with professors allows the rest of the design / development process to go more smoothly/quickly. I choose to spend a fair amount of my time on that and I actively choose to pursue those opportunities and spend, because I really feel that when those conversations and meetings are really effective and then I hone them down to specific now let's build an outline and lets dig into details, exactly how do you want this to happen and how do you want students to present their presentation of the German fairy tale, should they post it on YouTube, should they show up to a live session, should they, you know whatever. You know there are so many ways, right should they make a podcast, whatever. So I like to really drill down in those meetings so that by the time the content is coming in I have already kind of got the skeleton built in the LMS and we both have a really clear direction of where the course is going so everything kind of flows pretty easily from there. I feel like when I invest a lot of time in that front end discussion and planning, almost building in a not explicit way, then I feel everything else flows pretty quickly and pretty efficiently.
351	Create own content and sometimes what they think is the right content they are putting into the training -- what they understood from the SME -- is not accurate. Communications breakdowns between SMEs and designers can be disruptive and frustrating. Most times we are also writing content and sometimes there is that break down and frustration where you thought you understood something from the subject matter experts and then once you get it back to them

	they are like no this isn't the correct format or this isn't the correct procedures.
481	Content comes from SME, in this case, it included an assessment from manufacturer for the safe use of equipment.
	of course the subject matter experts threw me this content and say do this, specifically to include the assessment that was already made by the ladder manufacturer that we were doing the safety on.
3	Instructors act as subject matter experts and work with instructional designers at independent study to convert their classroom into an online format.
	mainly the job here at independent student is to work with faculty or high school instructors to create online courses.
21	SME guides pedagogy
	One of the things that the instructors wanted to do was throw up little interaction points, kind of a little "Ok you just learned about water pressure, now let's play with water pressure" so you can kind of see it in action.
84	Subject matter experts provide the content, but an instructional designer needs to be able to come up to speed on content fairly quickly and thoroughly enough that the design doesn't suffer from an insufficient understanding of the material.
	we have subject matter experts and I don't know how to teach a 300 level course in abnormal psych
86	She will play the role of SME in areas where she is more qualified.
	For some of the High School courses the assumption is that you are probably pretty good with 10th grade biology just because you passed 10th grade biology there is a little bit more content creation. Especially like we need more questions, we need more chances for students to practice.
88	Instructional designers are sometimes asked to play the role of a SME in certain organizations.
	When I was at Test Out, when I was getting into instructional design that is what I did. I created the content, I wrote it and put together the questions and put together all that kind of stuff.
97	Instructional designer ensures assessments are created appropriately.
	as an instructional designer, I kind of glance through it and make sure that it does tie back to the objectives and that they do seem like good questions.
122	Some instructors make the work exciting by being excited about the instructional opportunity.
	Most of the instructors we work with are the ones that say Wow I am interested in eLearning, I am interested in distance learning. I want to get my knowledge and expertise and my teacherness out to more students and those are the one that are really fun. Those are the ones that are usually pushing. Oh, I've got this great idea; I've got this great idea so they are great. It is mainly internal; we have just got a lot of internal complications.
348	Subject matter experts review content.
	Pretty much, now we do have our subject matter experts on the team that we get the content from and as I mentioned earlier they are the ones that will do the review of it.
355	Part of their process was to help their trainers (SMEs) become more proficient at creating their own training based on ID principles
	and also part of my job as an instructional designer those subject matter experts were our trainers but they were also, we eventually taught them the instructional design process in adult learning and they were helping to create their own training.
356	Having SMEs tackle content with ID mindset simplified design process.
	We were able to have that content being written by them and we were there just to put all the adult learning aspects, making it flow well and all of that.
358	SMEs put the content down "on paper" which made their process easier.
	We were able to go directly to the source, get all of the information out of their head by them putting it on paper themselves, if that makes sense.
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	of course the subject matter experts threw me this content and say do this, specifically to include the assessment that was already made by the ladder manufacturer that we were doing the safety on.
498	Well speaking with a subject matter expert is a good way to go. Really I think that is going to be the first thing you need to do in order to figure out the last thing you need to do to create the module.
	Well speaking with a subject matter expert is a good way to go. Really I think that is going to be the first thing you need to do in order to figure out the last thing you need to do to create the module.

499	Working with an SME for a second or subsequent time is easier than the first
	Regarding the subject matter expert, a lot of people have a lot of ways to go about it. I like to, it is a little easier once you have met with the subject matter expert once with one project and then going back to them because you know how to accommodate their way of working with a project.
500	First time meeting with an SME, she uses action mapping to try to help figure out what they need
	When it is the first time around you don't know what they need in order for them to help you. The way I am trying to steer my subject matter expert meeting more now days is using what is called action mapping. Have you heard of that? Do you know Cathy Moore? Well she has an amazing blog; I forget the blog name right now.
504	Action mapping process leads to collaboration, rather than a content dump from stakeholder SME.
	Design process can break down through the communication process between stakeholders, SME and design team.
	So it is not just the subject matter expert saying here is the content, do what you need to do, it is more of a collaboration of ideas and it makes it a lot easier further down the line and development process reducing the changes needing to be made because that communication wasn't clear before.
569	Feedback comes from the SME
	A little bit more of the solid feedback that comes from the actual subject matter expert, or the training contact I am making the course for so they basically give their analysis about how well the training is and whether or not it is usable to reach the goal that they have.
	Christijan "So do you get that feedback generally every time you do project. Charlotte - Every time, from those people yes,
572	Uses subject matter expert to get content.
	I gather content from the subject matter expert, that is a professor on campus or somebody else that we have determined.
573	Propose a course, work with SME, Outline -- create overarching vision -- refine
	I guess the first step is proposing development of a course, then we gather the content and then I work with them in development of the content, refining as they are sending stuff in, then I will sit down with them look at now we had this kind of outline and overarching vision for the course, here has our content has come in and here is how it would look online, maybe we tweak, or maybe we refine the way we are sending it, or kind of adjust the mindset.
586	Traditional instructors aren't aware of value of instructional design
	sometimes if you are a dynamic teacher or instructor or you are a language acquisition expert you kind of have this mentality, if your are a great dynamic teacher you have this kind of perspective, or if you are hard core pedagogue you have this type of perspective and don't always really how much really simple tools can facilitate the course effectiveness, accessibility to students, etc.
620	Japanese course was structured in a way that didn't align with current language acquisition practices -- the problem of designing the course was not associated with e-learning per se, but rather with the subject matter's approach to instruction
	I would say, I can think of a specific example with our high school Japanese courses where the subject matter expert had a very unique model that runs exactly contrary to what most acquisition experts would say is how you should set up your learning. It focused on using baby talk and incomplete sentences while you acquire the language, like a child would but in fact that is not, I mean brain science and language learning science shows that that is not actually how a child acquires their language, right, they don't acquire baby talk words, and then big boy words and then adult words or whatever. So the whole design of her course was very unique and we were able to address several levels of that. I am still not very happy with where it is. But ultimately, and even when we were talking about just the design of your course, like the way you are walking students through this it is counter intuitive but in the end she is the subject matter expert and I am the facilitator to make the course come together so, it wasn't tied to e-learning challenges, it was really tied to challenges to design the instruction, like I said I am not totally happy with the outcome but it was a step in the right direction. I hope there will be another iteration that will be another step in the right direction.
631	Responsibility for ensuring quality of course can be dynamic based on the expertise of the so-called SME.

	<p>"No forced rubric or anything like that. How much is that your responsibility vs. the subject matter expert or instructors?"</p> <p>... It seems to kind of be dynamic depending on the personality of the SME and how much of the subject matter expert they actually are.</p>
742	They have to write their own content and curricula many times because they rely on open source material and the library of content is just not full enough.
	We use open educational resources, you probably already know that, and so we are a little more challenged in finding resources to develop curriculum and often have to write our own.
780	<p>As a course developer, she writes curriculum in her wheelhouse.</p> <p>It is difficult for an instructional designer to develop content without some domain knowledge. How difficult is the instructional design with only a cursory understanding of the content?</p>
	I put all of those on paper and sometimes what I do is print out all of those standards and I have them sitting on paper and I only, obviously I only write courses for which, in my content wheel house which is English and History and things kind of surrounding that.
789	Feels she couldn't write curriculum for math class -- outside her expertise
	I don't know the process to writing a math class, I would be horrific at it because it is not my forte
	<i>Communicating design intent</i>
bBN9	Created a high-level design/detail design document hybrid for sake of speed. Detail design document was part of contract.
	8/28 was the initial contact andalright so we skipped ... So we decided to go with and HLV/DLV high level design, detail level design sort of a hybrid and sort of skipping the HLV phase and going pretty much direct into a detail design document phase. That was partly in the interest of time and partly because the project didn't warrant both of those documents and if I remember correctly the DLV was part of the contract where the HLV is sort of nice to have for this particular account. We went through, with this document just like with most of mine, what I sent over to my content developer was basically an outline. Let me see if I can find that outline.
bBN19	Design document contains overview of course, outlining modules with performance outcomes and associated learning objectives for each.
	Then we have got sort of an overview of the course which is just an outline in five modules with the learning objectives or performance objectives. I think this was done, Yeah on this one we had, we did performance outcomes as prose [PROs? patient-reported outcomes?] and then learning objectives to support those performance outcomes. That was basically broken down by module.
bBN54	Detailed design document is "designed to so that A. the reviewer can read through it and get a good picture of what we are going to build and so the content developer can actually build it."
	I will say pull this content, pull paragraphs 3 and 6 on page three of this PDF and that implies that they are not just pulling those in but that they are rewriting it so that it fits the course. I might even say summarize paragraphs 3 and 5 as a single paragraph. Usually I don't need to go to that level, usually I just say these things begin on this page and go to this final page or something like that. Highlight this message, make sure, by highlight I don't mean color it, I mean emphasize this part of the message, it is sort of core for what they are trying to convey and they need to make sure that this is emphasized in the text. Does that kind of make sense? So, that is the detail design document? It is designed to so that A. the reviewer can read through it and get a good picture of what we are going to build and so the content developer can actually build it.
bBN56	Design documents are both valuable, but detail design document builds out on high-level design document, so usually becomes the document in need of final approval.
	Brandon - It is one of my ultimate deliverables. I don't know that I was say it is my primary deliverable because I think that the high level design document and the detailed design document are both valuable. Often times we will do a hybrid which means one less review per cycle because the detail design document is just a build on top of the high level design document. Effectively I am doing the high level design document and then going further with it into the detail, I just don't have to get their review on it. Often times I will show it to them or show them pieces of it so they can see but I am not delivering it to them and I am not asking for formal approval. I am asking for informal feedback. Once I get that then we build out into the detail design document and then they will approve that. Sometimes it is a formal

	approval on the high level design, it really depends.
bBN52	<p>High level design document creates the outline of the course and flow of topics, how they are organized and encapsulated.</p> <p>Detailed design document takes HLD and inputs pointers to where to gather the correct content. Content developer should be able to work directly from DLD to create training without need of input from ID.</p>
	<p>Brandon - So your question is what is the difference between the high level and the detailed? The high level design document sort of defines the flow and defines the topics for each chunk or each module of the course or of the materials and then the detailed design document adds in pointers to the locations where that content is actually found so as I said and it will also say, it is the _____, basically the content developer should be able to build directly from the detailed design document without having to come back to me, does that really happen? Close. It is not perfect but it is really close and actually, quite honestly it does often happen. That doesn't mean that we are not in contact but they are not usually asking me to verify how I want things done. Usually that had gone into the detail design document. It will define OK we are going to put this content into a quick to reveal media object or we are going to put this content into a linear animation or we are going to have an image on the page of a, you know, a police officer cuffing a guy or something, you know whatever it happens to be but trying to be as specific as possible while still providing enough leeway for media to actually to fulfill.</p>
bBN20	<p>ID locates content source material and places references to that content in the design document.</p> <p>We go through and we have, and actually my content developer on this one got a little bit confused as we were building this whole thing out. In the document I gave him I gave him pointers to all, what I do is give pointers to all the content. This comes from this reference guide pages three and four and emphasizes these messages, right.</p>
bBN23	<p>Communication between creative director and ID was disjointed -- not understanding or communicating clearly at first, but then through negotiation ended up at a final product the ID was happy with.</p> <p>There was a number of miscommunications with my CD on this one. I was trying to get him to do that and he was basically rewriting the whole scenario, which is redundant and it is going to annoy people. All you basically have to say, give a nod, if you talk about Jose and his problems with this new medical procedure and then you talk throughout the module about how these problems are to be expected and how they are not actual problems but they are symptoms of his body healing itself, whatever it is, and then you come back to the end and you say and now you know how to respond to Jose or friends in a similar situation to Jose or clients in a similar situation to Jose. You don't have to recap the whole scenario; the whole point is to hold it together with a bow. It was a little difficult to get to that point with this particular CD but we did get there and it ended up being very elegant. Once the communications loop was closed between us then it ended up being very nice.</p>
bBN21	<p>Designer moved to high-fidelity with initial design document, which ended up causing unnecessary time and engagement as SMEs evaluated content rather than overall structure.</p> <p>And what he is supposed to do is very briefly summarize that, that what I've said and pretty it up. And really just prettying it up and give that to them as a detailed design document. What he actually went and did instead, he went through and basically wrote all the content for the course right there in the detail design guide. He took my pointers and he actually acted on them instead of basically just prettying them up and putting them in. DoeThis is not an ideal DLD and it wound up hurting us a bit, the problem there was that when you actually build out the prose then your reviewers and particularly your SMEs they are look too much at the grammar, they are looking at the style of the message and this was still very early phases but it looks too polished. That makes it difficult for the SMEs because they get hung up on the wrong things. They should be looking at is this the right message, is this coming from the right place. They are familiar with these documents, are we pulling the right content from the right place. If he had just copied and pasted everything in ok but it would have been ugly and he is not going to do ugly. Our CD's are not going to hand over something that is ugly which is fine but instead what he did was he prettied it up and that sort of blurred the message and the other thing is it means that he spent a lot of time on building out the content too early. Whatever, it happens; we had some discussions about it. Sometimes being an eager beaver kind of hurts. [00:22:23]</p>
bBN24	<p>Discussion of how much a client needs to see early on. ID felt it was too polished to present. CD wanted to provide something at a more complete appearance.</p> <p>There is nothing standout in the detail design document really. It was much more detail than was wanted.</p>

	He has got at the end congratulations you have completed the, what it really should have just said summary or closed. But instead he has all text "It is important that all blah blah blah employees that deal with blah blah blah you know, it was just not necessary. Let us see if we can go on to. And again I gave him basically an outline and he put it into the right template and like I said beefed it up a lot more. I think one of the problems working with me is that I am going to give you really junk, I am going to give you the bare minimum that I have to in order for you to get, you as the CD, in order for you to get the job done and I think in that particular case he wasn't clear on how much more he had to do at the moment because I gave him so little. He knew what it was that I was trying to convey and what the course would ultimate look like because he and I had had the conversations and because I had outlined this thing for him and then he built the thing out and clearly he knew what to build out but he just built out too much in the early stage.
bBN35	Storyboard is rough draft of training in PowerPoint rather than final development software.
	Brandon - Oh the storyboard looks like the course except in power point instead of Captivate, Electora or Story Line of something like that. It is basically the whole course. Some of these things look ugly because of the way that they are done because we had to use these sorts of ugly check boxes for the sake of time and then the media developer is going to make it look prettier but that is fine. We have some images in there that are not at all appropriate and you have to say this image will be replaced.
	<i>Aesthetic, interaction, visual design decisions</i>
	<i>Planning interactive and visual elements -- tactics?</i>
483	Designed course so learning could happen during assessment as well as during content
	It is a lot of backwards design for that as well as really development processing, really getting them to not only use the module in the way that they just move ahead hit the next button, do the next one and hit the next button but mostly engaging with the content in the assessment portion and on the job. Where I was able to modify the assessment questions enough for them to be relevant and then learn from the assessment and not just form the content they were receiving.
771	There are organizationally mandated physical constraints for video content, allowing them to provide short "chunks" of content.
	that they keep theirs under five to eight minutes because we lose our students, they are done and so keeping things in very short chunks is very helpful.
74	ID will back off aesthetic decisions (colors in this example) if the decision does not impede learning objective.
	they really feel strongly about it, as long as it doesn't hurt the purpose I am willing to say to just say ok, we will use green, green is good, go with green.
109	The aesthetic qualities are innate or perhaps tacit -- learned but at a subconscious level.
	Partly it is just look at it and say yuck, or that looks nice.
320	Takes minimalist approach, just for preference.
	I believe in a minimalistic approach to it. I don't know if that is just preference, I don't know because again I have been doing this for a while, I don't really think about it.
406	Visual mock-ups were part of design document
	So the recommendations that you made were more organizational in nature as opposed to what might appear visually?
	B - No, the process, where I was before, a part of going to meet with the client, we would take mock ups and work with artists like the upfront design, the visual part of that was very important part of that.
407	Part of the responsibility -- design mock-ups for each type of activity
	We would come up with the look and feel and things like that and part of the design document that I would be responsible for putting together would include like mock ups of each type of activity and things like that.
408	Built -- or oversaw building of -- framework or template for producers and writers to build within. It was still part of his responsibility to help develop or guide the look and feel of the training.
	I was still very much involved with the look and the feel and a lot of that kind of stuff. It was kind of building the structure that then the producers and writers and whoever would go in, expand upon and build kind of within that template or framework.
413	Mock-ups were look and feel, but had actual scripted content in the page -- no fake text
	How detailed were those mock ups. Were they to the point where there were clicks and buttons and

	<p>everything that user might interact with or were they more...</p> <p>B - No they weren't prototypes, they were just static mock ups. We would put the actual content in them. We would want them to look like the real thing, no lorem ipsum or anything in there just scripting them as if they were real pages. Making those mock ups were like designing and scripting pages and that was something like the actual scripting of those pages, sometimes the producer would take care of that. The design lean would give some guidelines and kind of put out a vision and then the producer would actually script out the content for those mock ups. Yeah that was the extent of the mock ups.</p>
70	The media team (designers) have say over final appearance of content elements, but instructional designer has recommendation power to guide the overall look and feel.
	I can say this needs to be very fun, cartoony. This needs to be very rich and serious, this needs you know I can make suggestions like that. The media team, however, does have final say on look and say of the final things. So I can have input on smaller pieces, but that is not my call
73	ID will back off aesthetic decisions if they don't impede learning objective
	they really feel strongly about it, as long as it doesn't hurt the purpose I am willing to say to just say ok, we will use green, green is good, go with green.
434	How to decide what to cut and what to keep
	"How do we make enough stuff fit on the page where it is still, they have everything that they need but it is not too much, it is not overwhelming, it is not ugly."
719	Creative Commons images in wikipedia have opened up opportunities for him.
	I remember when I started trying to create these art classes, Wikipedia I don't think had put together a repository but now they have, basically licensed all like images throughout art history that are whatever the creative commons license like 50,60 years ago and beyond. They have taken all of those and made them all creative common license images. That just opened up my world so much after that happened. Just because it was so easy then to, you know you can type in any artist name and hundreds of their work show up as free to use and share images, that you don't have to worry about the copyright of. That was really nice in regards to getting the quality of the image down, but even like some sort of diagram or representing ideas and like that I don't view as important in my classes but in other classes I think that could be,
553	Interactive custom quiz experience takes her longer to create
	in interaction format so it takes me a little longer than most.
440	Interface and navigation were part of look-and-feel initial design phase as they presented design document to client.
	So, in thinking of my last, where I was before, it was kind of part of the mock-up, initial looking feel. When we were coming up with the look and feel that was part, like the interface and kind of how the navigation was going to work in the interface.
435	How to visually represent a concept.
	"How do we take this concept and represent it visually."
82	Aside from arranging and organizing content, she spends half her time "figuring out" media, illustrations, and other mediated enhancements to the learning experience.
	The other half would probably be figuring out media pieces, figuring out illustrations, figuring out enhancements, that kind of stuff.
764	Found that students had easier time when courses matched each other visually. (Emergent design)
	What we found was that it was easier when the courses visually looked the same for students, they were very similar, and they came with different material but visually. Some teacher may have a big quote at the top and the picture that is very English teacher like and some teachers are just very succinct and so we don't, we number assignments and everything, resources don't get a number and that should help with our grade book.
682	Video element of primary concern for each course.
	Wants to make content entertaining
	I think the things that concern me most is always the video element.
	That is like my thing that I am very passionate about, is making that video element and making it as entertaining as it can be.

791	Likes finding interactive and web tools to use. I think I just love the research and find interactives and web tools, our options for our students to use.
511	But sometimes development process comes first -- she know how she wants to present it, so that development affects her design process That differs too, sometimes the development process comes to me before the design process and I have the design process affected by the development process.
bPE13	Visual artists tried to make art match film for each unit, thus being relevant to the course and not standing independent of it or as only a generic visual element. Penelope - So they did try to make art that tied to the film for each unit. <i>Ideation/Discovery as fun part of job</i>
786	Loves the thinking Loves finding content Loves learning as she goes.
	I absolutely love the thinking, I love the research or finding things to teach and then I get intrigued with topics and the way things meld together.
118	Enjoyment from creating something -- design. "I also really find a lot of satisfaction in physically or virtually creating something." And then I also really find a lot of satisfaction in physically or virtually creating something.
448	Ideation process one of his favorite parts of the process. Will you talk to be a little bit about that, you talked about when you were doing those things at your last job as a group you would brainstorm together to get that initial look and feel and all of that. Can you talk a little bit about that process? Yeah, that was one of my favorite parts of the process.
656	Likes working with faculty, brainstorming ideas I love working with the faculty and like brain storming and thinking of cool ideas
785	Creative process more fun, but longer than the review process. So it looks entirely different, a little bit different when I am reviewing and streamlining a course. [00:23:44] two different processes, the first one is a lot longer, it is fun though, I love it.
788	Loves the writing and the thinking involved with writing content and curricula for a new course. I love the actually writing, I love the actual thinking involved.
657	Likes introducing professors to ideas and helping them get to this new medium And it's so cool to see a professor get excited about an idea or be intimidated by something at first and then walk through those steps and be like I am so glad I am doing this.
658	Likes introducing the ideas to the professors. Love, love, love it. And I love just working through ideas with them, especially on campus, it is pretty new ground for them, to a large extent. Our campus isn't super advanced that way.
bPK47	Innovation opens the door to possible usability problems. That was another thing, like everything that we did was custom and we would base stuff that we had done on previous projects that we had done. We had like basically templates but we were encouraged to innovate and build on those templates, change them around and do different things and so I would say it was definitely a double edged sword. We came up with some interesting ideas and interesting interactions and custom stuff but at the same time we weren't always following conventions and it could be more confusing sometimes. Focusing on strategy
574	Propose a course, work with SME, Outline -- create overarching vision -- refine. I guess the first step is proposing development of a course, then we gather the content and then I work with them in development of the content, refining as they are sending stuff in, then I will sit down with them look at now we had this kind of outline and overarching vision for the course, here has our content has come in and here is how it would look online, maybe we tweak, or maybe we refine the way we are sending it, or kind of adjust the mindset.
578	Primarily designing course ideas then evaluating how to make it an effective online course or blended

	course.
	Most of my time, I would say is spent really kind of designing course ideas and then working with faculty to evaluate how to make that effective online course for them or blend it. I also work with blended courses on campus.
	<i>Tacit vs. explicit design</i>
231	First seeks existing material to read about the project.
	I will read and need the material that we have available on the project itself.
232	Reads content, problem, impetus for training.
	The content, the problem, the impetus for the training solution, whatever and then I will wait for the client kickoff.
233	Will "churn on that material" until client kickoff. Some of design is tacit and begins formulating at a subconscious level.
	Sometimes it, often times it is pretty soon but I will wait for the client kickoff to let my mind churn on that material.
234	Does a skim reading and feels like he has a decent idea of ideal solution in his mind based on knowledge he has.
	It is not usually a thorough read through, it is usually sort of a skim of it and going into that kickoff I have a pretty decent idea of what so of the ideal solution would look like given the constraints that I know of at that point.
235	References person can't remember name where she recommends formulating initial solution and then adapt with new facts emerging as you go.
	What is her name, gosh I forget what her name is, oh forget her name. Often times the design literature, oh what is her name, she talks about these sort of formulated initial solutions and then that adapt that solution to the facts on the ground. I would say that most often these days that is the approach I have been taking.
237	Initial solution does not end up being far from initial solution proposed
	I will read, well they have this need and they also have this concern and hopefully I can address that and I will ask a question, what about this? and gradually flesh out the design. Increasingly I will come up with an initial solution and most often that solution doesn't wind up being very far from the final solution that we propose.
265	Each situation is unique and so his tacit knowledge leads him to design a certain way.
	The other thing is, I feel that each problem in its own way is unique and I don't know I mean I guess it is just an aggregation of my experiences and putting that together.
292	Design becomes innate and you don't think as much about it. It becomes a tacit practice.
	After doing it for so long I kind have to step back because a lot of it is kind of innate, you know you just kind of do it.
305	Has freedom and designs very tacitly.
	"I kind of, in my mind, know what I like to see and am able to create that."
	There is a lot of freedom in what I do but, as I said earlier I have been doing it so long I don't really run into any issues of getting it in there. I kind of, in my mind, know what I like to see and am able to create that.
479	The design solution presents itself to her fairly quickly, so the actual development stemming from that ends up taking around twice as long as the design itself.
	There seems to be a presupposition that the design will work because it is based on some principle or theory -- or even tacit experience. But there is no check on effectiveness and little preliminary research.
	The actual design? The design part become pretty easily to me so the time I put into that is not as much as I put into development, so I would say the design part would maybe be 35% if that, the development really supersedes that.
443	Designers will look to other solutions for inspiration as well. But, are those observations very superficial, thus resulting in a solution that is based only on the outer sheen and not on the underlying theory and intent of the overall design?
	Obviously we would take inspiration from stuff that we had already done and try to reuse a lot of that or we would go get inspiration from websites and things like that.

442	<p>Re-use existing concepts. The designers would rely on their experience to come up with a solution that fit the scenario.</p> <p>I suspect this is often a cost choice, where experimenting with an unknown approach would be much more costly with arguably less certain results. Going with trusted methods is like a crutch -- essential if the situation requires it, disingenuous and further debilitating if not strictly required. The problem is whether the trusted methods really are as valuable as a crutch. Can the client stomach a better way. Or can the vendor manage to eat some of the cost to create truly remarkable work? Does a UX design result in better designs than other processes? Is the ideal process already described?</p>
	Obviously we would take inspiration from stuff that we had already done and try to reuse a lot of that or we would go get inspiration from websites and things like that.
514	Designer has ability to decide what to do -- identify what should come first in the process.
	If you are going to be a designer you need to be a little more creative and identify, for whatever project you are working on, what should come first maybe even before design. It depends on a lot of things how that works for me.
bN12	Created inline quizzes based on "our experience" backed up by the research on internet usage.
	Nancy - Partly it is just because we have been doing online courses for quite a while and we get responses back from students. We do a course evaluation survey, it is not required, but students can take it. Some of them will say "there was so much reading, oh my gosh," The other thing is just web research, people really do tend to only have a certain amount of focus and then they zone out, so. It is kind of a combo. Our experience backed up the research.[00:08:01]
	<i>Building on a company/organizational/historical/theoretical foundation -- Design traditions can be both useful and limiting. Organizational structure helps streamline the design process.</i>
106	Having an organizational foundational process helps shape the quality of the designs produced by instructional designer.
	I think we have got a good foundation here for the way we are doing our courses.
551	They try to create 15-minute-or-less modules
	We try to have all of our modules 15 minutes or less, that is our guideline for what we do.
552	Tries to create 6 assessment items
	I am not sure about the other designer, but my projects, these modules that I work on I want to have at least six assessments items, not all necessarily in quiz format but in interaction format so it takes me a little longer than most.
262	Existing literature describes his process, more or less.
	Oh that is just from design, that doesn't influence the way I do things it just fairly accurately describes the way that I do things. You know just looking at precedent.
437	Usability tests are currently in the company's process, but happens for website, courses, and other things.
	At my current job we do have regular usability tests but we also, it is for our website, it is for courses, it is for all kinds of stuff.
624	References ADDIE model
	"The guiding principles, I would say probably I would refer to the ADDIE model and then we have some principles that are part of our internal training that we follow that are kind of an amalgamation of learning models, I would say."
	The guiding principles, I would say probably I would refer to the ADDIE model and then we have some principles that are part of our internal training that we follow that are kind of an amalgamation of learning models, I would say.
393	Reference to Cathy Moore's action mapping model.
	What were their ultimate business goals, what behaviors do the learner need to exhibit in order to reach those goals and then breaking down those behaviors into different components, Knowledge, skill, motivation? It is pretty similar to the action mapping model that, Cathy Moore's action mapping model.
484	Using a variety of models in the design process. Uses different ones depending on the type of product.
	Yes, one that is a little more design heavy was a time keeping module I was doing. I was working with one of the HR directors to identify the best ways to have a schedule set up for non-exempt employees. So with that it was a lot of Blooms taxonomy here focusing on not just the understanding of the content but also applying it, analyzing it and discerning what would be an ok schedule to create and what would be

	an ok schedule to modify to meet that standards that we have here. Depending on the type of project that I am working on it is not always going to be the same type of model I would be using for the design process. It really does depend given the type of product.
763	Emergent design of organization. Over the years, they have shaped how the courses function. Originally it was relatively open and less guided. Now their instructions include a style guide for all instructors for their courses. Their objective is to keep things consistent.
	We both are kind of hands on curriculum/LMS working with all of our teachers and so we have a set up a style guide that we have asked everyone to use, if they are all consistent, that has developed over time, by the way, that wasn't that way at the first.
593	Uses theory has learned a lot since starting about instructional theory and learning theory.
	since I started this job I have learned a lot about instructional design theory and learning theories and all that kind of stuff and I fell like pulling from that and pulling from research and then kind of pulling from, you're a pedagogue so I know that some of the theory you really trust heavily can also be intertwined in here and you know.
706	When first creating courses, he ended up with inconsistencies, but has begun bringing them back to a unified format to make things easier on students.
	Keeping it very logical and uniform because I know when I started and I created my classes the first time I had like little different variations in the directions like Oh for this one submit it to your blog and then for the next one it would be submit it to the course. It was just confusing, and if it is one of those things that if it doesn't matter on my end why am I having them change things.
733	Your first course is like the first CD recorded by a band -- second CD is easier because you've learned the ropes, but there's a lot tied up in the first CD -- it becomes a formula for success.
	You know that first one, you know, has like a place in your heart because it is like a band that just created their first CD. You know it is like all of their material that they came up with for the last 10 years of their life when they wanted to put together a band. Then they create their first CD and it is like, you know it is maybe their best material in regards to the lyrics and the difference in the sound, but then once you have that formula then creating those other classes is a lot easier, like as a band it would be a lot easier to create the second CD because you have the whole process down and you understand where you want to go and the flow of it.
512	Following a set of predefined steps in a process can be a useful approach to design, but is limiting if you turn off your designer training and rely too heavily on the process to guide you. In that case you move from designer to technician.
	One thing that I don't like that some instructional designers is go in linear systematic process where they go ok let's do the analysis, let's do the design, let's do the development. It works often enough that I can see why they do that, but to me a designer is only a technician if they only go through those steps in that order.
444	For B., the design was open to interpretation and experimentation (within the budget). There were no dictated navigational standards for the project.
	We didn't have like a set of really like codified standards.
352	Previous job more formalized ID process because manager was trained in ID.
	My last job, the big difference was that my manager was trained in instructional design. Everybody on the team were trained instructional designers and so we did have a more formal process of designing
362	He likes being free from being required to follow a model.
	What would you say are you favorite parts about doing instruction design currently?"
	T - My favorite part, we don't really follow any sort of model which I kind of like.
363	Partially follows ADDIE
	Addie is the big model word out there but in some aspects we follow it but not really
364	Prefers "art" side of thing rather than "science" of thing. Makes eLearning more interesting.
	Following the ADDIE model is the "science" side of things. It appears to give a sense of making the emerging design less interesting.
	which is fine with me because I am more the art side of design than the science part of it. I think it helps

	to make eLearning more interesting
365	Using instructional models are difficult in fast pace of current life.
	which is fine with me because I am more the art side of design than the science part of it. I think it helps to make eLearning more interesting and also we don't have time to follow those models because of how fast paced everything is.
366	Prefers "art" side of thing rather than "science" of thing. Makes eLearning more interesting.
	which is fine with me because I am more the art side of design than the science part of it. I think it helps to make eLearning more interesting
367	Likes freedom to create things rather than follow a set process.
	I think my favorite part is just kind of having the freedom to create things without having to go step by step through a process.
319	Probably doesn't follow any set guidelines or heuristics explicitly.
	Are there other, I don't know if you call them heuristics, or any other guideline that you follow tacitly that you might articulate?"
	T - Probably not,
bMS64	Longer course created by team might follow more traditional addie model with additional analysis, feedback, pilot study, etc.
	We do have courses that are developed on our team as well that might be an entire day in class and for those we do have focus groups at the very beginning and we do follow more of an ADDIE model for those longer classes where we do poll the employees and see what they are needing. We do the pilot with a select group of students in there and then we get their feedback on the training. It all depends on what type of training it is that we are creating.
	Adapting process to constraints / Accommodating multiple perspectives
726	Interactivity is time intensive -- would focus on making small improvements.
	I would like to do more but it is very time intensive. That is one of those things with that 10% better, next year could be, like my goal could be to just like focus on making it more interactive.
238	Stakeholder might change design. Design process has to adapt to unknown impediments.
	Now there certainly have been instances where that solution goes off to stake holder that we have not heard from before, that we have not had any reason to talk to and they make changes to it.
241	Materials serve as way for stakeholders to "structure their thinking about what they want"
	I usually find that most of the materials serve much better as an opportunity for them to help themselves structure their thinking about what they want so that way they are in a better position to answer my questions.
242	It is an iterative process to accommodate stakeholder needs. By proposing a fairly quick solution, and then getting stakeholder feedback, a designer is able to accommodate stakeholder needs and reach a solution.
	I would say that it is definitely an iterative process where you are sort of designing and making changes to your initial solutions to accommodate different stake holder needs.
243	Sometimes new information is radical enough to prompt a redesign, but not often. Often final design ends up being similar to what is put out their initially -- maybe because we are used to doing it that way.
	Sometimes some new radical information comes in which does cause you to sort of come up with a significant redesign.
244	Sometimes new information is radical enough to prompt a redesign, but not often. Often final design ends up being similar to what is put out their initially -- maybe because we are used to doing it that way.
	But most often it winds up being similar to what you put out there initially. Maybe that is because we are used to doing in it in one way,
394	Working with client face-to-face to break down components
	Starting with business goals, behaviors, Knowledge, skills and motivation that support those behaviors. We would do that analysis with the client face to face.
411	In many ways, design is a process of negotiation.
	graphic designers would come up with mock ups and come up with look-and-feels and then we would just go back and forth and negotiate until we got something that we were both happy with.
410	Graphic designers came up with look and feel, but to get to a solution, there are compromises and negotiation along the way.

	graphic designers would come up with mock ups and come up with look-and-feels and then we would just go back and forth and negotiate until we got something that we were both happy with.
451	Team would perform creative activities as a group to provide something based on the creative brief.
	and so we would send out that creative brief and we would come together and have just different activities to get people's ideas.
454	One meeting before presentation to client, another after to refine based on feedback from client.
	That was kind of generally how it would go. We would do that before going to meet with the client originally because we needed mockup and then we would have another one after the meeting with the client once we actually knew what they wanted.
455	Info from sales sometimes led to a weak first approach, but they always had a foil for discussion. The communication process from sales to the team can be a tricky channel for information to flow through.
	Sometimes there would be a surprisingly big difference from what we thought they wanted from the initial conversation with sales to what we figured out that they actually wanted when we went and had a face-to-face meeting with them,
494	Balance of effort between interaction rich or content rich. The cost of interactive training is high in time and money. Designer has to consider this constraint in order to determine the design and development approach for her training.
	how thorough should we make it to be. Is it worth our development time and development process to focus more heavily on interaction or should we focus a little bit more on the content and try to weight the options about the best way to proceed with it.
528	You have to manage stakeholder priorities and expectations in order to justify spending more time on little details
	"When you speak about value of spending more time on some of those elements. What is the kind of language you use to explain that is valuable to the subject matter expert or whoever is paying the bills. Whoever is giving you the time, and how much more time." Sure, it is more of having them identify what they want in the training and if that is going to be in the training then a lot of accommodations will need to be made depending on what their expectations are.
506	Recent adaptation of design process. Design process is not a static process, but a living means of reaching the best solution. Designers might be on the lookout for new ways of approaching their work. I suspect this is especially true when they find some disconnect between what they had tried in the past and their feeling of the outcome. Although, they might not even have seen or had any means of finding out how successful their training was for their learners. That is what I have been aiming to do lately.
636	Example of how art direction was wrong and had to be corrected for culturally problematic artwork An example of that is in Arabic we built some interactive games in the courses and initially the art students that had developed the aesthetics for that had people images like boys and girls, but like the women weren't veiled and there were boys and girls next to each other and there were boys and girls of different skin color and so all of those things were touching on some pretty sensitive cultural issues in Arabic speaking countries and the professor said, oh no, no, no, we are not going to get into the business of like having unveiled women and veiled women, you know, and men and women by each other and stuff like that and so we scrapped all of that art and we went to geometric shapes and vibrant colors and kind of more like the abstract artistic type elements you might see at the market or a whatever. Yeah, ultimately I guess I took that feedback from the professor and said we can't do this so ultimately I guess the designer would have the final call on some of that.
218	Sometimes the needs of the learner are not the client's priorities. "I would say that is not always foremost in the mind of the client. Sometimes you have to remind the client of that and sometimes you have to stealth it in." I would say that is not always foremost in the mind of the client. Sometimes you have to remind the client of that and sometimes you have to stealth it in.
219	Sometimes training is purchased to avoid fine or is rushed for compliance to a regulation There are a number of different reasons why people purchase eLearning, sometimes it is compliance

	driven and sometimes it is rushed because it is compliance because they are trying to avoid some kind of a fine or some kind of a regulation.
220	Client will sometimes be up front about not making user a priority
	Sometimes you know, and sometimes the client is very up front about the fact that this is not going to be high quality learning.
bPK57	Director of graphic design reshaped design process, bringing graphic designers and programmers into the process earlier.
	This guy that I had been talking about a lot, who brought in a lot of influence; he was director of graphic design. A lot of our graphic designers had been with the company years and year and years, and this director of graphic design they had just brought in a couple of years before. He started six months to a year before I started there. He helped kind of create, put together our creative process with the brainstorm meetings, bringing in the artists and programmers earlier in the process. He just kind of put together a whole creative process.
bC29	Simulation is not literal. ROI for exact similarity not worth the time.
	So for this I have little items here that are dragable items. In real like what a person would need to do in order to remove or insert a wire into a terminal is unscrew these little tops and put the wire in there. No I didn't think it was worth the time and I don't think there would be any great return investment to have that kind of animation shown so instead they are going to be dragging and dropping these items where the wires go. There is a jumper wire they need to play around with. They need to determine which terminal that wire would need to go to so if they were to drag this to that it would be connecting to that, and vice versa in all of these different things so all of it is a drag and drop sequence.
	<i>Designing for instruction can be a moving target</i>
bBN50	A lot of iteration even up until the end.
	I think that is about it. We wound up having the assessment questions and a set of sort of extra questions. We wound up providing them with 12 sort of standard questions, two each line of business assessment questions. That is where it wound up and then like I said we had that one piece where they added the slide in and in order to address the differences that was supposed to give them a little bit of warm and fuzzy on their being address specifically and I don't see it in the course any longer so they must have ended up ripping it out, which is fine. Would it have been OK to have it in there? Yes is it fine to rip it our yeah, I didn't really have a horse in that race. I didn't love the addition of it but the way they added it was OK. It wouldn't have hurt anything and it wouldn't have confused anybody. I didn't think it was necessary and ultimately they ripped it back out, whatever. I guess I could look at it as a little vindication on my part but you know, whatever. So yeah that is the course, does that give you the walk through you were hoping for?
bMS57	Changes to training happen right up to product release sometimes.
	We just jump in and we are making changes all the way up, right up to when it is released at times.
bKA37	Creation of the instructional blueprint was always in motion -- continuously edited throughout the project. Dynamic nature of the business prevented them from settling on one set of content early on.
	We were editing out content all of the time, trying to get it down to that 20% that you really needed to know and then to rely on a very comprehensive performance support system that had the other 80% of the details of the knowledge embedded in the system and constantly updated. They make updates to their performance system daily. We just couldn't keep up; even though we were only working with 20% of the content I would say at least twice a month there was a significant revision that we then had to track through the WBT to update. It was a lot of rework because their business is so dynamic.
	<i>Learner as participant in design</i>
436	At one job, usability was not part of the process.
	We didn't pay as much attention as, I should add it wasn't a formal part of our process.
676	Build on previous students' projects.
	I include the students in helping me make my courses better, so you know whether it is research projects and then I have them build upon each other's research projects rather than just creating another research project about the same person another person did last year.
679	Has advanced students work together to create presentations for class.
	taking those advanced students and like hey this is the presentation for like three weeks from now, you know find something that you can add a video element to and make like a crazy video with another person, you know, in the class or something like that.

344	<p>Some content has been created in response to learner's request for help.</p> <p>Interesting idea about types of learners: those seeking help and receiving a response to specific questions, those hoping for general domain knowledge, those required to take a course to fulfill some other mandate.</p>
	<p>There is something else around that that we started doing about three months ago that is very employee driven. They were asking questions on how to do things, we ended up taking those questions from them and we created little videos on the topics that are in cartoon format where they have their questions answered for them. That really seems to be going over well. So that is something we have included since those are driven by our client, our internal associates, that has certainly given them a stake in their learning.</p>
681	<p>Uses students to improve the course by giving them opportunities to create elements.</p>
	<p>Just saying that they come up with some of the best stuff or making interactive games, like those are the things, animation videos, students are so good at that stuff and they have like such a good sense of what is going on in the world today and what is going on in their specific age groups culture that they can create this wonderful stuff that I then implement in the course and it just makes the course so much cooler.</p>
bSN46	<p>He uses students -- TA and class members -- to contribute to course content in order to alleviate some of the time issues associated with the course.</p>
	<p>Shawn - Right now, so now the resource, this one refresher for submitting art, this was my TA. I use my TA's mostly because they are the advanced student who I know I can kind of go to, to help me. But this was, I gave my TA the current directions and they looked basically just like blank text and then the TA created this document of how to turn in work so I can easily have a nice document that I can link to, if the students are ever having problems and I actually had my TA create a bunch of how to documents that I have now, in my class. That has been really nice, using students like that. Also in regards to student examples, in order for me to create all of these different projects and do multiple creations of it, you know what I mean, so using student examples is the biggest way I use the variety of students and then I use my TA in my different specific ways like to create like _____ documents that will be beneficial to other students. But yeah, these student examples, for me to draw all this out is just hours worth of work that you can access the students to do and that can benefit the next group of students.</p>
	<p><i>Custom design for specific audiences</i></p>
bPK15	<p>Created course based on learner's own perceived expertise. They could opt to take foundations exam or view material first.</p>
	<p>We also divided into three phases, a foundation phase, a certification phase and a support phase. The foundation phase, everyone actually took all the same courses there but they were optional so there was an assessment, we called it the foundation assessment, that covered all of the material and if someone felt like there were experienced and knowledgeable already they could just take that foundation assessment and not have to complete the foundation courses and just move right into certification. People weren't familiar with the content would have to take those foundation courses until they could pass the foundation assessment. The purpose being everybody comes into the certification training at least somewhat of the same footing.\</p>
bPK14	<p>Three audiences had different paths through content and specific certification exams.</p>
	<p>The image I have here is a curriculum map and the main features that we have here is that we divided up the three audiences, selling, designing and installing, each of them kind of had their own path through the content. They had courses that were specific and certification exams specific to their roll. That kind of solved the problem of people having to sit through stuff that wasn't relevant to them.</p>
bBN16	<p>Three separate designs based on user type, goals of user.</p>
	<p>There was no pre-test or post-test on this and there was no sort of light version of the course that was an option. We have done other ones where you actually have three versions of the course, one which was sort of refresher version, one which was sort of the brand new version and then like you specialize in this so you need to go through every single bit of content. It was like a small, medium and large. The small was ... you could potentially test it to the small version, the next version was sort of let you know what had changed and then there was sort of a longer one which was sort of I am not confident you really understood the stuff the first time so we are going to really make sure and have you go through this other one and then I think a longer one which was this is core to your job and so I don't care what you</p>

	remember from last time we are going to go through the whole thing again anyway.
bC17	Designed for lowest-common-denominator.
	I wanted to accommodate to the lowest common denominator and work from the bottom rung of the fundamentals.
bSA7	Assignments are numbered to accommodate special needs -- different audiences require different approach within the system.
	You will notice that all of our assignments are numbered. Now you are going to see right here that I have two numbers, we tier our courses, so in this class Tier I is integrated and everyone has access to that accommodation. Tier II is more scaffolding for students that have 504's or IEP's; Tier II and Tier III. Now if we wanted to we could separate those tiers out and do more scaffolding, the idea is to keep all of our students integrated as much as possible in the main stream classroom, than a restricted environment and this is one of the ways that we do that. Obviously when we get to kids that are low enough that need a completely different reading level, we have to pull out.[00:07:59]
bSN25	The make structural changes to the course aimed at helping those with distinct learning needs.
	This is nice for the students, especially certain students that have trouble with pacing or struggle, you know if there are 504 students it is really nice because you can have them follow this weekly schedule and it just, it really works well for them. They are really able to find a lot more success than otherwise. This is something that doesn't have to be in there but I have another video in here where it is like just welcoming the students to school and that is another element you know just because I am more video intensive and then after a minute I actually end up on a jet ski and I drive away. It is just a funny video I made this summer to welcome students to school.
bSN28	The design for an online course for school seems more complex and has to cater to more broadly diverse audiences in terms of overall skill level compared to a training that might be produced for a skilled adult workforce.
	Then if you go into your weekly schedule and introduction video, on Friday they can rest and relax and then they have this video walking them through the steps of the course. Basically every week, a lot of this stuff will change a lot depending on the course you are in. For my classes, usually I have the two assignments and at most three and if there are three then one of them pretty short. But I have my weekly drawings because this is an art class, so that is kind of like a warm up drawing activity almost. Like students will spend a half hour to an hour max on it but I don't want them to go over an hour, just because I don't want it to be more important than these create projects. One thing to make note of here is the terminology that comes before it, so the students know what to expect and the numbers. So basically assignment 21, they will know this is an assignment that they will have to turn something in for, vs watch, read, Andy Goldsworthy's Earth art, that is going to be something that they just look into as a resource. My create projects, that is like the overarching, like bigger like _____ term for projects is create earth art or create perspective drawing or whatever it is and then once again with an assignment down here,
bMS2	Designed for internal associates
	Markus - Sure this tutorial, or the screen test for this tutorial were for a new mobile application that ADP put out about four years ago, four or five years ago and with this particular tutorial it is for internal associates that are taking phone calls from clients just to get the familiar with the application.
bSN73	Perception of a persona type gives him ideas for ways to structure or label courses to better meet the educational goals set for the students.
	Actually one of my goals is to maybe get rid of the word assignment because I feel like assignments are doing worse than anything else just because it says assignment. When you are accessing those lower students something as simple as saying assignment will have them not click on it. But we can go back to what you were saying, that was a little side bar.
	<i>Learner guided pace to the course</i>
bPE43	Online provides efficiency in courses through allowing people to go at their appropriate pace -- it has the potential to be self-contained, self-explanatory compared to the classroom, where a lot of instructor time might be spent explaining an assignment and answering questions, when most of those questions could be answered in the online assignment description.
	The biggest benefit for the instructor is to be able to use her time on more important instructive activities.
	Penelope - I think the benefit of having these components online is there is some efficiency, so in class

	she would be taking valuable class time to describe this activity and to hand out the passages that they might do, you know this attachment that is in there. To maybe show the clips that were really good one and maybe field questions, Can I do this or can I do that? And instead it is really self-contained here and really self-explanatory and so that allows here to use that valuable class time for something that is more critical in the human attraction and this is something that is really, the human attraction isn't critical. So I think that is probably the biggest benefit is it creates some efficiencies and helps her free up her class time to do more valuable things.
bMS3	Self-guided tutorial, non-linear navigation
	It was a self-led tutorial which means that they could really go any place they wanted to within the tutorial so was not linear at all. So we went with, for this particular tutorial it was myself and another designer that put this together.
bMS29	Groundbreaking design in 2010-11 for their team to allow self-guided tutorials, embedded videos. Also won local award in e-learning competition for ASTD.
	This is something that was new to our design team, to having something this fancy looking at the time and so allowing the end user to actually do their own choices of where they wanted to go within topics so this was actually kind of ground breaking for our department. Something this fancy with embedded videos and what not. It was received well amongst the employees and we eventually rolled out a version that worked with android as well so we had a follow up training that I was not part of for that so we did have iPhone and Android so it did make it to a different platform. This particular training actually won first place in the Atlanta ASTD ELearning competition. Not only was it well received within ADP but also outside of ADP.
bPK21	Learner can explore the content to show the proper answer.
	Patrick - This is an example of one of the foundation courses. This was a primer on products that the company offered. The different types of cameras, and software, digital recorders and encoders and all kinds of stuff. The way it worked, rather than make the learners sit through presentation after presentation about the content, learners would come into the course and they would select the topic, cameras or software etc. and they would select that module and they would be immediately presented with a multiple choice question. That is what this is here; the point of the question here is which type of camera would be best for the environment shown in this picture that is going to get the best image quality. It is just a multiple choice question. They have their options down there that has the names and images of the camera and over on the side there is, I will scroll down here, there is a pull out menu there that had all of their different camera lines and then they can click on each one and read the description of the camera.
bPK23	Learner has control of access to the content.
	The content is contextualized and it is very learner concentric, they have control over what they access and when they access it. That is an example of one of the foundation courses and how we designed those.
bSA24	Self-paced courses increased engagement compared to same course on a set schedule.
	Let me show you, I think you would be interested in seeing, so these classes work like in weekly modules, things are assigned on Monday, due the next Monday. We keep two weeks open, we stay at least two weeks ahead of the students, if not more so they can access, go ahead, we don't like them to get behind. Let me show you a course that is, I am going to have to go in a different way. Let me show you a course that is self-paced because we do have self-paced courses. I am going to show you Fitness for Life. I am sorry I have to get to it in a funny way. C - No problem Come on let me go. OK so these are a little different, these are new this year. I just got some data back within the last week saying our Fitness for Life, so it is a gym class that we changed to self-pace are up over 10 % over our scores for last year at the same time. So we are really pleased with these courses, these self-paced courses because they are proving to be, at least initially, very successful for students. Now I have asked my little, I have asked my teacher that part of her job is to do testing data and digging around data along with [person] to go in and do some even more specific data gathering on these classes so for example we wanted to know how many students passed this off early as opposed to how many students worked in it regularly as opposed to how many students spent the bulk of their time at the end of the quarter, excuse me at the end of the semester because this is a semester class. We also wanted to know, and this is harder data to gather, whether students would go working in other classes, to work in

	<p>more of these classes, these self-passed classes at the very last minute to get passed and then didn't have time to work in another class. So we have come up with some ways that will, maybe with that one, that is going to be a little bit generalized we will have to make some assumptions but will give us a starting point. We want to make sure this is a right fit for our students. You will notice they start out at a "0" and they worked towards 100% passing grade in the class and they have until the end of the quarter, again you see them navigating the course module. Gym is different; there are two pieces to it. They do their own activity and they record it. They have eight weeks of five logs a piece so they have 40 days that they have to report activity for, and then there are all the modules that they have to work through. So most modules have a lesson, this is what I was describing earlier, so with the subtitles being lessons and then assignments. You will notice they are not numbered in this class because we don't need them to go sequentially, they can work however they wanted. So they work through the lessons and they complete the assignment, or really the assessment really. And most of them, and they all look this way, there is going to be a quiz at the end of the week or a drill and a quiz. And so they work through all of these modules and topic 19 should not be showing. Why is topic 19 showing? I need to go in and make that invisible. And then they work through their final exam and they again have that course evaluation. That is how the self-paced ones work. We are really excited about this, we got this on Friday we got that data from our end of quarter passing statistics and times and processes and everything so we were pretty darn excited about this one. Well we have about six of these, we have two that are badged, they work the same way but you earn a badge and so and they, we were getting the same kind of statistics from the badge classes, and really in the end they work the same way, you just get a badge for you _____ backpack, that's all. [00:25:12] each time you complete a module.</p>
bKA64	<p>The design is too constructivist in nature, so she puts in little guides in her designs that helps users understand what's happening so they don't have to waste time figuring it out on their own.</p> <p>"The course we are designing right now needs some significant orientation at the beginning."</p>
	<p>Katrina - That's right, I mean the course we are designing right now needs some significant orientation at the beginning because it is designed using this constructivist paradigm, this tiny bit a material that can be assembled anyway the learner wants and there are three main sections of content but you have to actually explain the interface because it is not very intuitive. Yes they could click around wherever they wanted to but they are actually not considered very competent until they have looked at all the resource material. It is a basic resource that is built into the system but not explicitly told to the students anywhere. That kind of stuff is just garbage. I don't want to waste my time clicking around in a course trying to guess what someone else wants me to learn from it and then will assess me on what is in their head not assessing me on what I actual create in the material that I am reviewing. I have fundamental issues with what we are designing right now and as a result I keep designing little nifty things in there that aren't in other people's courses or not in other people's units to clue the learner in. Like a little hint, if they click on the hint button for one of my first units in one of my modules is If you think you already know this material skip to the prove and test yourself or here is an advanced organizer that outlines the material that you will be assessed on. It gives them the clue that Oh, I don't have to go through it in linear fashion and if I want to jump ahead and look at the assessment and then go back and look at the learning I can. How am I going to pass this? Well shucks I can't answer any of those questions I should probably learn this material. It gives them some rational that organizes what it typically a very constructionist way of looking at it but it has this hidden behaviorist agenda behind it that comes from the client. They love the gaming look and feel and the buttons in our interface are super intuitive but the overall design is not. I don't know about you but if I had ten resources to teach me a set of content the first thing I would skip is the graphic and yet I know that graphics are very helpful and I have spent probably more time creating that info-graphic than I have creating any other instructional materials and so it is really good but I have to think how is the learner actually going to interact with that content and what would be the first things that I would skip.</p>
	Constraints
60	<p>Constraints to instructional design tend to be more systemic and institutional rather than design related per se.</p> <p>a lot of constraints that I have run into with doing design have nothing to do with the actual design itself;</p>
61	<p>Design is constrained by the expectations of the institutional governors, rather than the needs of the users.</p> <p>a lot of constraints that I have run into with doing design have nothing to do with the actual design itself;</p>
62	<p>There is resistance to change organizationally because "that's not how we've done things in the past." The</p>

	designer is perhaps the most informed person on new technologies, or is in better contact with the most informed (the developer or graphic designer), who is immersed in the technology daily. Managers or clients are perhaps resistant to unknowns. They are not prepared to take risks organizationally.
	One of the things that we run into here is "But we have never done that before." "That is not the way we do that" "That looks different," so there is a lot of resistance to change, which is kind of funny when you think eLearning, are you kidding this is technology, technology changes. But we do have a lot of organizational resist
64	Designer has experienced resistance from her organization to non-traditional assessment methods. Capabilities within the LMS that perhaps have instructional value are curtailed by those who embrace their existing learning paradigms.
	We also have the capability to say, you have three tries on this one. That has caused a lot of trouble in some parts of our organization, "Well we've never let them take it more than once."
68	For some organizations, there is an overall organization style-guide that dictates general appearance. It might dictate structure of pages. It might include typography and other visual design guidelines. There are certainly LMS implementation constraints that dictate what sort of technologies can be used as well. Designer has no control, but perhaps that limits what a designer has to think about, which allows them to concentrate on the learning theory or strategy with heightened focus.
	Well, here I have no control over what I would call the style, this is what the page looks like, this is the margin of the page, these are the headings, this is the font, this is the layout, and this is the spacing. I have no control whatsoever over that that is set.
121	Institutional attitude about instructional design is fear based. Designer would like to change it to allow for more opportunities for innovation in education and instruction.
	Mainly what I would change if I could was the institutional attitude, to change it from a fear base almost catastrophizing kind of thing to lets find a way to do it. That would be my wish, if we could just flip a switch and turn that attitude on.
bPK52	Decisions about attending to aesthetic issues or overall stepping up the design game often have to have strong buy-in or support from management.
	I feel like we adopted stuff from the web and I think that was a combination of the company deciding we did to be better at this and bringing on our director of graphic design who had like a strong sense of taste and like set the creative and visual tone for a lot of the work that we did. He just really raised the bar. I think it was having custom tools and then bringing in people who didn't have a long background in eLearning. They brought in, I feel like our graphic designer really brought in a lot of outside ideas that helped us break some of those weird eLearning conventions.
130	Client wanted to reject/fire their approach because it wasn't typical. Clients are often looking for a familiar tactical solution. They're often not prepared to get down in the weeds with you to approach a problem from a broader philosophical, theoretical, or conceptual framework. This is perhaps a good location to discuss the idea of the value of UX as a means to build some assumption testing into an innovation process. If we can iterate small and test, can we then go big with more confidence? Is that UX or is that more Lean?
	We were functioning on the philosophical approach, it was very difficult for the client that we worked with to make that adjustment, they routinely vacillated between wanting to fire us and just really struggled with the concept.
215	Constraints: budget, client involvement, what technologies are available, client tolerance for innovation.
	constraints, there is budget, there is client environment, there is what technologies are available, how much deviation from tried and true does the client appetite for.
221	Sometimes what you're designing is a step in a bigger process
	They have a plan to roll out something that will be high quality but they don't have the time to do that right now because deadline for delivery is one month and they need to show that they are doing something.
223	To some extent on every project you are sacrificing something
	It always happens to some extent on every project because in a corporate it is exceedingly rare that you are ever dealing with the learner themselves so you are always going indirectly through some learning manager which is not the learner so you are always sacrificing something.
224	"in the corporate, it is exceedingly rare that you are ever dealing with the learner themselves so you are

	always going indirectly through some learning manager which is not the learner so you are always sacrificing something."
	It always happens to some extent on every project because in a corporate it is exceedingly rare that you are ever dealing with the learner themselves so you are always going indirectly through some learning manager which is not the learner so you are always sacrificing something.
226	<p>You are sacrificing something if you never talk to an actual learner, the question is of how much. It might be minimal.</p> <p>You can conceivably create successful training without speaking to an end user, but it is always a risk. If you never ever talk to an actual learner so you are always sacrificing something, it is just a matter of how much.</p>
227	<p>Example of case where they proposed a training that couldn't be done because they couldn't sacrifice people time.</p> <p>the learning people on that side were thrilled with it but the line of business said, "yeah, we can't give up any of our people time so it is not going to happen" so just go with a standard type of training.</p> <p>What does it take to convince a business of the potential ROI on a training scenario that seems like it will take too much time.</p>
	There are some cases where the client can't afford any impact on their own people. I had to meet one day with a client who could not give up any of their people time to contribute to the training so while we proposed this nice classroom study on your own with support for the learners and authentic cases and whatnot we had gone through and designed this and sort of a learning, the learning people on that side were thrilled with it but the line of business said, "yeah, we can't give up any of our people time so it is not going to happen" so just go with a standard type of training.
239	Stakeholder might provide feedback that mandates change to the proposed design.
	Now there certainly have been instances where that solution goes off to stake holder that we have not heard from before, that we have not had any reason to talk to and they make changes to it.
240	Stakeholders have more influence over the design than the materials. Designing for stakeholders eliminates one source of potential constraints.
	That certainly does happen but generally speaking if we have actually talked to all the stake holders, for me I find that it is more about talking to the stake holders more of asking them questions and getting answers from them than about the materials.
245	<p>Maybe it's because we get "slapped down" when we go beyond the norm.</p> <p>Clients often have expectations of what training should be, so design becomes very pattern based rather than designed around a specific problem to be solved.</p>
	maybe because so often if you go beyond that you get slapped down and told yeah, no we just want standard three day training. [00:18:06]
261	Doesn't have to dip into other disciplines because their organization can scale up to accommodate additional content and media development.
	Your question was, in larger projects do you wind up, and do I wind up doing more? No I don't think so. I still, we have people that we can scale up. We can add more content developers; we can add more media developers on a particular project if that is what is called for so no, not really.
277	They are not able to get feedback from learners, even when they seek it because of companies not wanting to give out that information.
	<p>Do you ever hear back from learners about what went well and what didn't or do you seek that out specifically?"</p> <p>We always seek it out. Sometimes we get the feedback on the pilot. If we are doing a pilot then we will get feedback because they will want us to apply that feedback but we always ask for feedback from the learners, we rarely, rarely give it. It is just not something that companies are willing to give up.</p>
295	Deadlines impinge on ability to do "what I would like to do." The ideal design is hard to realize because time and money limit how far designer can reach.
	in the real world what I would like to do rarely happens because of deadlines

299	Would like to have learner spend more time in training, but business realities prevent his target audience (call center people) from spending much time away from the phones.
	Differently, I would have like to have had more interaction for the learner based on what ADP and our particular division, my client is internal call center people and so they don't have a lot of time to get off the phones to take training so we have to really kind of rush it through. I would like to have had some more interaction, even some quizzing for that, but that is just not possible at times.
300	A lot of content he creates are job aids or 3-5 minute sessions, so not much user research.
	Often times we find that what we are creating is just kind of need to know knowledge for them to pull it up and quickly view it. A lot of our training has been condensed down into 3 to 5 minute sessions.
317	Problems are based around project management, content changes, delays, dropped projects, etc. Design is not really challenging to him except as he has to navigate issues associated with project logistics.
	My problems, when design learning are based around the project management, content changes, delays in projects, projects that are, when you are in the middle of them are no longer a project. That is really where my challenges lie. We are more of an agile type of company so things change often and sometimes within hours so sometimes you have to be really flexible with that.
318	Changes happen 50% of the time. Cancellations happen 10% of time..
	I would say probably say that changes are 50% of the time. After something has been approved we will have changes to it. Cancellations of projects I would say might happen 10% of the time.
445	The constraints of a system can help provide boundaries. Without constraints, the possibility of miscommunication is heightened. Number of possible variables for disconnect is enourmous. We didn't have like a set of really like codified standards.
468	Last position not much feedback and couldn't change with anything they did get. We didn't get learner feedback and even if we did we wouldn't be able to change very much.
495	Balance of effort between interaction rich or content rich. The cost of interactive training is high in time and money. Designer has to consider this constraint in order to determine the design and development approach for her training. how thorough should we make it to be. Is it worth our development time and development process to focus more heavily on interaction or should we focus a little bit more on the content and try to weight the options about the best way to proceed with it.
523	Budget dictates how much of her attention is devoted to finer details of design/development It changes it depends on the deadline and the time frame I have to complete the project from start to end. If I have a two month deadline and the project is supposed to have a lot of interaction then I am going to focus on the smaller details. The details, about the way the background should look. The details about what the next button should do instead of just going to the next slide. The deadline is going to definitely affect that answer. Is that good enough? Do you want something more thorough?
527	Company puts priority on creating trainings -- getting the content out there -- over what the designer thinks might make it more engaging. The company is experiencing a slow shift toward prioritizizig engagement as a factor in the instructional design. Since we are new we are more about getting the content out, not necessarily about the engagement. That is slowly shifting to engagement and then content second.
534	The people focusing on the eLearning products have been here about a year less.
550	They try to create 15-minute-or-less modules. We try to have all of our modules 15 minutes or less, that is our guideline for what we do.
604	Organizes content to match the LMS format. This is a constraint, but it is not necessarily something she is unhappy with. It's even possible she is grateful for a structure to build to. then I try to organize it in a way that will be easy to plug into the LMS once it comes back from editing.
666	Technical aspects of teaching art online was easier than he thought it would be. Well photographs are going to be more time efficient so then I ended up basically have the students

	create a blog for their art work that they turn in, you know just some of the technical things of how to teach art on line actually came a lot easier than I thought they would.
688	One video per weekly module
	weekly modules so they have a week of material and they always have a video that basically walks them through that week.
689	After they have the intro video, it is two minutes at the most; we try to keep them short and sweet.
691	HTML Allows him to make it what he wants.
	I liked having the control because I understand the HTML code to make it what I wanted.
693	Style guide helps with consistency across courses in the school
	There are a lot of style guides at our school which I think is really important, so each of our classes, you know when you look at a week of our classes in one class it is going to look the exact same as the next class in regards to format of it.
698	His instructions he uses as a Google doc that is embedded in all classes, so it updates in all places.
	I actually use a lot, like instructions that don't change throughout the weeks in my course and I actually embed a google doc into that. In all of my courses if something was to change with the website like submitting something to blogger or turning in a work of art, I can just change that one google doc and then it updates throughout all of my classes and I don't have to spend countless hours going in and changing one instruction because something is a little bit different.
699	Automation, --- what's the term for this? one area used as a template for all others
	I try to figure out ways that you don't have to go in and you don't have to go through every single assignment just to click one button, or just copy and paste one thing.
701	It is useful to provide training to students for system familiarity.
	I think about that a lot as kind of you train them how to do it and then you can link to it and have them have that as a resource if they need it but for the most part they are not,
743	Reliance on open source limits their access to content.
	We use open educational resources, you probably already know that, and so we are a little more challenged in finding resources to develop curriculum and often have to write our own.
755	Class structure -- weekly modules in quarter long courses.
	We, we put our quarters into modules, weekly modules for students and so they work through a week and are able to, and teach people two weeks open, and often teachers keep more than that open. We are tied to a time frame at our school,
759	Quarters last 10 weeks.
	those two categories the self-paced and the module, weekly module and then we operate by quarters, 10 weeks. So four 10 week quarters.
760	90% asynchronous
	I would say we are 90% Asynchronous, that is the model we go from although our teachers do often offer synchronous pieces, but they are not required, we cannot require them.
761	Teachers will sometimes have synchronous time
	although our teachers do often offer synchronous pieces, but they are not required, we cannot require them. So for example our Math teacher, once or twice a week have what they call math learning lunch and you can go online for an hour between 12 and 1 and have lunch with your teacher and ask any question you want. They record those so that the students can watch those too.
762	Example of a synchronous event that will also be recorded.
	We do things like we bring in an author this next week and he is going to our physical facility in West Jordan, just our offices that I am often at, and we are going to record that for students that can't come so they can participate if they want to. So we do offer some synchronous events but they are not required, then we do a lot of in person so we have activities and all of that so that is another aspect of our school.
772	Students time in class specified.
	We ask that students spend about an hour a week in their core classes, Math, English, History and they are usually about an hour accumulated to an hour and a half in their electives per week. Students are working about five to five and a half hours a day in their classes.
781	Base curriculum on 10-week quarters, but focusing on the middle 9 weeks
	From there I have the standards, I loosely break them up into that 40 week pattern that we have, which is the ____ times four quarters, realizing that the startup of each quarter and the wind down week of each quarter is slow, so I do about 36 weeks of curriculum and we know that from experience and so that is

	just, that has come to be wrap up is slow, and wrap down is slow.
794	Have developed an initial module for all courses to share that is consistent and has instructions for course navigation and other instructions. Providing consistency to students, the instructors need to build their course within the constraints.
	Our school goal this year is to make sure every class visually looks that same, so when you go in the title of the class has been created and it is the same for everyone. Where the teacher keeps the current information is the same. Everyone has the, the first module is not the first week module; in every course it is called navigating the course. It includes links that are school wide, either tutorial for students to use that have been developed by department heads and departments and also school wide. I can go and I can choose to upload ABCD and put them in my course because they apply.
799	Content length short to keep students from quitting Can't get too long with these kids, if you lose them they quit.
802	Moodle is better than others she's seen. "How have you found working within that LMS to be? Is it, does it impede your ability to do good design or does it enhance it or is it fairly neutral." I have worked in several LMS's and I definitely feel that the one I am working in now, Moodle, is better than what I have seen it before. I don't feel like it impedes.
814	For some learning, a physical presence is assumed best. They struggle with how to deal with that logistically. Ok, like for example, and tell me if this is what you are looking for, like our science classes obviously need labs and one of the places that we struggle with is that they don't get those hands on labs. We have ___ with the idea of having kids come in physically, around the state, because we do do that for testing, and doing labs. Our teachers have done a little bit of both. We are not doing physical labs around the state. They actually do labs that students can do in their homes and it is the materials that they would have in your home and it is kind of known upfront if you would need to have something different but usually they are nothing that is hard to find.
822	Teachers have some flexibility in what is presented in their course module visually. But as far as courses, like individual pages within like a module or resources or assignments, we do leave that piece up to teachers although our teachers know that some sort of a picture, or interactive or anything that is very visual works with students well, that is good teaching, they know that.
824	Visual content doesn't make the cut when time is short. When they get busy they don't do it, when they are not busy they put it in.
825	Student needs as required by law impose need for accommodations. A lot of our teachers use, we do have a high population of students that are special needs and 504's so they have some accommodations.
826	Special needs students need visual stimulation? We find that these students absolutely have to have things like this so our teachers are getting better and better and are able to do that in different ways.
828	Audio files for books provided for reading along to, to accommodate specific learning needs. Almost all of our classes, anytime you read a book it is audio so you can follow along with the written copy. We do provide, if you are reading a novel in our classes we provide that novel, in addition if we can access it online because I have done a lot of research on that and they need both and so, reading on a computer all day long is hard sometimes.
bBN18	Concerned for legal review. And then the legal review, we were concerned about the legal review that was another thing that came up in the risks on the detail design documents. You are working in a very highly regulated environment then the various reviews, not just the SME review and the learning consultant review but also the legal and client side reviews. They have to make sure everything is actually ok, that you are not accidentally saying something that would be ambiguous or misleading and so they had to basically go through all the language with a fine toothed comb. Not for, not so much for accuracy, that is what the SMEs are looking for and not so much for message but for the possibility of confusion. Sorry the possibility of dangerous confusion, dangerous to the business. [00:18:36]
bPK45	Doesn't have a strong background in usability. How does this relate to evaluation?

	Usability was ad hoc and usually the design went with a process that didn't include usability review.
	This was another thing over here, this information with the client, stuff over here, people would miss these a lot. We had a help page that explained stuff like that but I definitely feel like usability wise, I don't have a strong background there, whatever made sense to me and we would get feedback where we could but we didn't have like I said last time an in house usability expert and it wasn't a part of our process.
bPK6	Instructional designers as contractors. As an outside group, there are limitations to the access they have to learners, stakeholders, etc.
	This was probably the biggest project I had at my last job. It was for surveillance, IP surveillance Camera Company. Really physical security, they have kind of expanded it, access control and video analytics and stuff like that, it is like a technology manufacturing company. They manufacture cameras and then they have channel partners who sell and install cameras basically. They contracted with my company to design their training curriculum for; the primary audience was their channel partners.
bBN53	Media developers have limitations and restrictions to budget that prevents them from always being able to take approach recommended by ID.
	Media always has to look at my direction as a strong suggestion but they can't always act on it. They are not going out and doing a photo shoot, they are going to stock photos.com or thinkstop.com in order to pull the images so it is not like they have a huge amount of choice. It is not like they can do everything that we are requesting. They have to go out and build it and find it, so there is enough detail in that for them to build.
bBN5	Design also entails working with problematic personalities.
	Our initial conversations were with that individual but on our team we were sort of warned about this individual up front because our office had already had a number, at least one, I am not sure if it was more than one, but there was one or more engagements with this person. She was very hands on and very willing to give information but seemed to sometimes feel that she was more of a SME than she was and she would sort of act a little more authoritatively than she really was so we knew that we were going into this and we had that to sort of work around. We were a little bit concerned about that relationship and so I started thinking about it, trying to make sure that we managed that relationship well.
bBN6	Review cycle can take a long time.
	Then we started digging in, let's see is this the first. The first week we were sort of planning out the project and that is largely driven by the project manager in consultation with myself and the rest of the team, sort of can we meet these dates, does this work for a development cycle, does this work for review cycles. When you work for a lot of these clients then you end up with these very long review cycles because you have to get it by the learning consultant before they are willing to waste the SMEs time and then it goes to the SMEs to verify that the continuity, the learning consultant or people along those lines will say yes this passes the sanity check and then it goes to the SMEs and they review the content and they can sort of assume that yes this does _____,
	<i>Technological constraints</i>
63	Instructional designers have to live within the constraints of a Learning Management System (LMS), which sometimes prevents them from achieving a specific outcome at times. Modern LMSes appear to be improving.
	They couldn't save their answers, like start it get interrupted, oh I will save this and come back to it later. You could take it once; you had to take it all the way through, that was it. Well now, happily we have got a much better LMS so yeah they have the capability to get part way through, save it, go answer the phone or whatever they need to do, come back to it.
66	She feels that the software impedes her design vision "fairly often." Designer perhaps has a vision of instructing in a specific way that exceeds the abilities of her system. This potentially causes wasted time as the designer wrestles with a vision, trying to get it into a reluctant receptacle. Square peg, round hole. there, how often does that impede your ability to create a good design?"
	Or to get to the learning experience that we want. Fairly often.
67	Another difficulty designers face in online learning: Even if the LMS technology allows for a certain pedagogical or assessment approach, the other university or organizational systems might not allow for that sort of integration.
	Well that is very easy to implement right, you just say OK here are you six, pick which ones you want to

	do an go for it. In the LMS itself that is very easy, you just tell it to OK in this category take the top four scores. So if they don't do two of them no harm done they get their four. In the other program we use though which is kind of the registration system it, if you include an assessment in it the students have to finish their assessment before they can take the final exam. It will not release their exam to them until they have crossed every T and dotted every I. So to offer an optional thing that means you can't include it in the registration system, OK. Now technically that is totally possible but the institutional expectation is that everything that has a grade attached to it will appear in the registration system. So it is that kind of thing.
78	Design decisions are often made with the context of the LMS in mind.
	Just taking what I get from the instructor, kind of seeing it in context of the LMS,
95	Layout is done in HTML within a fairly strict page structure -- Navigation on the left.
	Inside we have standardized on HTML pages so we can embed media, we can have some nice formatting. We can do that kind of thing just right inside.
542	The default assessment engine in the LMS they use is a limiting factor in her design. She pictures ways to assess students for her design and development, but it can't be implemented, so she has to redesign within the technology limitations.
	Well our LMS doesn't, at least not quite yet, look at the specifics about how someone answered a question. It can identify the question as answered correctly or incorrectly but it can't identify the scale of how incorrect it is. I am a little bit inhibited by that.
543	Forces her to be more deliberate or careful with they way she constructs her assessment questions.
	I have to be a little bit more tactful in the way I correct questions, where it is not just A,B,C,or D, which one is right. I want it to be a little more difficult that than but I can't because the LMS system cannot grade in that way so in terms of assessment that is a little bit difficult. [00:25:16]
673	Technology allows you to make constant improvement.
	With technology you can make everything better, like you can add more fun or more video elements or something like that,
674	Technology opens the door for multiple approaches to presenting content making "everything better."
	With technology you can make everything better, like you can add more fun or more video elements or something like that,
807	There's always a way to do what a teacher wants online. You just have to find the right way and tweak it.
	And they say I want to do da, da, da, da, da, da, da and I figure out how to put it online because there is always a way, it is just a matter of tweaking what it looks like.
815	Hope for technology integration from wearable tech into course -- requires grant money to purchase hardware
	One of the things that we wish we were able to do is to have some sort of a heart rate monitor _____ that are very popular but we need someone to write a grant for that where student could wear that and it would prop to the course, right now it is just them doing it.
816	PE class exercise recording etc.
	Then there is the module pieces, there is two pieces of it like the gym class there is the exercise pieces that they are recording and then there is the module pieces where they are working through the curriculum, heart rates and all the things you do in PE class.
818	ASL class requires more face-to-face interaction
	We have an ASL class that would obviously be hard to do all on _____ that has to happen, meeting with their teacher weekly with that one where they are actually signing with their teacher using the recording app.
819	Technology can overcome a lot of barriers, but they have roadblocks sometimes
	That is one way to get around some of those things. There are ways to do it, we do get stuck sometimes, ok what should this look like and how does this translate.
821	Experimented on choir
	Internet connectivity limitations made online choir not work well.
	We tried choir a couple of years ago with someone who did a virtual choir. It didn't work very well, not everyone has a robust internet connection to be able to do that that was our hold up with that.
bMS46	Need for shorter trainings in the call center came from a management decision that they couldn't spare their team for longer trainings.

	It was definitely, the management made the final call but just looking at the way our business is and how it is handled. We do have classes that are longer, like our new hire training lasts about 12 weeks and a lot of it is instructor led, none of it is in classroom anymore but virtual. We do have several courses depending on the topic. A lot of the things that the department that I work in, we are doing this short little videos for the call center people so that they have the topics that they need. Just because of the way the business has changed it came down from management that they can't stay off the phone so this is what we came up with as a team. Shorter training, shorter videos.
bMS48	Management of call center doesn't care about instructional design, they just want something quick.
	That is correct. I have worked with three major companies so far and to be honest with you few of them follow any instructional design at all. The management doesn't care about that and it is just get something out quick.
bSN94	Time to create a course is very large. Creating custom experience for 1 or 2 students not worth the effort in advance. He's just working two weeks ahead of them at the moment.
	I don't know, I don't know if this technically counts but this is a class that I am creating. It is just for students that have taken all of my other classes. I am just going through the process and am working two weeks ahead of them. This is like an independent study class, so it doesn't necessarily follow the other guidelines. I would like it to be following the other guidelines but right now I only have two students in the class so for me to spend 100 to 300 hours in this class making it, the way I would want it for students, that is just not going to be possible at this point.
bSN96	Custom course is a rarity at the school.
	But that is really, really rare at our school and basically I was just able to get the administration to let me do it because they know that I am going to be trustworthy with it. I wrote this two nights ago, just an image, basic instructions and the students that will be accepted into this class are students that I know will go above and beyond and I don't have to give them that much guidance, they are intrinsically motivated and the classes are just to guide them through the process as they improve their portfolio as they are about to start applying to colleges and stuff like that.
bC37	Wiring combination possibilities made for very time-consuming training.
	UM, I would say about 180 hours. The problems with this, well not necessarily a problem but the issue originally with the amount of time spent with this was almost the endless amount of wiring combinations to every practice activity. So let me give you an idea of how, what I am talking about. Kind of like what I showed you before in those first slides. The mother board has all of these wires on top and this device might have a lot of possible inserts from those wires. The problem was depicting those wire combinations should the technician playing around with this training choose the wrong wiring combination. So out of 100 different wiring combinations only one is right, well the technician will need to know every time they get it wrong why it is wrong and what is wrong about it. When they finally get it right, they will know why it is. To show that through visuals with all of these different wires was a whole lot of work. We really played around with the drag and drop activity in order to get that done and had to be really creative with it. That was probably the most time consuming part was figuring out how we could do that with all the different results along with the right and wrong combinations and then showing that in play.
bMS53	Product developers moved to agile, which means training has taken on shorter time span.
	Going back to something that you had asked in a previous question about how things have changed and who brought down the call for the shorter training. A lot of it was dictated by the change in the process from our technology team and how they bring out products. We have really gone with more of an agile method. So that has also dictated a lot of our processes that we do in our development of training. I believe I mentioned last week that we don't necessarily follow in any model at all and that is something that brought about by the change in programs and the enhancement to our programs from the technology team are developed. That has also dictated some of the shorter courses.
bMS55	Getting information later in the process than previously, changes in features roll at the last minute.
	Exactly and we are getting information later in the process than what we did and then they make changes to the features at the last minute, right before the roll out so you know that doesn't necessarily allow us to come up with...
6	As technologies change, instructional design adopts new platforms. Designers are asked to cross from one medium to another.
	At that point we were still doing it on CD's but just at about the point that I left they were starting to look at putting things online too. So 15 years is probably about solid on eLearning with a couple preliminary

	years in there.
	<i>Design constraints</i>
bMS44	They are supplying a lot of shorter, more entertaining training videos for employees to use in brief time periods. A "model of what you need right now."
	Also when we do some sort of training that does have the documentation along with it we started doing a lot of videos that are five minutes and shorter. A lot of cartoon videos, we have started using Go Animator a lot. Also another program called Crazy Talk where we are creating kind of more of the cartoonish entertainment type of, I call it edutainment; there is some education within that entertainment. That is kind of where we have gone because we cannot pull people off the phones for 15, 20, 30, 45 minutes for training so we have gone more to a model of what you need right now. This is where you can go and just quickly find the answers while they are on the phone with the client, so they can go out and look at the steps or watch a 2 minute video real quick to guide the client through any problems that they are having. That is kind of where we have gone now. [00:15:54]
bKA46	"As far as ease of use and general UI this is abysmal in my opinion." But, sometimes the design bows to the requests of the client. Sometimes design decisions are made against usability to deliberately slow down the pace of interaction.
	As far as user interface goes that is horrendous. Then you have got this table of content that does pop out, it does mitigate some of the crazy that goes on with these buttons and why things don't work the way things are supposed to. If you are on a question slide and it won't let you advance unless you answer the question, which isn't that big a deal, but sometimes there is like three or four questions and you don't want to answer all of the question but there is like a sneak thing on those question slides that you can click on to advance without actually filling in the questions but it is for the instructor to use. As far as ease of use and general UI this is abysmal in my opinion. Once you have taught them how to use the buttons to go to next, next, next but then your buttons disappear when you are on a question which was a client request which I think is lame. They were trying to force them through at a specific kind of pace. Rewind this specifically if there is audio playing and you missed it and you want to rewind it.
bSN43	Time is the biggest constraint to doing an online class.
	I would say the biggest constraint is just time. It is one of those things especially in an online class, where I could spend all, like years developing, and I have seen that in the research that I have been doing right now and kind and the kind of literature in regards to online classes is just the amount of time it take to develop a class is astronomical
	<i>Design within constraints</i>
bKA4	Client concerned team was rushing participants through training.
	But, we weren't trying to pace them for how quickly. The business got very concerned that we might be pushing them through the content too fast and even though we took like a 16 to 18 week course and they went through it in like six to eight weeks, they were still really concerned that we were trying to push them. That's sort of reinforced.
bKA15	Business implemented training differently than it was designed.
	So this is the learn, play, prove. If they click on learn then they go through the instructional pieces. If they click on play then they can practice the skills that they should have learned from the learn units or they can skip straight to prove. So this is part of the original design. The business was willing to allow us to build it this way but they have yet to actually use it this way. When people actually transfer in across business lines they should be able to go straight to play without having to go through all of the learn sections and play with the scenarios and see how much of the content they actually know. If they feel confident in their ability to pass the plays then they can move to the proves which are variations on a theme for actual performance objectives. Then they can test out of a unit, if they score at least 8 out of 10.
bKA17	Instructional designer had to "get on the bus, be a team member" when having concerns with navigational approach that was advocated by the graphic artist.
	It seems like graphic artist has a role that is not as up to date on current accepted practices in the field of interaction design.
	This was a fight I lost. I used to teach visual design, this is terrible, I would never do it this way. They liked it; they thought it was nifty so they did it. I don't like it at all. I had no control over this. As my boss would say, get on the bus be a team member. So the graphic artist who mapped this out thought this was way cool and I asked the same question that you asked me, what was the thought process, why did you

	choose this? He is like it's cool and I said that is not an answer.
bKA55	Non-designers made final call about interface design decisions, saying "Good enough."
	Well there was Paul and I, as instructional designers, that fought for the larger wrapper system and that really went to bat for the role plays. A lot of the user interface issues, those decisions were made by a project manager who worked for us and the project coordinator who worked for the client, neither of whom had any instructional design background. So as far as user interface decision that is a classic example of someone who doesn't understand the importance of what they are deciding, say this is good enough.
bKA45	Navigation was decided by someone on the team, but she thought it was "awful." But compared to what came before it was much better. There is a certain level of truth to the idea that there is a sense of comparison between designs -- ID might look clunky next to expensive designs done for high-end clients, but they might be worlds above what came before them, so by comparison a clunky design might knock it out of the park.
	No, someone had to decide on it and it is awful. They didn't do any user testing for it. The client loved it because it was so much better than the garbage that they had before.
bC77	She knows what they already know -- or are supposed to have learned -- so she can design within that framework and reference prior knowledge.
	They already know what these things are meant to do and how they are supposed to be done. They just don't know how to implement that knowledge and get that into a working sort of phase. The nice thing is that I didn't have to worry about having to teach them the how toos and whys of every single device, they knew about them already so I just had to focus on the installation purpose and get it to their knowledge where they have to make it workable, if that makes sense.
bBN10	Client asked for single, non-branched design even though there were multiple distinct intended audiences for this training. Branched training is much more complex and time consuming to QA and review.
	One of the things that was a concern on this project, there were multiple audiences and they were telling us that no, they were not looking for branch training, it was an eLearning. But they were telling us from the beginning no we are not looking for anything branched just a straight forward, straight ahead course. A branched course is a lot more complex to design but the real problem with branched is that it is very very easy for the SMEs and the learning consultant and everyone on that side to get confused, right because they are not just being one of those people, they are not being just one of the possible audiences, they are trying to be all of the possible audiences and as boring as it is to review a course on content that you already know, to have to review that three or four times with only slight variations is really no fun. We were trying to avoid having a branched course, especially if you have to, if it is branched... if you have three separate audiences and you want to do three separate courses. It is very doable to have, to make it, for the technology to handle going multiple different directions. To have these multiple branches and have them come back together or not, that is not the problem with it, the problem is when the people are going through and reviewing it, and even when you are developing it is tough to keep track but that is not that big a deal, the people on the other side reviewing this, they don't really care about the technology, and they just want to make sure this stuff is correct. Building it properly, _____, so giving them the course and then making sure they know how to go through each of the branches that they see all the possible, it is just a pain in the neck, it is just really a pain in the neck to make sure they get to all of the actual content and that they feel like they have gotten to all of the content.
bBN11	Client kept indicating there were three audiences with distinct content they would need to be tested on.
	We were steering, we were trying really hard to steer clear of that but I can see in these components that I am looking at it was clear that they were, and I remember this, they kept talking about audiences and wanting distinct content for each individual audience and there were sort of three different types of audiences which sort of legitimately had different pieces that we might want to look at or different content that they should be tested on. [00:12:15]
bBN12	Project floundered because of lack of clarity from client.
	One person being the learning consultant person saying "no it is a straight ahead course we are not needing branching" and then that sort of SME like person kept saying "No I think we are supposed to be doing branching off." So there was this discussion back and forth and this didn't wind up getting resolved until the very end and we wound up, as it wound up at the very end, as I remember correctly we wound up having to do the assessment, we wound up having to do probably a change order because we had

	assessment questions. I want to say we had a pool, they were drawing maybe eight from the pool of 12 or so for everybody and there were, I think, two additional questions per audience. If you were audience 1 then you would get these two questions, if you were audience two you would get these two questions and if you were audience three you would get these two questions. That was how we wound up solving it and then we also ended up adding in an extra slide or two and then that ended up getting ripped out. This is at the very end, after all of the design was done we had to wind up coming back in, cracking the thing open inserting this new slide with this new content in it and if I remember correctly, and we will get to it, we wound up ripping it back out because no it is going to be confusing, just to the assessment.
	<i>User research testing</i>
27	There is an impression that assessments, regardless of whether they don't count toward a grade, induce anxiety and concern on part of the student. But, how does an instructional designer learn this? Is it assumed? Is it from their own experience? Would this still be the case if they were able to watch students use the course in the context of an actual class?
	There is also a little bit of that anxiety that hops in, in an assessment even if you tell them that it doesn't matter. Even if you tell them this will not count on your grade.
153	Observation, listening to users and stakeholders is a means to discover the need you intend to fill as a designer.
	It is invaluable to break up that observation so whether it is Y calling in a call center or observation on a manufacturing floor, you need some significant time to look at the patterns and to begin to see or hear those patterns emerging.
301	Not much user research due to the nature of the training he creates, namely 3-5 minute job aid sessions.
	Often times we find that what we are creating is just kind of need to know knowledge for them to pull it up and quickly view it. A lot of our training has been condensed down into 3 to 5 minute sessions.
302	When creating a classroom course they will run a pilot and do learner polls.
	Now if we do a classroom course then we do have pilot groups where we will bring in people to, you know the actual learners to poll them a little bit and have them run through the course.
321	Failures have come from not considering the audience correctly.
	I can certainly tell you about some failures that I learned from. I certainly have had failures where I have tried to put too much content into an eLearning where I didn't consider the audience or we didn't poll the audience correctly.
460	Few user consulting because of tight timelines.
	I would say that the majority of the projects that I worked on in my previous company, not very much at all because it was rapid analysis. They were tight time lines.
462	User research depended on time and budget.
	I did work on a project where we did have a needs analysis up front. That did involve much more; we had some focus groups and some interviews with intended learners. We went and observed some of their existing training and stuff like that, so it would kind of depend on the time and budget of the project.
463	Now learners are customers -- a lot more data is gathered about them.
	When the learner is the customer, it makes more sense (perhaps) financially to spend additional resources an trying to understand the customer.
	Now I think in my current place it is customer education and so it is all about the learners and we have surveys and we have, you know it is much more, yeah our learners are our customers directly so there is no kind of middle person there.
464	We did a series of interviews with, the audience was kind of had two parts, it was people internally at the company and then also their channel partners who were responsible for selling and installing the product that this company manufactured. We did interviews with the internal people, who were sometimes responsible for the design, and sales and installation to kind of get their perspective. They had to do it and also because they worked very closely with the channel partners and if the channel partners had questions they would come to them so they knew like trouble that people ran into a lot. We did have some interviews with a few channel partners, where we tried, we had a hard time actually contacting some of them and finding time and having schedules align and stuff so. We definitely had more easy access to people inside the company than the channel partners but we did do some interviews and then just had some informal interactions. When we went and observed some of the company's training for their current channel partners we did a, kind of a focus group of people who had attended that training to

	<p>get their feedback on what they liked, what they thought could be better and stuff like that and just had some informal interaction with them afterwards. So we kind of went through, we had a data gathering plan that kind of set out how many people are we going to interview, how many surveys are we going to send out, how many questions those surveys are going to have, the type of questions we are going to ask and then we just kind of went through that process over the next, the coming weeks and months of holding the interviews, sending out the surveys, doing the observations, stuff like that. Based on the information we kind of wrote up a recommendations report. One thing I think is always difficult with analysis in general and especially in a corporate setting where you have tight timelines and budgets there were lots of things that I already knew or thought I knew like looking at their current eLearning and looking at their current in-person training like here is what needs to be fixed. Then it was almost a matter of like, kind of, you know, you enter in data and are asking questions that would kind of support those ideas. It is really hard to not do that in lots of areas. It looks like the confirmation bias in general. So I would say like the data that we gathered did give us some new ideas and things, we definitely, there were definitely some things, like for example, learners felt like they had to sit through lots of stuff that wasn't relevant to them and so one of the solutions that we suggested having were like differentiated paths for different job roles. That was definitely something we gathered from the interviews and meetings that we had with people. Whereas like other things, like right now nothing is interactive, like that wasn't something, there were some things that we knew needed to be changed going in and then other things we got ideas through interviews and stuff. So it was kind of a combination I would say.</p>
466	<p>Confirmation bias in some research user research ... you're seeing what you want to see as a designer. It looks like the confirmation bias in general.</p>
467	<p>Research does suggest new solutions not previously considered just from looking at the product. So I would say like the data that we gathered did give us some new ideas and things, we definitely, there were definitely some things, like for example, learners felt like they had to sit through lots of stuff that wasn't relevant to them and so one of the solutions that we suggested having were like differentiated paths for different job roles.</p>
469	<p>Last position not much feedback from users and they couldn't have changed with anything they did get. We didn't get learner feedback and even if we did we wouldn't be able to change very much.</p>
565	<p>No integration of learner in the design process. But, she says it is "sad" and that it is their objective to involve them more in the future. Christijan "On another tack, to what extent are your audience members consulted or used in the design and development process. Charlotte - None, which is sad. We are focusing to get them more integrated into that process but none at this time.</p>
566	<p>Using learners in the design process will make subsequent evaluation better. It's a high priority to get learners into training design experience quickly. Well it certainly makes the evaluation of our products a lot better because we get it from first hand people that we are going to deliver it to anyway. In terms of the complexity of content, if it is clustered too much, or not clustered enough, if they are feeling overwhelmed by what they are getting, we obviously don't want that. So that is a high priority. I would want them to be used in the first evaluation phase for sure.</p>
651	<p>Historically, students not involved in the design process. Christijan "To what extent is the intended audience of the e-learning product included design and development cycles. Penelope - To what extent are the Christijan "Intended audience, the students, do you pull them and involve them in the actual design process?" Penelope - Historically no, and I am sure Jess said that too,</p>
652	<p>German course has invited feedback from students to note errors and inconsistencies, etc. however, in our German courses right now we are, this is kind of interesting with our blended course, the Professor is giving them extra credit points if they find errors, or inconsistencies or whatever so their feedback comes to me, it help to refine the course. It is also beneficial to their grade, potentially right. And then, of course the TA's who are designing some of the quiz questions are like, challenge excepted, these babies are going to be foolproof. And the students are like challenge accepted I will find your errors.</p>

653	There is reluctance on the part of the organization to have them collect feedback on errors or inconsistencies in the course, but instructor and Penelope embrace the idea.
	So that is pretty, some people in our organization do not agree with me doing that. I do not understand enough about the weird historical baggage here but they don't think that students should be involved in that process basically and I feel like that is where our intended audience is and if they can find things that can help improve the course and we can feasibly implement those then why wouldn't we? And that is kind of how the professor feels too, she loves it, and students are totally in to it.
767	"we have learned that about two paragraphs is all students can handle without breaking it up." Through observation of students, they've landed on some principles they follow that they feel help align with their students' capacities.
	There are blocks of text; we have learned that about two paragraphs is all students can handle without breaking it up.
770	Directing teacher content creation behavior based on student feedback? They say they lose students after five to eight minutes of a lecture type experience. This is probably based on data gathered from their experience thus far as an online school.
	Again we ask the teachers when they do their short little lecture type things with maybe a power point or we used to use _____ but it is not available anymore, that they keep theirs under five to eight minutes because we lose our students,
773	Student engagement data helped guide course development.
	Well, we were looking at student engagement data, and so we would pull how much time kids were spending in courses and what they are clicking.
774	Grades as criteria for guiding course development.
	Grades, I mean we track time in class, and their grades every quarter, you know when kids are continuing to struggle with a class we have ____ that there is something more going on more than just the students.
775	Looking at clicks first to determine engagement.
	We can track clicks obviously, so looking at student engagement which is hard to quantify in an online setting but we quantified that as clicking, because students will sometimes not work through the material.
777	The learners move around through the course haphazardly. The designed path is disrupted through the open nature of the medium. By watching how students moved through the course, they were able to designate labels that helped clarify and provide navigational guidance to students in subsequent years.
	We do things summarily through a course but they will skip around so it is interesting to see what they click on and those catch phrases came from that. Watch, review, read, quiz.
797	Consistency evolved because audience contains high number of "kids that struggle."
	That has come because of our high population of kids that struggle, IEP and 504 students, but all of our students love it, so. That is in each course.
801	Implemented check-off feature to help students know their place in the lesson.
	We also, one more things that we do in our LMS, I am looking at it, so I am remembering, we have an automatic setting that has a little check box and so what the student has submitted that the need to or looked at the page the student can mark off the check box if they have looked at the page and if they have submitted something it automatically marks so the students know where they have left off in the course, in the week in the module and that is an LMS setting.
827	Special needs students need visual stimulation?
	A lot of our teachers use, we do have a high population of students that are special needs and 504's so they have some accommodations. We find that these students absolutely have to have things like this so our teachers are getting better and better and are able to do that in different ways.
199	User testing is a glaring deficit
	Are you talking about user testing? Not nearly as much as I think we should. If I were to say that we have shortchanged the process anywhere, that is where it is glaringly a deficit.
200	User testing is lower priority compared to analysis and evaluation. She can do subpar user testing on the cheap with friends/family. It is easier to get useful information when testing an audience that is not spot on with target than to do analysis or evaluation
	If I would have to choose between user interaction testing or analysis or sacrifice evaluation or user

	testing I can always find a cheap way to do testing. I have teenagers, I have neighbors, I have a husband who I routinely say go through this and tell me if you can figure out what this unit is trying to teach. How fast can you learn this? And for cookies, or a favor or something I can get someone to test out something that I think is problematic pretty dang cheap. It is not ideal; it is like showing the hand behind the curtain.
201	The ROI on user testing not as high as it is for evaluation and analysis.
	If I could do great user interface testing I would but the return on investment for it is not as dramatic for as understanding the problem and making sure that I have actually got performance to the level that I want it to. So I would sacrifice user interfacing in a heartbeat because I can make it work with cheap second best options.
bN61	Doing formal usability studies is too long a process for their courses. They take too long as it already is.
	Nancy - We don't really do a behind the glass mirror type of study because it just takes too long to get through a course.
bN62	They will use colleagues or students working for them to try something out to see if it makes sense. They also have a QA team.
	Generally we have kind of three ways to do it. 1. If we are trying something like this sign language tutorial for instance, we don't quite know if it is going to work, or with the Hebrew widgets where they are supposed to be teaching you vocabulary but we have never really done a ten commandants game on verb forms so will this work or not. The fastest and best way to do it is to grab a couple of our colleges or a couple of our students and say hey come here and try this out, do you understand what is going on and just getting a fast and dirty reaction from somebody. The next level up is a more formal level and that is actually the QC test, so quality control. The students just get the course; they have a check list of things to look for. They just go through, they click every button, they try every game they do the whole thing and then they can come back and say Wow I got so far on that sign language quiz and all of the sudden the video started glitching out or I didn't really know what the scoring was on this ten commandments game, it wasn't clear to me what I got right, what I got wrong, you know so we can get feedback that way and then shift.
bN63	Used to hire external person to actually take the course and provide feedback. They provided great feedback if they were new to the courses, but once they had used people multiple times, their responses were more like the QA team, so less helpful.
	The other way that we have done it in the past that hasn't really been in practice for a little while now due to transitions and we are changing and doing some things. We actually used to hire somebody outside just somebody who is interested and we just have them take the course, literally, like we would give them books, we would give them everything and they would literally just go through it, do the assignments, do the readings and then they would give us feedback from a completely outside experience. That we found was quite helpful, the one thing that was the downfall of that one though, is if we used the same course tester for a few times, they start catching on to our model so instead of really taking it from a completely here am I as a student having an experience perspective, they would start saying Hey I noticed that this particular lesson didn't have self-check and you guys usually have this, like a summery at the end and so they would start giving us the kind of things that our quality control folks might give us and so that was kind of a You have done it too long, you need a break. We will go to somebody else for a while. Interesting getting feedback as you know from doing surveys.
bKA66	Performed pilot test and gathered user perceptions of the course, which showed that one of the design elements they used was less credible (to their surprise).
	Katrina - We have. We did, in the Pilot test; we did a couple of just like user perceptions. She is a little too cute, a little too peppy, a little too blond. One of their larger training centers is in Texas so she fits that cute Texas mom look. We didn't expect her to be less credible. They liked the old guy with gray hair that looked like a used car salesman. To them it typifies expert, old grey haired white guy.
	Learner concerns
217	Foremost as a designer are the learners concerns.
	Still most in your mind as an instructional designer is going to be the learners concerns;
218	Sometimes the needs of the learner are not the client's priorities. "I would say that is not always foremost in the mind of the client. Sometimes you have to remind the client of that and sometimes you have to stealth it in."
	I would say that is not always foremost in the mind of the client. Sometimes you have to remind the

	client of that and sometimes you have to stealth it in.
222	The concerns of the learner sometimes take a back seat to the needs and desires of the client. A good eLearning design balances all of the concerns. One of the concerns is that of the learner.
339	Has a consistent audience now, so feels he understands them generally. Again once I learned the audience and what their needs were and their availability for training I now have that in my mind. Really it was just that initial learning... ok we only have 10 minutes to get off the phone and learn and I am not really great with computers but I have good customer skills on the phone. Once I learned that then OK I had that initial assessment of them and I need to keep this simple and to the point.
342	Some content has been created in response to learner's request for help. Interesting idea about types of learners: those seeking help and receiving a response to specific questions, those hoping for general domain knowledge, those required to take a course to fulfill some other mandate.
	There is something else around that that we started doing about three months ago that is very employee driven. They were asking questions on how to do things, we ended up taking those questions from them and we created little videos on the topics that are in cartoon format where they have their questions answered for them. That really seems to be going over well. So that is something we have included since those are driven by our client, our internal associates, that has certainly given them a stake in their learning.
345	Team creates trainings in multiple formats on essentially the same material to suit contextual needs. Sometimes a learner needs full training, but sometimes they just need a quick reminder about part of the content in the full training.
	So for instance let's say we created a 15 minute eLearning they went through, as I mentioned earlier, they might not remember that three, four, five months down the road and then they will be having questions about stuff and so instead of saying just go back and look back through that entire 15 minutes, again we just create something really quick for them. We are able to do that several different places within our website. Again we are doing those little short videos; we also have through our documentation team where they do step by step on how to do a procedure. On some of those procedures we are actually providing the video to go along with it. The video is less than two minutes long and there is no audio with it, it just steps them right through the steps. They can not only read it, print it out and read it, but they can also visually watch those steps being performed.
571	Multiple audiences to consider I have High School and University courses.
704	Some students read everything. You know there is obviously some students that read through all the directions every single time and then they are the ones that say Hey why is this a little different, and you go Oh I didn't even realize that or something.
705	Age of student makes a difference. It is a high school age too; I think maybe it would be different if it were higher Ed sort of a class maybe.
707	Giving options for different comfort levels in how they turn in their assignments. If it is the same content that they created then I should have it always the same process of turning it in and giving them flexibility. Some students like posting it to their blog and being social with it, being like hey check out this work I did. Then other students just want to turn it in because they are like I don't feel comfortable having other people look at my drawings. That is great.
734	The online learning experience in HS allows for unique students a chance to contribute from their depth of experience Sometimes they are supporting their family so they aren't able to do their work. Obviously there are the kids that are lazy and things like that but there is a good portion of students that aren't able to do the work that they want because they have all of this responsibility and two they can create great works of art because they have that depth of experience in life and they have something to say and they have like fresh ideas and stuff like that because they have all of these experiences that brought them to the online setting.
754	Feels her own experience being taught online is not up to par. I am taking an online courses for my masters and I am like people you are not even using online like you should so I laugh.
757	Age group needs more structure.

	She says their demographic requires more structure because they leave their material to the last minute. I think it's quite possible this trait extends through to older ages and professionals as well.
	We find that high schoolers/middle schoolers, they need dates and so even with the mastery based courses self-paced; they struggle because they leave it to the last minute, so very typical of that age group.
19	Nancy had a basic understanding of the context in which the student approached the material for her class.
	The students comes and generally don't have a hard science background and reading that much text, it had a text book and quite a lot of lecture material online.
79	She attempts to think about the content from the perspective of the students. She tries to understand their perspective and to design in a way that accommodates that perspective.
	Taking students' perspective
33	An instructional designer benefits from thinking from the perspective of the student. The question arises, though, is how well does an instructional designer really know the student? Is the general training in a degree program or on the job enough to convey the sense of what is best for a particular user group? Are students generalizable enough that no user research is necessary? Can we satisfy?
	Once you have got that down then figure out kind of from a student, user point of view, how might that look and then for me it is usually going to a programmer or artist or somebody and saying ok, here is what the goal is, here is what we want the experience to be how do we do that.
41	Students work in close proximity and can act as user testers. Although they are not enrolled students in the course, they are of the same body and demographic generally, although perhaps a bit more experienced in interaction paradigms than the general student body might be because of their position.
	We also have around here a plethora of really great students so if we are wondering does this particular thing work, we can round up a couple of them and say open up this page and tell me what you think and we can get their reaction.
327	Princeton Review podcast made him think about his designs in terms of other people. The podcast helped induce a paradigm shift for specific circumstances, which potentially introduced the skill of being able to take multiple perspectives on a project. The ability to step into many points of view has the potential to open the door to new understanding and a potentially better overall solution to a problem.
	Princeton Review. I got it off of iTunes, that is where he would link us to it. So you know it would take every day different topics. Let's say a kid got beat up over his chocolate bar, that might be the headline in the paper but through the analysis of the facts you find out that there was a lot more going on. The kid with the chocolate bar was actually throwing the chocolate bar that provoked those kids to retaliate. That kind of a situation where it gets you to look a little bit further at a subject. Just that kind of thinking has really changed my instructional design a lot. Back then when I was a little greener at doing this, that helped really make me think of my design in terms of other people.
518	Takes user perspective on design: too many buttons leads to disinterest, don't want to do a lot of "work" with the mouse. User wants to move forward in the content to learn
	If there are way too many buttons for an e-user to click on that immediately disinterests them. They don't want to do a lot of the work when it comes to playing with the mouse. They would rather move forward in the project or in the content as much as possible and of course learn from that.
bPE31	The pattern of the course is repeated and that will help them pace themselves. They begin to feel how long the pattern takes to work within so they know how much effort to put in.
	Penelope - It is pretty consistent throughout the course. Yeah, it is pretty consistent throughout the course and part of the idea is that they will figure out how to pace themselves. So once they are through unit 1 then they OK, how that I know I really need to spend a lot more time , or OK, now that I get how this works I can kind of, I'm in my groove or whatever.
	Characteristics of Good Design
	<i>Visual characteristics, visual layout should be "clean" or uncluttered; aesthetics</i>
638	Aesthetics a subject of controversy within the organization.
	Some put appearance above quality of content.
	So that is an interesting question and it creates a fair amount of controversy within our organization because some people feel very strongly that it has to look awesome or a student is not going to engage

	with it and kind of the quality of the content being secondary.
639	Others put content first because without good content, no matter how engaging, students won't learn
	And then other people feel like the quality of the content is primary because a student won't actually learn anything, no matter how beautiful the course is if the content sucks, so therefore making the aesthetics secondary.
	I lean toward that side, the content side.
	<i>Visual elements can distract from learning</i>
309	When he sees other designs, tries to find the decision logic from an instructional design perspective why certain elements are on the screen. He is asking what learning purpose each element serves.
	Because of my experience, personally, when I see things on the screen I am always trying to figure out, OK what in the world is that there for or something that might distract me like a really bright border might take away from the actual content with that contrast of colors.
491	Her primary concern is the look and feel of entire product because she feels that an unappealing design visually will "impede the learner from actually using the module the way it was supposed to be" used.
	Right now it is more of the feel of the entire product, the look of it. It is easy to do stock photos, something like this, and say you know what I am done but make it in a way that doesn't impede the learner from actually using the module the way it is supposed to be.
103	"I absolutely detest things like pop up ads and banner graphics and flashing things in the middle of your stuff you are trying to read."
	I absolutely detest things like pop up ads and banner graphics and flashing things in the middle of your stuff you are trying to read.
328	Using colors in a way that avoids overpowering the learning
	I think using colors that aren't over powering the learning.
329	Avoiding huge graphics or not-directly-related graphics
	Where you don't have graphics that are really huge or don't have anything to do with the learning.
12	J says an instructional designer's work should be invisible.
	"I really like the quote – I am just paraphrasing – but it said good design should be invisible."
	I really like the quote, I am just paraphrasing but it said good design should be invisible.
13	"So my invisible design is something that doesn't stand between the student and the content. That makes it easy and seamless to get what you need, to demonstrate what you can do and to go on. You know just no impediments."
	So my invisible design is something that doesn't stand between the student and the content. That makes it easy and seamless to get what you need, to demonstrate what you can do and to go on. You know just no impediments.
307	Wants learner to focus on learning.
	I want the learner to focus on the actual learning whether it is graphics or animation that is on the screen.
331	Example of poorly placed graphic
	Or the graphics are too big or they are placed in the wrong spot where the learners eye wants to focus right in the center of the page they might have this big picture of a sun and then all of the content is over to the right hand side or something like that.
304	Tries to keep his designs "simple as possible."
	I personally just try to keep it as simple as possible.
306	Likes to keep his designs "clean."
	I like to keep it clean.
313	Clean and consistent. ++
	I think that a very clean layout, that is consistent, is key with that.
640	Neatness and cleanliness important -- but consistency in colors is not that important (etc).
	However I like it to be neat and clean, But I don't care if it is the same color of orange in lesson one as it is in lesson eight.
564	Uniformity of color scheme helps improve design.
	Christijan "Color Theory"
	Charlotte - How chaotic a slide looks for a module. A lot of times I have seen modules, even ones that I

	have created, they don't, they don't fall into one color scheme so it make it look a lot worse than it actually should be so keeping those uniform as much as possible helps a lot.
649	Color in a presentation matters -- cultural sensitivities, pleasingness of colors, color associations, etc.
	So in terms of overall aesthetics, I know that the art director is going to say a certain color is more pleasing than another color and I am in tune with that so I pay attention to her suggestions. But there are also, especially the languages; there are some cultural sensitivities to certain colors. Colors associated with certain objects. So color definitely matters.
174	Sometimes put in media for the sake of media, but you become "media rich and instruction poor" , increasing cost while not increasing value
	A lot of times we put a movie in there of a little talking head of somebody blah, blah, blah blahing and we don't need it, it breaks up the monotony but it is not instructionally sound to add a movie. Or we add audio narration because it is kind of boring to just read slides or read pages of information but there is no instructional reason for us to add the audio. We increase the cost of our instructional materials with no sound instructional reason as to why we are doing it and we find ourselves media rich and instruction poor.
bN57	In video, sometimes more production value reduces approachability and that has negative impact on learning.
	In some cases I found that, for instance not in animations or arts but in videos, like we have gone in and filmed the instructor in the classroom vs we have filmed the instructor against a backdrop in a controlled environment, unless you have somebody who is an actor, who is really good on camera, filming that instructor against the beautiful backdrop makes it come off as stagy and stilted and uninteresting. You take that same instructor and put him in a classroom, and the lighting is kind of off, and the Power Point is kind of blurry and you have people's hands waving, it comes off as easier to watch in a way. Even though it is not beautiful and professional and there is um, and ah, and buds, it just feels more real. And in that case, because one of the things video does is affect your emotions, I would rather sacrifice perfection for approachability.
	<i>Visual elements can add an additional level of meaning/reinforce learning</i>
432	How to convey information without deluge of text.
	"how can we provide learners with enough information to be able to complete this activity without making them sit through pages and pages and pages of text."
20	It seems there is a general understanding that text is not engaging in and of itself. The instructional designer then feels it is her duty to try to design the course in such a way that students don't become overwhelmed by the volume of content.
	So the problem was how do you keep them engaged because if you throw a lot of text at people, especially people who are overwhelmed they tend to check out.
769	Minimizing reading by using other media. They feel that reading is not engaging for students in large chunks, so they vary content delivery approaches frequently.
	We don't do a lot of, like in a history class you may need to read chapters, we don't do a lot of that. You might read a page on something and then you are watching a video and then maybe there is a teacher lecture.
800	Content length short to keep students from quitting
	Can't get too long with these kids, if you lose them they quit.
179	Specific to infographic design, if designer doesn't hook you in with title, compelling data, customer won't move on to more perceivably boring content.
	If you have not hooked me in the title, if you do not have compelling stats and great visuals I am not reading the infographic and I sure as heck am not going to read the report that it came from.
388	Videos communicate things more difficult to communicate with just static graphics and text
	The videos are narrated, they are not just narrated, it is a live video of one of the coaches that they might interact with in other parts of the educational offering. They explain additional principals or other things that are more complicated. They might do software demonstrations. A lot of the videos are to communicate things that would be difficult to communicate with just text and static graphics or things that are maybe kind of a little bit deeper. It is optional, if people want to learn more about a specific topic; sometimes those videos will go into more depth with those things.
555	Visual design must work with content not just as aesthetic. It's ultimate objective is to help explain content more precisely or more clearly.

	Visual design really has to work with the content, not against it. Not just for aesthetic. The more accommodating that picture or graphic is to the content that is being delivered the better. Even better we can make a graphic explain the content more precisely. That is the way to go.
650	Aesthetic feel for each course should convey a different type of message -- easy versus complex, etc.
	"When you talk about feeling something aesthetically, what kind of feeling are you hoping, in the design for a student to feel? Is it the same on all projects or is it different?" I think it is different. In beginning languages it is a feeling that is kind of easy to digest. Not too layered. So kind of simple and stripped down, well not stripped down but without too many layers I guess. And more advanced, where especially university languages where we are dealing with mature adults now, who are probably pursuing this as a major and perhaps a professional career we want, that I want the design to communicate more complexity, more challenge, more for the student to digest and take apart as well as be able to synthesize and create their own creative output later. So yeah, I think that feeling is different depending on the course. And definitely non-romance languages vs romance languages, definitely the feel is different. I don't know how to articulate why.
492	Judging a module on first contact affects how people embrace it -- they're focusing on trying to make it look better.
	It is so easy, when it comes to eLearning, to quickly judge a module on the way it looks on first contact, so the design is what me and a few of my colleagues are focusing on, trying to make it look better.
497	She has some interesting guidance to decide how to make training more aesthetically appealing. She makes aesthetic decisions based on demographic, but aligns photos with experienced professionals, illustrations with younger people.
	Well the audience. If I am working with a department that is a little bit more experienced with the professionals that they have I want to use more photo stocks, picture stocks whatever they are called. If I am working with someone, or a department that is more customer service, population are younger people, illustrations are usually better. They interact with that more, so it usually depends on the demographic.
556	Flow-charts by really skilled visual designer are amazing.
	Flow charts by a graphic designer are amazing; I love those, by really skilled ones.
717	Passionate about how his course looks aesthetically.
	You know that is fine and I am sure it will catch up but so in regards to visual aspect and the aesthetics of the way it looks, I am very passionate about it.
718	Having an image can spark learning, or engagement. Is this the blind leading the blind? Or is this possibly a matter of context and audience?
	You know I think even just a simple photo, and I talk about that often with other faculty members and stuff like that, it is like even a photo that has something to do with it will like it opens your mind to like the text that is there. If you open it up and there is a photo or some little image it will open up the visual learners mind to the text that it there. It will spur them forward, it is like a green light saying go forward and the images, we always use creative commons license images, and so that repertoire of images is growing which is really nice.
722	Square Space referenced as example of quality visuals in a design.
	When you look at square space, like a website, it is one of the top newer websites that has a really cool feel to it and the pictures aren't like just little tiny pictures on the side that you can kind of see if you like squint but having the text live next to the picture or inside of that image, I think it is cool.
723	Photos to use in your design It is definitely worth the time it takes to find a good photo and I wouldn't be afraid to say, go take a photo. If you feel like talking about, I don't know what it would be, some history thing in Utah, is it a fifteen minute drive, go take a bunch of photos and have that in your presentation about that thing.
823	Assumption is made that using a visual is good teaching.
	our teachers know that some sort of a picture, or interactive or anything that is very visual works with students well, that is good teaching, they know that.
554	Image just for the sake of filling white space is a pet peeve "Good visual design is not just putting in a picture for the sake of filling in white space. I really hate

	seeing that. There is nothing more that bothers me."
	Good visual design is not just putting in a picture for the sake of filling in white space. I really hate seeing that. There is nothing more that bothers me.
291	Graphical elements should reenforce learning, not just decorate. should have "meaning"
	Also with eLearning I think it is very important to have meaning for your graphics. Not just have a graphic up there but it should also help re-enforce the teaching. That is kind of how I view eLearning.
643	Not an expert on how much the visual design affects the learning, but feels she has tacit awareness when it isn't working or is not interfering.
	I don't purport to be an expert on where that level is on any given course but usually just based on the amount of curriculum that I have evaluated over the years when you look at it you can tell Oh I can't even tell where I am supposed to start on this page, or yeah this flows it is clean, that is a pretty picture. That is some cool artwork and I see how it supports what I am reading about or oh that is some cool artwork and that is all it is, not really tied to support of the learning I can do without it.
647	Typography matters for visual digestion in general
	I think just for visual reading, because all of your reading is free reading so I think you typography matters in terms of visual digestion in general.
646	Typography matters.
	Typography I do think matters, definitely.
101	Hierarchy
	highlight what is important,
102	Visual cues
	offset with tables, shading, whatever it takes.
186	Discusses evaluation of colleague's info graphic.
	I am working in templates that go across several designers over different milestones so we are putting together a larger system but I did a peer review today of a colleague's infographic and it looked like a high school flyer. It was just, like it had a title, it had a nice graphic on it, it had chunks of text on it but it didn't flow, there was no hook, there was no statistics. The graphic was cute but it didn't actually relate to the text at all. It was like oh look here is some clip art let's stick that in was on Think Stock, it is cute. Yet the person developing it is a really good instructional designer and they asked for feedback and they asked for some information on how they could improvement it. I said, 'for starters what made you think that it had to be constrained by an 8 1/2 x 11 sheet of paper'? The lights went on in his head and he said 'yeah I looked at them on Pinterest and I looked at them on the web and yeah they are a lot longer than one page aren't they'. I say 'yeah you have squished everything on this one page, there is no flow, your writing style is very long and it reads like legal writing, three is too many commas in it. You need short punchy statements that are going to draw them in and I read the whole thing and I still don't know why I need to learn how to use this particular tool. It is like I am left with a yes, so what. It is a tool and I might be useful someday. Tell me about the critical era; tell me about what happens do I get good things happen, what good things happen if I do this tool really well. I have got nobody on this whole sheet; there is no image of a person or a consequence or no statistics. One of the defining images of an infographic is that you need a stat, one need some sort of graph or a really good question somewhere. You need some sort of hook that is going to bring them into the data and it can't be word dense. You can have lots of text but it needs to be direct and punchy.' So none of those things are rocket science, any visual design class worth its salt in instructional design program is going to tell you all of those things about any kind of graphic that you include. It has got to relate to the instructional purpose, it has got to be catchy, it has got to connect. Unfortunately I think the thousands of clip art options in Think Stock and IPhoto in a bunch of other places that we are like that's cute or that's artsy or that is the right color so I am just going to stick it here. We are just not taught, I don't think with enough precision, as instructional designers, on how to choose or create our own graphic to communicate the instructional intent of what we are creating.
	<i>Impact of visuals or aesthetic has a short relevance curve</i>
190	Anecdote about how arrangement of material on the slide is bad, but instructional design is solid
	I am just thinking of one piece that I just evaluated, the ubiquitous next button on every single slide and three sentences on every slide, I mean it was like how many times am I going to have to click that dang button. It just didn't flow well and it was annoying and the interactions were badly arranged on the slides. The instructional design itself or the material on the slides was solid so after you got over being annoyed at the repetitive bad navigation, if the instructional design is still good. The content on the slide

	are designed to teach then the navigation can be overcome.
644	Aesthetics not as important to her. "Not a bells and whistles as some of the other designers"
	I am not as bells and whistles as some of the other designers, I guess.
bN55	Lack of consistency in the media objects doesn't "wound" the experience much.
	Because that was such a long project and we had media being built literally over years and the original artists come and they go and everything, that one did not get the style guide treatment, in that case though I don't think it wounds the experience much.
bN56	Students don't notice minor variations in style or lack of stylistic consistency.
	"They don't care like we do."
	One of the things I learned, I worked at Word Perfect back in the day, and one of the things we did was usability studies on our test screens. What does this have to do with anything, well it was very interesting for us because we were highly aware of the difference between how our help looked and how Microsoft help looked and how the other programs help looked. So as we were sitting there behind the mirror watching these users who would start out in our program, get into our help, click out of it, get somebody else's help up, you know so they went out of Word Perfect and went into Windows help for instance, they did not even notice it, even though we had different colors and we had different set up, different fonts and different.... they didn't even see it because that is not what they were looking for, so I think while my editor would be highly, highly intrigued by the font change, you as a kind of a designer, illustrator mind would know, wait a minute this is super cartoony and this one is kind of more realistic looking. Most of our students either don't bother to register that, because it is not important to them, or they don't care like we do. Our artist Susie sees comic sans and just freaks out, she says "Oh that is awful," normal Joe, run of the mill person just goes look works, kind of casual words, they might go that far. I think there is well; there are definite advantages in the look and the professionalism. I don't think having some variations hurts.
	<i>Structural design issues -- designers suggest: navigational intuitiveness, simplicity, and consistency; content organization;</i>
	<i>Navigation</i>
189	Bad or suboptimal navigation will not necessarily break a design. The instruction can still be effective even if navigation is cumbersome.
	This could potentially stem from a captive audience that is required to complete the material regardless of how cumbersome it might be.
	Having said that I have seen some really bad navigation and the instructional design is still very successful. You can compensate for abysmal navigation, as long as the stuff is not hidden of course.
520	Make it more intuitive.
	They would rather move forward in the project or in the content as much as possible and of course learn from that. I like to reduce the amount of interactive buttons there are and make it more intuitive.
602	Ensure all content is there and flows well, "natural way"
	And then just that you know that it is all there and that it flows in a natural way.
294	Flows well. Without instructor it needs to be "sound."
	Again because you are not going to have an instructor there for eLearning you need to make sure that it is pretty sound and that it flows well.
100	Scannability
	how can I break up this material so it is easy to scan
332	Example why consistency in content placement is good.
	I think that it is good to have a meaning for your graphics and also page, example that I just gave where the learners eye wants to focus on the center, don't be having every page jumping around. What I mean by that is that on one page you have everything on the left hand side and then they go to the next page and they have everything on the right hand side and then the next page you have some on the left and some on the right. It starts to get confusing; you just need to make everything as simple as possible for the learner. Everything on that page has to have meaning towards the learning. That is just my view.
310	Feels navigation should be consistent within a project.
	I think that it just needs to be consistent on each page where the layout is.
311	Navigation elements same on every page -- doesn't want to have to think: How do I go back, forward?

	If I have something that I want to be self-paced, I want to make sure I have that next button or the previous button at the same place on every page, same color so there are not any doubts. They are not having to every page say how do I go back, how do I go forward?
289	Easy layout -- so people don't have to concentrate on navigation.
	Also a very easy layout as a design so that people are not focusing on how to get through it.
191	Navigation is only an issue if it is so bad you can't get over it.
	But obviously, navigation is one of those things that you want to blend seamlessly into the background and to be so wonderfully easy to use that it never occurs to you that navigation is even an issue it is kind of like a mom being at home doing housework. Nobody sees what she does until she stops doing it. If a mom at home didn't do the dishes, and clean up and cook dinner and make everything run smoothly it is pretty much chaos, everything is a mess. To me navigation falls in that category, it is only an issue if it so bad that you can't get over it.
517	Navigation is very important
	"How important to you is the navigation structure of the content within eLearning design work. Charlotte - Very important.
617	Navigation needs to be fairly intuitive.
	Should not require assistance.
	I think it is pretty important so I think that it needs to be fairly intuitive.
618	Navigation should align with the scaffolding of the course -- the designed structure that is intended to guide the learner to new levels of understanding
	I think it needs to actually lead them through the scaffolding that is built into the course, right, so even if a student could jump around or whatever creating a natural flow really is important, especially in something like, I think it is important in any type of course, honestly.
700	Simplify navigation structure.
	They can just click a link and then they can get all the directions again if they forget or something like that, but simplifying it to a point where it looks really nice and the students who already know what they're doing don't need to go through all the scrolling of getting through all this information and paring it down really nicely.
522	Typical navigation -- for example the next button -- is the pattern they follow as a trusted baseline.
	Again we are fairly new so we like a lot of the next buttons and things like that but we are getting a little bit further in developing that more.
414	Their custom solutions had navigation that generally followed e-learning conventions, but it was custom, so there were differences compared to a set solution from an LMS or Captivate or similar.
	Since pretty much all of our solutions, where I was before, were custom, that was a big part. There is still a lot that is kind of a traditional. A lot of eLearning you have your bottom bar that has your audio control, your forward and your backward and you have a main menu somewhere that is a drop down or opens up or slides out from the side. A lot of stuff we kind of follow those general eLearning conventions. Since it was custom it would always be a little bit different, it would look a little bit different.
188	Navigation should be intuitive
	Navigation is always important; it has got to be intuitive.
415	Sometimes they took "totally different approaches" to navigation, but mostly they used traditional navigation.
	Sometimes we would go with like totally different approaches. More graphical menu's sometimes or different ways to navigate but generally a lot of the stuff was that typical forward and backward, down up down on the sides kind of thing.
290	Seeks intuitiveness.
	That it is very intuitive.
315	Will put in omnipresent table-of-contents navigation on trainings where there is chance user will need to access just part of the training
	Also using font color to indicate location within application.
	He has some established design patterns he uses to convey certain information to the learner.
	There are some projects that I want them to be able to jump back to previous sections or more

	importantly, in the future, if they need to come back to the training but they don't want to look at the entire training then some projects I do put a table of contents off to the side so they can jump to whatever section that it is. When I do that I think that it is really important that when they jump to a section, in my menu I try to soften the font color, then on the section they are on the font color is bolder so that way they would know exactly where they are at. I have found that that is also something that people are quickly trying to get around in, knowing exactly what section they are at. If you have just a monotone color, consistent blue or consistent grey for all of the links sometimes they get lost so I try to vary that font color a little bit in that scenario.
312	Sees other designers have users click obscure items on screen to navigate. He suggests that a lot of navigation designs he has seen are non-standard and hard to guess that they are navigation. [Example from design shown to me by Katrina is an example of how navigation takes on the form of a metaphor. ID could benefit from understanding some of the issues with this approach so they have a less tacit and more explicit reason to recommend against this when they have the opportunity to counteract someone else's proposed design. It would also discourage them from making this less-than-sophisticated approach.]
	I do see a lot of people, even on my team that will try to be fancy by having you click on things that you wouldn't even know that you should click on to advance
795	Having consistent directions and processes to follow for all classes.
	Our directions, actually this is really important, directions are king. We have found that we have to be so specific in how we write directions and that they need to be the same across the board. The same directions for uploading, putting a link in for google doc should be the same in Math as they are in English, as they are in History. We have some uniform sets of directions that we use, that we have developed, that all teachers use and tweak to whatever individual circumstance they are using. This way it is really familiar to the students.
519	I like to reduce the amount of interactive buttons there are and make it more intuitive.
	I like to reduce the amount of interactive buttons there are and make it more intuitive.
521	Wants multiple actions from button click, not just navigation to next slide.
	If I have a learner click on a button I want that to spark several different actions not just one, not just going to the next slide. I want it to spark a bullet point list, or a hot spot, depending on what I want him to do, even a new thought bubble with two people conversing in a scenario.
bPK30	Even if the instructional strategy is sound, there might be implementation issues – the interface-level interactions could be flawed or confusing. The ID might not necessarily notice it if the team explains the implementation.
	There is another example of a certification course. This one is for sales engineers, whose job it was... It was their job to design surveillance systems so basically they would get the blueprints for the site and based on that they need to figure out how many cameras there needs to be, where should we put them, what resolution do the cameras need to be. How can we cover the most areas, get the detail that is needed and use the least amount band width for storage. In this case we kind of had a couple of options. When they come to the page we have a description of, oh yeah so, you can't really see it here but it is the same strategy, where there is this pull out here, they pull it out and there is this little kind of box come out and they read what the client needs are and based on that they have three strategies to choose from, that are basically different camera layouts. They show like a parking lot, and then they choose the one that is best based on the client's needs. This is kind of a two part one so there is sight level, like where should, how many cameras should there be and where generally on the parking lot should they be and on the second part is ok you have determined where in the parking lot they should they be, where specifically for each camera should it go. How high should it be, how far from the target should it be, and so here they is a diagram of the scene they are trying to capture and they drag the camera to the best spot in the scene to capture the specifications that are listed here. So those are just a few examples of the activities that we had as part of the courses in this curriculum.
	<i>Content organization</i>
793	Importance of content organization has increased.
	C - How important is the, I guess the navigation or the organization of the structure of your classes for each Module. What type of attention do you give to the organizational structure?"
	E - I would say that has increased.

14	J places emphasis on the sequence of learning, that there is a logical flow. She tries to ensure the student doesn't have to "spend their mental energy" on navigating through the course.
	What are the parts of the e-learning design that you spend the most time on? What are you most concerned about as you are doing your designs." Nancy - I would say sequencing, clarity, making sure that everything is very, and very straight forward that people do not have to spend their mental energy wondering where to go next, what to do next.
16	The order in which content or interactions come is important to a quality design. Giving them what they need next, when they need it is very important.
99	Good eLearning characteristics: Simple navigation -- to avoid mental load. Clear, uncluttered layout Pleasing appearance Professionalism and care Opposed to: Ugly Crowded Packed No particular flow Nice shows they've thought about presentation.
	I think a simple navigation is important, again something that doesn't cause extra mental load. Just set it out, set it clearly and make sure it is consistent. Then the layout itself needs to be clear, uncluttered and pleasing looking. It doesn't have to be fancy, but it should show a level of professionalism and care so it doesn't just look like stuff tossed up on the internet. Some instructors pages, if they just put up stuff for their class or whatever, the content is wonderful, wow I have really learned how to calculate the column of a sphere, I feel very good about that but the layout is ugly, very crowded and very packed and they just kind of put stuff in there without any particular flow to it. The ones that look really nice are the ones where they have actually stopped and thought how is this going to look when it is presented, how can I break up this material so it is easy to scan? How can I highlight what is important, either with headings or offset with tables, shading, whatever it takes. How can I make this easy to glean the information from? And I absolutely detest things like pop up ads and benigraphics and flashing things in the middle of your stuff you are trying to read. But that is ecommerce so.
15	Clarity in the layout is important. This relates to a visual hierarchy. Good organization is really important. Clear layout is really important.
457	Learner has control and will be able to access content as needed rather than delivered linearly. I really liked that design because again because it was interactive, it was focused on real world scenarios and the learner had a lot of control basically. They accessed content that they needed when they needed it rather than having to go through it themselves.
641	Aesthetics only matter to a certain point, beyond that, they don't affect higher-level learning I think having nice clean aesthetics help support a course and yes having a beautiful course makes it more appealing but all kinds of studies show that aesthetics don't actually, beyond a certain point, all these extra ____ of making it so beautiful or flashy or look cute or whatever don't engage a higher level of learning.
642	Messiness, clutter, visually distracting can take away from learning. But to this point they do matter, so if the course is messy, or cluttered or visually too distracting, whatever, it can distract, even take away from the level of learning the student. <i>Design consistency</i>
bMS7	Each topic had same layout. They were able to know where they were in the structure. Markus - That is correct. This is actually; I'm not sure which part this was. There are five or six parts to this tutorial that they had to go through. With this one, I am looking here. Looks like this is our benefits or the overall view of the app so this is the second tutorial. This is basically setting the stage for them. Moving to the third one we see kind of the layout of the pages and how they are going to be. Down around the bottom we have the six different topics that they can choose on or click on to choose and once they do it will jump to that particular page and that particular topic. Each topic has the exact same layout.

	They were able to know where they were and quickly move to other ones.
bSA2	They've created a consistent beginning to each course.
	You will see, I talked to you about how we did it in modules. All the modules, they will be free paces in most classes; we do have some self-paced classes. I can show you one of those classes if you want to see it. These are weekly based modules; they look the same at the top. Every teacher has an introduction and weekly schedule, I will show you what that looks like. It is going to have a weekly schedule that breaks down what the students do each day, in the course and then a live, well it is not live, but a personal introduction from the teacher, `discussing what they need to do and anything specific they need to know that week. That obviously changes out with the teacher.
bMS4	Wanted to keep it clean -- i.e. consistent navigation on each page
	We want to keep it clean and also we wanted every screen, the navigation to be the same so there was definitely no guessing for them. So as you see on the first slide very minimalistic, just what they needed to have.
bSN29	Course adjusted before being taught again to bring it in line with school guidelines. (Which guidelines appear to be often in flux.)
	that is one that I just threw in, so that one doesn't maybe follow the guideline right now but it will by the time this course is taught next. [00:13:05] Do you have any questions to what this basic layout is?' <i>Instructional Design characteristics</i>
287	Objectives is listed as a fundamental, also seeks to conform as close to classroom as you can.
	You need to still have the fundamentals there of objectives and it all depends on the eLearning of course but you need to have as closely to the classroom as you can.
308	"I don't put anything on the screen that doesn't belong to learning."
	I don't put anything on the screen that doesn't belong to learning.
333	" Everything on that page has to have meaning towards the learning."
	Everything on that page has to have meaning towards the learning.
293	Focus on making content understandable.
	Really making sure that the content is really understandable.
288	Appropriate helps at the right time (since instructor is not present)
	Since there is not an instructor there you need to make sure that you are able to have appropriate help at the right times and things like that.
65	Good design equated to getting the learning experience she (we, the designer) want(s).
	there, how often does that impede your ability to create a good design?" J - Or to get to the learning experience that we want.
134	eLearning approaches shift with trends in the market and in the field.
	There was certainly a time when everyone wanted to everything online and then it was blended and now it is all about millennials.
5	Instructional design has crossed multiple media and similar strategies have been carried over from more discreet media, like CDs to a more flexible medium of the web.
	At that point we were still doing it on CD's but just at about the point that I left they were starting to look at putting things online too. So 15 years is probably about solid on eLearning with a couple preliminary years in there.
139	Focus on improvement of specific performance or tasks for a specific audience. The eLearning design should utilize a variety of instructional tools or interactions.
	If you have got an eLearning design that only does one thing it is not very useful, it has to be about improving the performance or improving the knowledge base of whomever you are working with.
137	"If it is not about meeting very specific goals, you don't know when you've hit it."
	If it is not about meeting very specific goals, you don't know when you've hit it.
314	A design might need to deviate from traditionally acceptable design patterns to embrace different types of learning: exploratory as opposed to linear learning.
	Now that is for something that is kind of linear learning, just the next and previous buttons.
372	Design should be aligned to learning objectives
	I think definitely aligned with some kind of performance objective, I think is a very important thing. So making sure that activities and learning objectives are aligned with performance objectives.
373	A design should have real-world application while being tied to performance objectives.

	That activities based on real world situations and real world application and that they, I guess that kind of really relates back to performance objectives and making sure that the activities are relevant to the learners.
138	Don't make a Main course when dessert is needed. Keep the design aligned with the objectives and needs of the client.
	If you are looking for dessert and you make a main they are going to be unhappy with it.
607	Evidence of quality course in student assessment of learning objectives
	So one evidence of that is that the students are achieving the SLO's.
136	Elearning can be built up with multiple approaches -- could be different each time.
	ELearning could be any recipe of those aspects. You mix and match and create the flavor of what is required for the solution.
619	Language learning has a more overt scaffolding based on the nature of language acquisition that is important
	But especially in language acquisition where there is almost an over scaffolding built in because of the nature of how we acquire a second language. At how we build on foundational concepts consistently, so I think it is better.
286	Elearning should incorporate elements of classroom.
	I think you need to really incorporate elements that you would use in a classroom into eLearning.
621	E-learning design differentiated from content refinement.
	Concept of a really measurable course -- do most designers focus on that at the design stage? How can we not only present the material, but present it in a way by which we can measure success of the course -- not only in terms of learning, but in overall quality as well.
	Is there a difference between the overall quality of the course and the assessment of learning?
	hey what is the fluff here and what is the extraneous stuff, and lets design a course that is really tight and really well aligned and really measurable.
133	A good design will reflect the intended goals -- what is wanted to be accomplished. You can't judge a design on its appearance alone. A good design is one that achieves its objectives.
	"What do you feel are the characteristics of a good eLearning design?"
	J - that is almost like asking about world peace. A lot of it depends on what you are trying to accomplish.
608	Student learning objectives could be faulty measure of course quality if objectives are not strong, but if the results of the course are that students are learning, then that the course is working as designed.
	the SLO's could be really poor so it doesn't always imply high quality course but it could imply yes the course is working as designed because these are the outcomes that were set out for the course, right.
bPK48	Instructional design, elearning conventions aren't aligned with current web conventions. They are "dated," "old," "kind of crappy."
	There was also this weird thing, eLearning conventions don't always match with web conventions and eLearning is just kind of its own weird thing. A lot of times the graphic design in eLearning, is like kind of crappy, dated and old and the controls are weird and it is just like it is a different thing from web sites.
bPK49	Graphic designer had background in web and advertising so encouraged breaking out of instructional design and e-learning mold.
	Our head of graphic design had a background in web design and advertising so I feel like he helped us or encouraged us to break out of that traditional eLearning mold but we still had, in a lot of courses, controls at the bottom and so it was improvising a lot of times.[00:26:59]
744	Online learning has a stigma, but it is getting better. There are a lot of people out there doing online learning poorly.
	I think the challenge of being an online teacher is always, there is a lot of stigma with online learning. It is getting better. I work for a school that has a lot of clout and does well and so that helps but there is a lot of people out there that do online poorly.
745	A lot of people do online learning poorly.
	there is a lot of people out there that do online poorly. Everyone gets judged for what everyone else does.
746	Poor online learning taints perception of all online learning.

	Everyone gets judged for what everyone else does.
747	Some families reluctant to accept online learning because of stigma - she puts in efforts to sell the e-learning experience.
	I spend a lot of my time doing PR work with families and showing them exactly what we are doing. We are very transparent and I will walk them through classes, I will show them whatever they want so that they know what they are getting, what kind of a model we offer. One of the challenges of working online is, at first I didn't think that I would engage with students.
bN54	A professional and nice looking design can create trust in the product, in the course.
	I do believe that something that is nice looking and professional looking and consistent does give a feeling of professionalism, it gives a feeling that you can trust this, it is well put together. However, like with the Physical Science, having different styles, different looks, they are all quality looking. You aren't getting any that look like they are slapped together and nobody took care so they are kind of raised to that floor of being trustable in a way.
bPE15	Online format made it easier to adjust an existing exercise to a format that the instructor felt would be an improvement over what was happening in the classroom.
	Right, so she has these journal entries and one of the reasons we built it this way is because in class it might be a discussion or it might be a thought paper. But we didn't want to have – one of the benefits of being an online course is you're not creating all this paper, and she didn't really like the way the formal paper was working on campus, like this reflection paper, so I said we could make it more like a journal entry and she said, "Ah! Yes." So they write their response, right, the things, and then the TA goes in and gives them comments and then they can go back and make corrections. So they are trying to write their thoughts but they are also trying to write in correct German.
bPE23	"I think there are some activities that lend themselves better to a classroom environment and some activities that lend themselves to an online environment."
	And I think there are some activities that lend themselves better to a classroom environment and some activities that lend themselves to an online environment. In creating the blended course she has really tried to let the human thing do what it does best and let the computer thing do what it does best.
bPE19	Same course can take different formats online -- guided or unguided, time delimited or not. Instructor felt TAs were necessary for all formats.
	For the blended course, right. You also have the online course that has a 12 month window of completion, but for the blended course, yes just this semester. She has for each, she has two sections on campus that are using it and they have one TA in each and then for the 12 month course that anyone can take she has a TA over that class.
bPE24	The fully online version of the class is an experiment, to see how well the students do by comparison with the in-person course.
	For the completely online course I think she is really interested to see how the data comes out compared to her blended students. She will probably publish on that. I think she is really intrigued to see, did she build enough scaffolding for the student that never meets in the classroom.
	<i>Seeks to be better than the competition</i>
720	Considers ways to be better than publishing companies he is competing with
	nothing against what Pearson does but they have designers who are thinking about what are in their textbooks so as a course instructor who is creating their curriculum, I am viewing it like how can I be better than them.
721	Thinking about how to include media in course that would compete with textbooks
	What does that textbook look like and like the classic textbook in your mind where there is a little picture off to the side, you know what if there are pictures that are in a loop at the top of the assignment that is pretty cool. You know there is some movement happening, or with the video element too that is an aesthetic thing where there is something for the eye to catch you and bring you in. Whether it is a silly animation video that is saying, you know hey check out what's below, I'll be your will be surprised, it could be like the smallest little thing at the top like a little picture or something. Having it big enough so that it is a part of the page.
	<i>Good design navigates constraints to arrive at optimal outcome</i>
129	ROI on a good design is not always measurable. It's not always obvious. It's not always high.
	You don't usually see that kind of return on investment, it is definitely not typical
214	Good elearning design makes best attempt to meet learners needs while staying within constraints of the

	project.
	good eLearning design is one that attempts to, that makes a best attempt to meet a learners needs while staying within the constraints of the project.
216	Good elearning design navigates all constraints to reach an optimal outcome within the constraints. So good eLearning design is one that basically optimizes the paths navigating all of those concerns.
127	Instructional design demonstrated the ability, through providing the right training experience, has immense capacity to save an organization millions of dollars. Just in the pipeline alone, in the pilot test of the pipeline we saved the client close to a million dollars in training, lost productivity, training resources, salary, it has just made their organizational new hire pipeline significantly more productive.
	<i>Designing for engagement</i>
798	Content length short to keep students from quitting Can't get too long with these kids, if you lose them they quit.
493	Second priority is engagement. The designer has to juggle the competing demands of time and money and user need to determine how much time should be spent on different aspects of the design: from appearance to content. Elearning is unique case because you have to try to build engagement into the system. In a classroom environment, the instructor can adjust for lack of engagement.
	The second thing is more of the engagement factor; how thorough should we make it to be. Is it worth our development time and development process to focus more heavily on interaction or should we focus a little bit more on the content and try to weight the options about the best way to proceed with it. ELearning is a little more of a difficult endeavor because you have the engagement factor you need to create and not just trainer implement in the classroom.
433	How to make an interactive experience engaging while still providing resources to complete a learning activity. "How do we draw people right into an experience where they are doing something that is interactive but still make sure that they have the resources that they need to complete those things."
22	Wanting to keep learner in the context of learning while still engaging them in interactive elements. Her concern as an instructional designer was to avoid decontextualizing formative assessment activities outside the flow of the learning engagement. This is primarily an engagement issue. An assessment interferes with learning goals if it is too disruptive, which interferes with user goals of learning, which are aligned with learning goals.
	What we didn't want to do though was say ok you just learned about water pressure now I am going to take you out of that context, I am going to put you into the assessment context, I am going to make you answer some questions. I am going to make you do several different clicks though to get over to the quiz, I am going to make you take the quiz and then I am going to make you submit it and then I am going to have you come back in and continue on with water pressure to the next concept. What we figured out with that was that we needed some way to keep that interaction in the flow of the context, so you are reading along, reading along, you get to the point where you could use some practice and then instead of taking you out to do it, to put something fast, fun and something jazzy right in there and then they go on, so what we did we worked with the instructors and the programmers to put together a nice HTML widget that even non-technical designer people could fill in, so you can come put that code in, put in your questions, put in the feedback which could be anything from a little video clip, to text, to images. Just have it right there, the students goes through, it is just seamless for them, Oh look here are a couple of questions to answer, they answer they get a little feedback kind of little break, a mental break, little bit of application and then they can just go straight on to the next concept without breaking the flow of what they were doing. So I guess that is an example.
374	Engagement will come, not from "superfluous, silly things" but from relevancy and usefulness. I think a lot of those things are what help to make it engaging, which I think is another important part. The more relevant and useful the learners find it, the more engaging it will be without having to add a lot of superfluous, silly things that people typically think are engaging. Lots of bells and whistles. If it really something meaningful, important and interesting to the learners then it will be engaging. I think a lot of that can be done through the design of the activities and the content and such.

375	<p>There are things that designers, especially beginning designers, use with the intent to engage the learner, but perhaps those things are really superfluous.</p> <p>It might be that they just reduce the opportunity for creating really compelling content because they are easy and quick to put into an instructional design.</p>
	<p>I think a lot of those things are what help to make it engaging, which I think is another important part. The more relevant and useful the learners find it, the more engaging it will be without having to add a lot of superfluous, silly things that people typically think are engaging. Lots of bells and whistles. If it really something meaningful, important and interesting to the learners then it will be engaging. I think a lot of that can be done through the design of the activities and the content and such.</p>
683	<p>Video element of primary concern for each course.</p> <p>Wants to make content entertaining</p> <p>That is like my thing that I am very passionate about, is making that video element and making it as entertaining as it can be.</p>
684	<p>Likes to have video element to juxtapose against the text.</p> <p>But that is me as an art teacher and someone who like really is a visual learner and so often I feel with online classes it is like a textbook. It is like all text and the text is really well written but I remember in high school, like reading a class wouldn't necessarily stand out as something I would really get excited about doing so I try to have that text as that backbone for the more systematic learners who like to have that framework but then my goal is to have a video with all of the big projects, so I have a video camera over my shoulder and I am doing the project but then I speed it up and add this element of entertainment to it.</p>
389	<p>Videos are optional.</p> <p>It is optional, if people want to learn more about a specific topic; sometimes those videos will go into more depth with those things. [00:13:48]</p>
496	<p>Designing e-learning is more difficult because you have to try to design for engagement.</p> <p>ELearning is a little more of a difficult endeavor because you have the engagement factor you need to create and not just trainer implement in the classroom. [00:08:43]</p>
524	<p>Little interactions matter because otherwise user isn't engaging.</p> <p>"As far as, how often are you able to put in more of those interactions? How much, generally speaking, maybe think back to a specific project, how much does having those individual interactions help the learning process?"</p> <p>A great deal, otherwise the person is going to consume the content without actually engaging in it.</p>
525	<p>She feels she has been able to focus on smaller details and on the interactions, but the company ultimately dictates how much focus that can have on any given project. In her case, that focus is not as much as she would want it to be.</p> <p>I luckily since I started, had a little bit more of an engagement factor with the modules here so we have been focusing a little bit more heavily on taking the time to work on the smaller details and working on the interaction and the amount there is. Really the company dictates the way that is going to be done. This company doesn't have as strong a focus as I would like, as I have seen in different companies.</p>
526	<p>Primarily about getting content out, secondarily about engagement.</p> <p>Since we are new we are more about getting the content out, not necessarily about the engagement.</p> <p>That is slowly shifting to engagement and then content second.</p>
725	<p>Games to increase engagement</p> <p>Just like simple websites we do like games that are one and basically just a bunch of games that my students have created for the class, like my TA's or whatever. That is the biggest ones I do in my classes.</p>
829	<p>Providing multiple media to enhance the educational experience</p> <p>And, I mean our teachers, yeah so, so for example a lot of our teachers do little mini lectures, like five to eight minutes and those always include them in a corner, [42:24] it is important that they see we are not [[here to watch]] [[out and about?]] and then also like a slide presentation that is usually very interesting, so as you are _____ the students are listening so they can be visually seeing things.</p>
376	<p>Media, "bells and whistles" are not the source of engagement. "If it's really something meaningful,</p>

	important and interesting to the learners, then it will be engaging."
	I think a lot of those things are what help to make it engaging, which I think is another important part. The more relevant and useful the learners find it, the more engaging it will be without having to add a lot of superfluous, silly things that people typically think are engaging. Lots of bells and whistles. If it really something meaningful, important and interesting to the learners then it will be engaging. I think a lot of that can be done through the design of the activities and the content and such.
bSA26	Badged courses also increased 10% in pacing compared to previous non-badged course last year.
	No the badged courses along with the self-paced courses were up 10% of the pacing rate as compared to late year quarter one `in the year 2013-2014. So very pleased, very, very pleased with the way these are turning out. And then we are going to do some more, obviously some more digging as to why and making sure that the data is indicating what we think it is indicating.
bKA7	Used rollover interactions, stories, check-your-understanding interactions. Used interactions every three to four slides of content. Client sometimes thought content was a little dense, so they added more "cheesy" interactions.
	Lots more stories, stuff that you can roll over trying to tie it to meaningful benefits. Then we have a bunch of check your understanding kinds of interactions. This one is not especially complex so you just going through and doing that matching kind of exercise. Which ones haven't I used? Then you would submit and get some feedback. Depending on the nature of the check your understanding depends on the quality of the feed backs. We tried to put in an interaction every three to four slides of content, of some sort, if we were forced to go back in and add additional interactions because they felt that the content was a bit dense some of them are like this, a little cheesy,
bN10	Inline assessment is used for keeping students engaged in the content, to prevent them from "glazing over" without having to take them out of the context of their learning.
	The reading quiz upfront is different, we want them to go out, we want them to do it, it is scored, we want it to be persistent. But this is just a fast little, OK we just talked about the ideas between scientific knowledge and you know general knowledge so do a fast little question and tell me which one that it. So I just mark it, please do an inline assessment with these questions.[00:06:33] Christijan "And what is your objective with those questions, that are not scored or anything?" It's two fold, partly it is just to keep them in their learning context. They are not now shifting gears into quiz, they are not having to leave. It is just this kind of OK are you with me, here is a little chance to kind of give yourself a little test to see if you are. The other thing is that we have noticed that when people start reading a lot, especially fairly complex stuff. Physical Science is a tough class, especially for people who haven't taken a lot of science and so we found that if they are just reading they tend to glaze over, start missing things start skipping so having these kind of little games in there just gives them a little Oh! wake up, interact, do something and then they can go on. Kind of a little refresher.
bMS5	Started with ungraded quiz just "to get their mind going"
	We started it off with a little bit of a quiz, it was just more of getting their mind ready for the learning. It wasn't a graded quiz, just more of a question to get their mind going.
bPK22	Engaging the learner with realistic scenario and allow them to explore.
	The idea is rather than make them sit through all of this information we give them an activity, a real world scenario up front and then they access the information they need to answer it.
	<i>Designing for human interaction/connection</i>
668	Rapport and connection to students can still be there in online learning
	you know once I figured the technology aspect, the connection is still there. The connection is there. I feel like through technology, when students chat me they are open way more than an awkward conversation with a high school kid.
669	Connection with students as strong -- or stronger -- that would be in brick and mortar school
	they can tell me so much about themselves through their art work, that they turn in, I feel like I build just as strong a relationship, if not in some ways stronger, with so many of the kids that would be in the back of the classroom, never raising their hand, just trying to avoid the social, situation that is a normal high school. I feel like that challenge was something that I was able to find great success with in regards to my contentment as a teacher.
685	youtube blog style video

	youtube blog style video, that is really what I go for in my videos.
686	Video is a way to engage learners. He gets feedback from students that they make a connection to him as an instructor through the videos he creates.
	the video will be kind of that last step to engage the learner. I get so much feedback from students who feel they know me so personally and I know about them a good amount but they will come up to me and they will like recognize me. I will know all of the student information once they tell me their name but it is like they feel like they have been on a hike with me as I have gone up and gone in the woods and talked about this and that, well that has relation to the class. Or they feel like they have sat down with me as I sat in front of my TV and had that as a projector and talked with them about some images that I was talking about or something. You know those video elements really bring that personal experience just that more through I guess.
687	Sees it as his challenge to make class most engaging for them
	This is where user-centered design principles come into play -- guiding the engagement?
	my challenge I guess, how can I make that the most engaging for them and something that they are excited about each week.
614	They created a web forum "cafe" where students can interact in the language spontaneously in order to capture some of the interaction necessary for effective language learning.
	spontaneous live interactions so we have kind of a web forum, I guess that is open set times of the day that is basically just a drop in lounge, right. Students can go there and practice for their upcoming oral assessments, get feedback, interact with one another, talk about specific projects or work on group projects and then some of our faculty actually assign, do partner work in the cafe.
615	Designing higher level interaction for instructors and students
	Students can go there and practice for their upcoming oral assessments, get feedback, interact with one another, talk about specific projects or work on group projects and then some of our faculty actually assign, do partner work in the cafe. Come in and find a partner and complete these assignments and you have to complete these in order to complete this assignment that is coming up later in the course, whatever. So there are, in my language courses, there is a higher level of interaction and there is definitely a teacher role.
727	He likes discussions where students interact with each other.
	Yeah, that is the biggest thing; actually I like discussions where the students are interacting with each other.
748	Online actually gives opportunity to engage with students more than in classroom.
	One of the challenges of working online is, at first I didn't think that I would engage with students. I thought Oh I'll try this and see what happens, I found that I loved it and could engage with students almost more eager than I ever did in the classroom when they came in and out, you know 35 kids at a time.
749	Online relationship not visual (visible?), so challenging to make it personal
	I taught High School and Jr. High. And so I liked that part and the only thing I would think was hard was when I would go in person, I couldn't recognize the kids but once they told me their name we would immediately start talking and revert back to that relationship we built that wasn't always visual and so I think that is always a challenge to make it very personal, that is part of our mission statement, we are very one on one working with students is really important, it is the piece that I think a lot of people forget when you are working online, you can't just, that just can't go away otherwise you are just distance learning which is totally different.
384	E-learning he is currently working on is a blended solution.
	The learner experience is that is web based. Kind of our whole solution is a blended solution.
386	Wanted to bring in elements of blended experience into the online portion by featuring instructors in videos
	The videos are made of investing coaches, we really wanted to make sure, since it is a blended learning environment that our entire kind of solution is a blended thing that we bring in the elements from the other parts of the experience into the eLearning course.
	<i>Not sure</i>
796	Explanation of common parts of course.
	So the weekly modules have the same format as far as a picture and a quote that sets up the week. It has

	the date there and it is week 1, then everyone has a weekly introduction. The teacher that does a live introduction can video record it, that changes out every time it changes a teacher and each time you redo the week you do a new introduction. There is also in each class, next to the introduction is a weekly schedule where the teacher breaks down all of the work, the resources, assignments into a weekly planner so that students, if they want to do it that way, they know how to break it all down into a week.
616	Literature courses don't have as much interaction.
	I can't, I mean the only courses, I would say at the university level that don't fit that bill would be literature courses or advanced language courses where it is heavy on writing and reading and so there is not live interaction but there is still asynchronous interaction where they are getting feedback on their paper or there, you know stuff like that.
613	TA and Instruction interaction now the norm for language learning. Language learning requires specific type of instructional design. To make it effective, she keeps up on latest research to help guide the practices she endorses and recommends for elearning. so now the language courses have interaction with TA's and with the instructor so they have scheduled live interaction as well as spontaneous live interactions so we have kind of a web forum,
622	Measurement is something that is not an e-learning design problem per se, but something she helps a traditional instructor try to grapple with and fit into their new course design. Having something measurable I think, as a former classroom teacher, but also the more I interact with faculty on campus; having every aspect of your course be measurable is not easily facilitated by traditional face to face classroom, right. There are certain things that you can measure but there is a lot of ambiguity that you cannot measure. so approaching that in design is often a foreign concept but well embraced generally, in a couple of cases a little bit afraid of that, but. Christijan "Afraid that it might not show that it is working?" J - Exactly, right or maybe that it will reveal some weakness that the professor will then kind of feel is a reflection of them.
	Content
75	Content comes in multiple forms/media As I am going through the course we generally get the content from the instructor and that may come in in text, it may come in as an outline with media pieces in, it may come in as a series of video tapes or PowerPoint lectures or voice overs.
83	An instructional designer is not creating content. I don't create the content.
85	She will create some content -- especially assessment items -- for courses where she is more qualified. For some of the High School courses the assumption is that you are probably pretty good with 10th grade biology just because you passed 10th grade biology there is a little bit more content creation. Especially like we need more questions, we need more chances for students to practice.
87	In her early career, she generated content. She was a hybrid technical writer and instructional designer and ended up playing across the two roles. When I was at Test Out, when I was getting into instructional design that is what I did. I created the content, I wrote it and put together the questions and put together all that kind of stuff.
90	Says design process is similar if you create content or if it is provided, but differentiates design from the "putting together process," which I interpret as her information architecture or organization process for the content. I would say that the design process is pretty similar, the putting together process is completely different, a lot more writing to do, a lot more other things. As far as the principals of design go, I find that I am working with brand new, coming up with it myself or working with something someone else gave me the design itself it pretty similar.
91	Writing own content could be easier because you can start from your own outline instead of trying to reorganize another person's content. In some ways it is easier if I am writing it myself because I can do my outline first and write to the outline instead of getting a bunch of stuff from someone else and trying to organize it into a nice little plan.

787	Loves the writing and the thinking
	I love the actually writing, I love the actual thinking involved.
790	Feels she couldn't write curriculum for math class -- outside her expertise.
	What is the distinction between curriculum development and instructional design?
	I don't know the process to writing a math class, I would be horrific at it because it is not my forte
11	The instructional designers were generating content, but they needed it done less expensively so they hired a technical writer. Content creation is not the same thing as instructional design.
	At that point they were saying this is great, we have instructional designers but we need someone who can pump out a lot of material, let's go with technical writers.
76	Arranging / organizing content is half of her work
	So arranging all of that is probably about half of what I do.
	Collaboration
	<i>Collaborating with team</i>
	<i>ID relying on team to execute vision</i>
249	Instructional designer becomes very reliant on team to ensure the vision is carried out.
	When you talk about structuring it, how do you go about that process and what is it that you provide to the content developer and the visual designers to put in?
	Brandon - Personally I tend to provide as little as possible.
632	Interactive pieces are created by media team / art team. Concept comes from ID
	I am not that involved in actually creating or developing them, more involved in figuring out the concept and what we want it to be. We work with, like we have a media team, we have an art team, and whatever. So we go to the media guys and say hey I really want to make this app that can be on the apple store and in the course.
71	Collaboration with media team is generally good. Media team does "their best" to accommodate specific requests from instructional designer.
	We have really good media people so they are really good to work with. If I do have specific suggestions they really do do their best to accommodate that.
34	Instructional designer needs to be able to communicate clearly with team members the overall goal of an interaction. He or she might not be specifically responsible for the actual interaction, but she owns the result.
	it is usually going to a programmer or artist or somebody and saying ok, here is what the goal is, here is what we want the experience to be how do we do that.
35	Instructional designer is a guide in design process. She owns the vision, but relies on the expertise of software developers and artists to execute the vision.
	Because a lot of the eLearning, I don't necessarily know the programming, I don't know the best way to do it, but I know what outcome I want and so then it would be talking to somebody who knows how to make that outcome happen
250	I usually provide an outline, a brief description of what it is and then an outline of how the thing is going to flow. That is usually for the high level design document and then they will take that and sort of beef it up.
252	Developers put in boilerplate stuff "make it into something coherent"
	then they will take that and sort of beef it up. They will put in all the boiler plate stuff. They will also make it into something coherent.
255	"I will also spend a lot of time on the phone with them explaining and walking through the whole thing because they will capture what I am saying better than I will capture what I am saying."
	I will also spend a lot of time on the phone with them explaining and walking through the whole thing because they will capture what I am saying better than I will capture what I am saying.
401	There was a great deal of specialization within their organization.
	We would have people-part time employees -- or whatever -- would do a lot of the actual scripting and then we had a dedicated programming team and so they would do, and it is the same at my company now. We have SMEs and then we have programmers who actually build stuff and we have graphic designers who create the videos and graphics and all of that stuff. Those were definitely segmented, but at the company where I was, it was segmented even more. There was a design lead, we would go and do the upfront analysis with the client and then come up with the design strategies, and then, partnering with a

	design producer (what it was called there), it's kind of, I would say synonymous with developer, and they would then be responsible for overseeing that design and bringing it to life and working with the artists, programmers and the writers to make sure that it gets developed. That was how it worked there so it was definitely specialization in those areas.
637	Visual designer would have final call on aesthetic things.
	I guess the designer would have the final call on some of that.
132	She worked with team of six people some ID, some graphics some programmers, but the team "changed quite drastically over the year."
	It changed quite drastically over the year but the team is about six people on a consistent basis, with instructional designers with a support crew of graphics and actual programmers to do the back end LMS creation.
	<i>Shared ownership of project</i>
49	The full team feels ownership of the usability and overall experience of the course. Team members feel open to make recommendations that "can head off difficulties."
	our media folks, our artists, they are really good at what they do, they can head off difficulties that might later hit QC.
182	She helps out with more granular instructional development with other team members after the initial analysis and instructional strategy has been created.
	Because I am a consultant I tend to be involved in all aspects of it which I really like. I do a lot of analysis work, I do a lot of evaluation work, when I am not busy doing either one of those for different projects, then I will help out with the very granular instructional development.
	<i>Creating a shared vision</i>
409	Collaborate initially to determine approach in "brainstorm." Worked with a team to develop
	No we would have brainstorm meetings up front where we would get together with the graphic designers, the programmers and everybody and kind of figure out what we wanted to do
412	Collaborating on a design requires negotiation in order to reach a solution that the team can agree on.
	graphic designers would come up with mock ups and come up with look-and-feels and then we would just go back and forth and negotiate until we got something that we were both happy with.
266	He is a social designer/learner so will go to others to run ideas by them or gather input that might be relevant.
	I will certainly look to others for input. I will certainly run ideas by other people and ask for ideas from other people but that I do a lot. I tend to be a very social learner and I guess designer and so I will definitely actively reach out to others, you know, generally in the organization and run ideas past them and people whose solutions I have respected in the past or people who have done interesting things in related areas in that past and or people with responsibility for the account, often looking for an idea of what will the politics of that account support or what will the politics of that particular situation support. That is pretty much it.
269	Fan of going and talking to developers to discuss things.
	At what point are those meetings happening for discussing the high fidelity elements, those brain storms and things like that. At what point do you usually bring those folks in to talk about those things?"
	Brandon - Whenever I notice it. Whenever I notice that there is a disconnect I will, you know it doesn't have to be formal. We do have formal meetings and the client certainly has their review cycles and stuff like that but generally speaking it is all sort of ad hoc. I am a big fan of sort of going over to someone's desk and just pulling up a chair and talking with them and making sure that we are on the same page and finishing up. Sometimes I will do it via link or something else but generally I don't have a problem with going over to somebody's desk and just, you know, sitting down if they are in the office.
634	Concept is shared with team in person usually and then followed up with project management software.
	Usually face to face and then follow up with the notes that go with our project management software. Then we build a task that they can actually log their time to and that is kind of summarized, these are the things we talked about and this is the deadline.
	<i>Creating internal community</i>
260	There is trust in coworkers and trust in the hiring practices at his organization.
	there is a lot of trust. I have worked with these people before and I know, generally, what to expect from them. I also trust in our hiring practices, you know it doesn't make sense to have to do double duty, right.

	You hire somebody because they are good, why are you then going to redo their work, that doesn't make sense. But you do want to do quality checks, make sure things are the way you expect them to be. Nobody is perfect.
274	High level of respect between disciplines within their organization.
	There is also, within our office a high degree of respect between people, between groups, between roles and everything and the ID's if they are at all smart have a very high degree of respect for the content developers and the media developers.
53	Doesn't seek outside sources for guidance first. Seeks team member help.
	Well, first, as most people do I go to my colleagues. You know, just for a, I have just hit this problem, I don't know how to approach it and so we kind of pool our brains together.
532	Relies on team for guidance.
	A lot of what I do, where I turn to is my team. My team is amazing. My manager, in particular, has a lot of experience on his end too. The development and working with subject matter experts particularly. I work a lot with my colleagues. A lot of graphic designers. Graphic design products from this guy, I get a lot of inspiration from visuals and then that further helps me figure out the way I want my design to be and the way I want the development to be.
271	He's not in the same office as most of his colleagues, but has met most of the remote colleagues face to face.
	I am not in the same physical office as any of the, actually my content developer on one of my projects is in this office but there are other people, there are actually three other ID's on the project, one of which is in I want to say Connecticut, the other two are in I want to say either London or Cork I forget and then sort of the account management team is here. The project manager, I am working with one project manager who is in Wisconsin, she is on two of my projects right now. I have two project managers for two of my other projects are physically in this office. One of the other projects, which are just weird to describe, so some of the people are in the office and some are not. My involvement in the project is also a little bit weird and sort of undefined at the moment. The answer is sometimes they are here and sometimes not.
272	Tries to use video for interacting with colleagues, rather than just chat or voice.
	I make a point of trying to use video as often as possible. I made a point to start to do that last year, maybe a year and a half ago to try to turn on video. Most people will just turn do instant messages. I started to using voice as much as possible and now I will use video as much as possible. So I think that bridges a lot of that gap.
678	Community of instructors builds the courses together to make them better.
	He like having us as a community build the classes to make them better
808	Sharing new ideas with team.
	They get creative and we share those things out with each other. Most of our PD is in house, because we are sharing out what's working and what is not working and we find creative solutions to things that in brick and mortar you would have to find creative solutions to.
714	Share ideas with one co-worker and then present it to administration.
	I have one co-worker who, we are chatting almost every other day about something, like hey I wonder if we could do this and that, and you know let's implement it and see what works and then we will maybe bring it to the admin and see what they think about it and then that could go school wide.
420	Team shares articles through Yammer to each other.
	We would share interesting articles through yammer
	<i>Working solo</i>
346	Generally don't collaborate with other designers on the team.
	Even when working in pairs, it is generally individual work
	There are about 14 of us on the team and we really don't collaborate too much on projects.
	Every now and then we will have maybe a couple of people on a project but it is individual work.
361	more of a one-man-show now.
	Now it is strictly on me to pull all that content out of the subject matter experts head and hopefully get all of that correct when I write it out and then send it back to them. So quite a big difference between my last job and this job, more of a one-man-show now.

347	They will generally review each others' work.
	Reviews, we try to involve at least one person on the team in review. We don't have a lot of collaboration once we get on a project.
	<i>Collaborating with SME</i>
502	Designer can collaborate with SME using action mapping to help both come to an understanding of the needs of the design in order to reach a specific objective.
	It is Cathy Moore. Really great at what she does. Her method is actually mapping where you basically have a white board in the room that you are having the meeting in. Set the goal for what the subject matter expert wants from the module smack in the middle of the board. From there you branch out and identify with the subject matter expert what behaviors will need to be done for that goal to be met and what kind of practice activities need to be done in order for that behavior to be done, in order for that goal to be met, and kind of branch out from there. It is easier for the expert and the designer to identify where they are both going to be, what is going to be the end result.
503	Action mapping process leads to collaboration, rather than a content dump from stakeholder SME
	So it is not just the subject matter expert saying here is the content, do what you need to do, it is more of a collaboration of ideas and it makes it a lot easier further down the line and development process reducing the changes needing to be made because that communication wasn't clear before.
635	She has a "fair amount" of influence on aesthetics, but more than she cares to have.
	Coming from a non-design background, her concern is with the content and its flow and organization. She has concern for the ways in which the course is designed, but how it looks is of little concern to her.
	A fair amount, a fair amount. When we built one of these Chinese apps you know what kind of colors do you want, do you like this background, do you like that. What kind of art should we, you know is it culturally sensitive to have big dragons or is that appropriate and a lot of that we consulted with some people on campus but probably more influence than I care to have honestly.
	<i>Collaborating with students/learners</i>
680	Uses students to improve the course by giving them opportunities to create elements.
	Just saying that they come up with some of the best stuff or making interactive games, like those are the things, animation videos, students are so good at that stuff and they have like such a good sense of what is going on in the world today and what is going on in their specific age groups culture that they can create this wonderful stuff that I then implement in the course and it just makes the course so much cooler.
	Individual designer/instructor aesthetics
bSA9	Centering of text is a pet peeve, but apparently teachers like to do that a lot.
	This drives me crazy by the way, when they center it by the way, I always go back and change it whenever I am in here but I won't do that right now.
bSA12	Teachers have personal aesthetic that doesn't align with the organization style guide, and make changes based on their own aesthetic. But administrator doesn't worry as much about it because the teacher teaches well. Perhaps aesthetics are more of a burden than changes warrant.
	It is very interesting to work with different teachers, English and History teachers like to be very creative and sometimes that bothers the eye, I find it bothering the eye. It is funny because I am an English teacher, that is, all of my training is that and so I find it hard on my eye to not have things all justified left. This is a good example of a class that I have gone through [00:09:41] and they are working in and then the teachers come behind me and, not purposely because she is a fantastic teacher, but has done things that is more pleasing to her eye but not following our style guide. Does that make sense? This is a really good example of what happens and why we have to consistently work through curriculum, although in the big scheme of things I don't terribly worry about this is not a big deal; she is including all the other pieces that I like.
bSN39	Design of course structure aligns with his "style of thinking"
	That is where we are at right now. I always have the part 1 and part 2 just to break things down. I don't know having a long list of things that I have to read through didn't, it just doesn't work with my style of thinking. I don't know outside my classes or classes that I have seen, I have a feeling that other teachers break it down in chapters or something like that but I am not exactly sure what that would look like.
bKA58	Some style differences exist between designers.
	So here is our blond lady, cute but not very critical. So it is not significantly different from the iterations

	that you have seen previously. Paul has a slightly different flavor of design and layout from me. Greg has a slightly different style as well. Between the three we intermixed the styles to keep it fresh so we didn't try to lock it down to the same designer for multiple units and the same piece or same module.
	<i>Design collaboration</i>
bPK32	Instructional designer develops curriculum, outlines content, and describes activities. Sketch and collaborate with developer and graphic designer. Designer would then mock-up the concept.
	So I developed the curriculum and for each course I basically come up with the content outline. I came up with the activities, I would kind of sketch out some ideas, we would have some brainstorm meetings with our programmers and graphic designers and kind of sketch out our ideas and then our graphic designers would mock it up. These are mock ups that look very close to what actually ended up doing, in fact these might be screen shots and not mock ups, I am not sure.
bPK33	Heavy collaboration with design and developers to help them bring to life his concepts and ideas.
	So I was pretty involved with, like this activity where they complete the sentence, that was me, that was my idea. I figured out how it would work, a lot of the functionality and kind of worked with graphic designers and programmers to fine tune it and execute it. Same thing with this activity here, these activities and these interactions were my idea where I worked with programmers and artists to bring to life and then worked with writers to actually write the text for some of these. Then again for these activities I would write one for an example to use as a model. Our scripters would come and script in the rest of them. I was pretty heavily involved in a lot of the details.
bPK36	There was a lot of back and forth between ID and graphic designer. Not sure how much or what specific influence graphic designer had on final product.
	The graphic designer, I feel like the way it would work, we would be in our brain storm meeting. We would come up with some ideas and sketches and then they would go and mock it up, show it to me, and I would be like yeah I like that and I like that but this to me doesn't really make sense or this should look this way and things like that. We would go back and forth until we got something that we both felt was right. Does that answer your question? I don't really remember any specific changes that a graphic designer suggested that I implemented. I don't really remember.
bC31	visual assets created by graphic designer. interaction was developed by v.
	No that was created by a graphic designer that we have on the team but everything else in terms of the interactivity was created by me, through captivate.
bN9	Her responsibility is to try to find or request images to match the request from SME. She might request from her artist team, but will often find one herself. She also has to pay attention to development issues, like alt-text in the HTML for images.
	So you can see, down here [00:04:32] where she had the actual optical illusions image, I go in and I find one or I request one from our artist that is the right resolution, one that we have permission for. Sometimes an instructor will just imbed a picture of a cat or something that they just pulled off the internet. We can't really use that because we have to make sure that we have good permissions. So what I will do is I will go in and try to find either that particular one and see if fair use of public domain will cover it or if it is just a picture of an orange stripped cat and it doesn't have to be that particular one then I go to our sources, like we subscribe to a couple of clip art sources, we have got other things and so I find the correct one and then I just put the note in there, I save out the correct one, in the right resolution, the right size the right everything into the folder and then I put in the information, the final name, what the caption should be, the alt text which ADA compliance, so put in the screenwriter text and then if there is a credit line I put that in you know courtesy of clip art.com or from NASA. Whatever the credit line is, so we have that information right there in the course. So I just go through, take a look at it and then here, I talked about it before, how we had these kind of inline assessments that we want them to do.
bN36	Discussion with SME to come to an understanding about what sort of exercise was useful for teaching a particular concept.
	Christijan "Something like that is something that you came up with as a recommendation or it this from the instructor? She said I would like to have an exercise that shows the powers of ten. And then we said OK what kind of thing are you thinking of? They gave us just a kind of OK give us these six numbers and then we did the little animations on them. So things that are quite subject matter intensive we do really rely on our instructors to help us out. So like this one, for instance, is pretty intense, the different kinds of

	interactions all the way out from, you know, inside an atom out to clusters of galaxies. So something like this we really would have our instructor fill in a lot of the content for us and then we are in charge of putting together the whole package, the visual, the content and the interactive.
bN40	Imagery will sometimes be dictated by SME or course instructor. They have an art team that takes care of that content, and the instructional designer leaves it to them to come up with something appropriate in general.
	That kind of depends on how, from the instructors about it. Most of the time we do have an art team so Susie Gerhart and her team are the artists so we will say "OK we have a physical science 100 course coming up and then if we have any specific guidelines to give them. For examples with this one we said have fun with it, just make it fun so they came up with this little cartoon of Igor and the mad scientist and they kind of follow through the course. Other times like I was doing an infant development course for instance for the school of family life and the instructor said whatever you do, please don't just use cute babies. This is an actual scientific rigorous course; don't make it look like toddlerhood is all sunshine and light. So we went for a more serious look, went for a lot more realistic look. We have had some instructors come in, for instance the French instructor, which Eleanor will laugh about, he was very, very specific, No baguettes, No Eiffel Tower, I want French orange, that is not French orange that is pumpkin. I want French orange. The German department came in, they were less snooty about it but they said I don't want to see anything with red, black, or fractured font, don't do it. So, you know that kind of thing, if there is something in particular that the instructor needs or that we know that we would like, like in the physical science we knew we wanted something fun, reduce anxiety, get the students more engaged, kind of have some fun with it. We do give that upfront to the artist. If we don't really have anything, this is just an open field, they can approach it in their own style then they just grab it and approach it in their own style. What they do is we supply them with a list of lessons and we also give them access to the content. So they will go through, take a look at the theme, take a look at the content covered in each lesson. They will try to tie whatever their banner is, the little illustration, they will try to tie that to whatever the lesson is talking about.
bN46	Artists, designers, technologists run their content by ID before it gets published.
	I did, I get a review for sure. And a lot of times the team as they are working on will say, you asked for this but as we started doing it, wouldn't it be smoother if it did this? And so we have a lot of that's not quite what I thought, or this would be good, or they suggest Hey this would be good so there is plenty of review. In fact for everything for the illustrations that people do, for the splash packages that come back, they run it by me first before everything is final and finished.
bN48	Most of the time what is produced by the art and development teams is good enough to roll with.
	That really depends, most of the time because we have had a chance to talk it through and because we have had a chance to talk about the design, what they come up with is really great and we just go with it. Other times, especially if we haven't had time to talk, if it is something really new or if the student employee is really new then we do some changes. Other times it is just kind of funny stuff that comes up, for instance these are artists, they are not science people, so on Physical Science 100 we needed them to say, what was it square inches, and they came up you know how science does it is just a little super script 2, and how they came up with it was a little inch sign, so a little quote quote sign 2 so they were trying to get the point across but they just didn't have the background to know what it was, so those kinds of things so far than others. So anyway great.
bC52	One-time instructional tool part of a larger training curriculum.
	Charlotte - Good question. It is meant as a one-time instructional tool. As far as I am aware of they cannot come back once they complete it. This training is paired with an entire curriculum to get these people certified to start doing the installations and basically all of their job responsibilities as a technician. It is a one-time training in a further and larger curriculum used for certification processes.
bN24	She works in code a little, but most of the other designers don't. They have the editing team format the HTML, but even that team mostly works in the WYSIWYG view of Dreamweaver.
	Nancy - Personally I like to have them both up at the same time, I do a code view, I do a split because a lot of it, if I just need a bulleted list really fast and easy to do in the WYSIWYG section, if I need to adjust columns or something it is a lot easier to do it in code. I am a little unusual because most of our designers do not do their own HTML. The editing team does that as well, the kind of editing/layout team. And most of the student editors tend to work just in the design view, not in the code. I guess I was raised on DOS and I haven't quite given it up yet. So this is the HTML view, so you can kind of see that we

	<p>have just taken the same thing that we added, this is what we call the splash page with the illustrations that go across the top of each lesson and then you can see that this came in with the correct formatting for the headings and everything else. This is the font we use, but then you see that we have some block quotes, I make sure that they are actually block quotes, so bring it over. Learning outcomes, Yep that is a numbered list as it should be.[00:16:05] Key terms – that sort of thing, put all that in, go through.</p>
bPK54	<p>Three groups: instructional design, art team, programming team.</p> <p>Instructional designer is idea and vision person, understanding project needs and creating guidance documents.</p>
	<p>Patrick - We have three main groups on the design and development side. We had the design leads like the instructional designers, that was my role, and we met with the clients, did they analysis and came up with the learning objectives and came up with ideas for activities and organized the content and stuff like that. We were really the idea people on the project and it was our vision that we came up with based on what the client's needs were. Then we had the art team and the programming team.</p>
bPK55	<p>Member of each of three groups is on each project.</p> <p>The art and graphic design team, they are kind of separate. The instructional designers had their director of instructional design. The graphic designers had their own director of graphic design and the programmers had their own director of technology or programming. We were like parallel organizations so every project would have a design lead who was the instructional designer, a graphics lead who was someone from the graphic design team and a tech lead who was someone from the programming team. The three of us would be the main people on the project. The design lead would have the ideas; the graphic designers I mean everyone would be involved in the brain storms. Up front as we are coming up with ideas to take to the client when we get back, the ideas have everyone involved and everyone having ownership.</p>
bPK56	<p>There is shared ownership between all three groups (art, ID, programming) of ideas being taken to the client.</p> <p>Even though the design lead is the one facilitating and driving things, still getting buy-in and input from especially the graphic designers.</p>
bN28	<p>Student helped create code for inline short quiz questions.</p> <p>This is one of those little fun inline questions, so I coded that in just into Dream Weaver so that we can say Yeah! I think the statement that the Mona Lisa is a beautiful painting is scientific knowledge, sorry that is not right, you know.</p> <p>Christijan "How much of that do you have to program yourself or is this a widget that you just have to plug questions and answers into.</p> <p>This particular thing is coding. It is a set code. Let's go ahead and pull that one up because it is interesting. It is a combination of HTML and Javascript that we just came up with in house. In fact one of our assistants did, she was taking a coding class and we were talking about Hey we would really like to do this kind of thing and she said "You know I think I could do that kind of thing for you." She just created it herself, which is really great. OK here it is and you can see, if we just switch over to the code view, so it is the entire thing is a question in itself, first paragraph is the Mona Lisa is a beautiful painting, and you have got your inputs of radio buttons of yes and no.[00:19:24]</p>
	<p>Analysis</p> <p>Analysis is understanding the problem</p>
146	<p>"More resources you can invest in analysis, the more confident you are that you understand what the performance gap is."</p> <p>The more resources you can invest in your analysis stage the more confident you are that you actually understand what the performance gap is.</p>
395	<p>Analysis happens face-to-face with client.</p> <p>Starting with business goals, behaviors, Knowledge, skills and motivation that support those behaviors. We would do that analysis with the client face to face.</p>
135	<p>You short change analysis if you go forward with a preconceived notion of how the eLearning should look or feel. Analysis is an opportunity to be open to broad ideas. Getting tactical too quickly limits an analysis' effectiveness.</p>

	You can short change your analysis to say that eLearning has to look like this or be flavored that way when you don't understand the type of content or the learner or the circumstances under which they need to be trained.
144	Peel back the layers to find out who the learners are, who the gatekeepers are, who the early adopters are. So I am designing for a solution that is going to take them from wherever they are now to the future state that I think they should be performing at. But in my head that analysis is saying how will we know that they had achieved that desired state. A lot of times people say really strange things like, "We want them to like their work environment more." Well that is lovely but if you had a bad day, or you had a cold or you had this or that you don't like anything so how do I measure what that positive attitude would look like in the work place. Do they come to work on time? Do they deliver deliverables on time? What kind of stats on the floor do they deliver if they enjoy their job? So member satisfaction is high because they have a positive attitude or they are service minded blah blah blah whatever that is. So I am looking at that measurement of performance change when I am looking at the analysis and say tell me about what it is that you do and why do you do it that way rather than this way. What are the barriers to performance? I am looking at it as a social system, as an informational system, a structural system. So why don't you peel back those layers of the situation to figure out who your learners are, who are problematic, who are the gate keepers, who are your early adopters and your late adopters and what are the resistant factors that are going into it. I tend to use a variety of approaches in the analysis and try to get different perspectives.
145	Analysis will help uncover what additional things are problematic. The client comes with certain preconceived notions, but assuming those notions are accurate can doom a project from the outset. I think it is really valuable to have the client identify what the problem is, to gather data as an external group and be able to say wow these are some other things that we uncovered and perhaps what appears to be the problem is only part of the story.
461	User research is seen as part of needs analysis phase. On one project they were able to observe existing training and performing focus groups as part of needs analysis. I did work on a project where we did have a needs analysis up front. That did involve much more; we had some focus groups and some interviews with intended learners. We went and observed some of their existing training and stuff like that, so it would kind of depend on the time and budget of the project.
148	Describing a stakeholder analysis for getting to the root of a problem A stake holder analysis is always helpful. It is very similar to a stake holder evaluation. Ask the people at the bottom of the food chain what they think the problem is and I would say eight out of ten people can tell you where the faults in the system are from their perspective and you begin to overlap that data, almost like a ven diagram of circles, and you will find a core of things that overlap. Usually the line workers say "management doesn't value this, this and this." Managers will say "line workers just never pay attention to X, Y and Z" and their bosses say "if only managers and line workers could see the big picture then they would know that this, this and this was the most important" and you begin to layer in those perspectives and you can see a line through the data of: there are all looking at that same problem for their perspective and you begin to have confidence that that version of the problem is probably accurate.
150	Teasing out the actual problem is the trick of analysis -- "weeding out the extraneous details" -- incorrect attributions made by management or line workers The trick is weeding out the extraneous details. So, management will often attribute a kind of behavior to an attitude or a lack of education or a lack of training. Line workers will often attribute that same issue to management not trusting them. How much of those things are really true and where is the real gap is the trick in the analysis.
151	Observation can be tedious. A large amount of observation is usually quite tedious especially if you are not inherently interested in the content.
152	Multiple observation points are necessary, along with a "significant" amount of time in order to see or hear patterns emerging that can then guide the design. It is invaluable to break up that observation so whether it is Y calling in a call center or observation on a manufacturing floor, you need some significant time to look at the patterns and to begin to see or hear those patterns emerging.
154	Observe and shadow management in order to see the need. So, a good chunk or the first week or two, depending on how much time (analysis is often a luxury) is

	being able to observe and shadow management.
157	Taking a multi-pronged approach to analysis yields better results.
	so you have got some issues to factor into your data gathering but like I say when you have a multiple stake holder approach you've got interviews, you've got observation, you've got company reports, you can usually get access to the previous training materials to do some content analysis.
158	Analysis might require 6 months, but you only take the time allotted from the company. "Obviously the better your analysis the more likely you are to be able to address the gap."
	It is just pretty basic stuff; it is right out of the textbooks as to what you could do. You have to balance, you know, the ideal analysis that could take six months to the constraints of time and resources and money to what you actually have available. Obviously the better your analysis the more likely you are to be able to address the gap.
140	The analysis phase serves as a sort of gap analysis, an evaluation of what is failing so she can determine if she has succeeded in bridging that gap through her instructional design.
	I see everything through an evaluation lens so I want to know. I have a lot of training as an evaluator in educational programs and products. I don't see analysis in the same way as someone who love analysis sees it. I tend to look at it from the perspective: help me understand what is going on in a typical sort of gap analysis type of scenario so that I know how to measure whether we bridge the gap or not.
142	Wants to understand -- like a gap analysis -- to know how to measure whether the gap gets bridged
	I don't see analysis in the same way as someone who love analysis sees it. I tend to look at it from the perspective; help me understand what is going on in a typical sort of gap analysis type of scenario so that I know how to measure whether we bridge the gap or not.
143	Discussion of what she tries to find out in order to discover barriers to performance, ways to measure success, ways to establish the baseline, etc.
	So I am designing for a solution that is going to take them from wherever they are now to the future state that I think they should be performing at. But in my head that analysis is saying how will we know that they had achieved that desired state. A lot of times people say really strange things like, "We want them to like their work environment more." Well that is lovely but if you had a bad day, or you had a cold or you had this or that you don't like anything so how do I measure what that positive attitude would look like in the work place. Do they come to work on time? Do they deliver deliverables on time? What kind of stats on the floor do they deliver if they enjoy their job? So member satisfaction is high because they have a positive attitude or they are service minded blah blah blah whatever that is. So I am looking at that measurement of performance change when I am looking at the analysis and say tell me about what it is that you do and why do you do it that way rather than this way. What are the barriers to performance? I am looking at it as a social system, as an informational system, a structural system. So why don't you peel back those layers of the situation to figure out who your learners are, who are problematic, who are the gate keepers, who are your early adopters and your late adopters and what are the resistant factors that are going into it. I tend to use a variety of approaches in the analysis and try to get different perspectives.
149	A stake holder analysis is always helpful. It is very similar to a stake holder evaluation. Ask the people at the bottom of the food chain what they think the problem is and I would say eight out of ten people can tell you where the faults in the system are from their perspective and you begin to overlap that data, almost like a ven diagram of circles, and you will find a core of things that overlap. Usually the line workers say "management doesn't value this, this and this." Managers will say "line workers just never pay attention to X, Y and Z" and their bosses say "if only managers and line workers could see the big picture then they would know that this, this and this was the most important" and you begin to layer in those perspectives and you can see a line through the data of: there are all looking at that same problem for their perspective and you begin to have confidence that that version of the problem is probably accurate.
567	Using learners in the design process will make subsequent evaluation better. It's a high priority to get learners into training design experience quickly.
	Well it certainly makes the evaluation of our products a lot better because we get it from first hand people that we are going to deliver it to anyway. In terms of the complexity of content, if it is clustered too much, or not clustered enough, if they are feeling overwhelmed by what they are getting, we obviously don't want that. So that is a high priority. I would want them to be used in the first evaluation phase for sure.
bPK28	Determined through analysis that a primary skill was to figure out who is customer, what their needs are

	and how to present product to show it would meet their needs in an appealing way.
	The sales people really needed to go to this section _____ on products, meaning they needed to figure out who was the customer, what were their needs and then based on those needs how can I present those products in a way the is going to meet their needs and appeal to them.
bPK7	Needs analysis with stakeholders, not learners.
	We did needs analysis first which involved going in and having a kick off meeting with kind of the key stakeholders for the project.
bPK8	Needs analysis to find objectives and target behaviors.
	We were just kind of figuring out what they were looking for and kind of doing basic needs analysis there and figuring what their objectives were and what behaviors they wanted to target and just kind of presented our data gathering plan to them.
bPK9	After that we had a series of interviews and we interviewed a couple of channel partners but more people internally in the company who worked with channel partners because it was kind of hard to put us in contact with channel partners.
bPK10	Observed existing training Interviewed target audience, but more interviews were with internal company people who worked w/channel partners, because target audience was hard to reach.
	We went and observed a session of their current training. Their current training was online or in person and we went and observed a session of their in person training where channel partners could come and get certified to sell and install their products.
bPK11	From observations and interviews saw issues that affected effectiveness negatively.
	So we did those observations and did the analysis and kind of came up with some main issues that the learners were having and that we kind of gathered from just looking at their materials and stuff. One was that it needed to be more interactive. Their eLearning was just Captivates with no interaction. It was basically just videos.
bPK12	Differing knowledge and skillset of learners made it difficult for in-person trainers.
	There was lots of, different people have different responsibilities, you have sales people, you have sales engineers who kind of design surveillances then you have installers who actually put the cameras on the wall and hook up the wires and all of that. They all had to take the whole curriculum so you would have sales people sitting in on this really pretty technical stuff that wasn't relevant to them and then you had technical people sitting in on sales stuff that was not important to them either.
bPK13	Training was not differentiated for disparate audiences.
	Another big problem was that people would come into the training on different levels, some people would have years of experience in the industry and going to the training was just checking off a box where other people were new to the industry and they really were learning, for the first time, a lot of principles of surveillance, some digital imaging and all of that kind of stuff. There was a lot of variance and it would make it difficult for the in person instructors to meet everybody's needs.
	<i>Limitations to effective analysis</i>
225	Analysis phase limited to second-hand accounts of what is necessary rather than direct observation because of the nature of a corporate environment.
	It always happens to some extent on every project because in a corporate it is exceedingly rare that you are ever dealing with the learner themselves so you are always going indirectly through some learning manager which is not the learner so you are always sacrificing something.
236	Does analysis during the design process -- adapting design, testing hypotheses as he goes
	I increasingly tend to feel that I do my analysis through design so as I have been thinking through the problem I will sort of formulate an idea, I will come up with an initial, I will read through that initial material and then sort of let it sit a bit. Usually I have some ideas at that point, but then I will send you the literature I am referring to, maybe it is not 100% accurate but it seems to be relevant. At least I come up with sort of an initial solution and then I explore variations on that solution and while reading through the materials and ask question to verify my hypotheses and my initial stab at it.
465	Felt there was some basic things that just looking at the product revealed, but still did a lot of research. The position of expert allows him to see solutions right away.

	But this has the potential to introduce confirmation bias. You immediately see a solution, which makes you look for certain things within the data as you perform a analysis.
	One thing I think is always difficult with analysis in general and especially in a corporate setting where you have tight timelines and budgets there were lots of things that I already knew or thought I knew like looking at their current eLearning and looking at their current in-person training like here is what needs to be fixed. Then it was almost a matter of like, kind of, you know, you enter in data and are asking questions that would kind of support those ideas. It is really hard to not do that in lots of areas. It looks like the confirmation bias in general.
516	like I said earlier, the department I am in, we are fairly new and we don't do a lot of analysis and we don't even do a lot of evaluation of our own projects. We do more of the DD, the design and development.
	Well quite a bit, the Dick and Carey model is what I follow most. I think it is the easiest way to break down content and especially if it is more thorough. I would say I would use about 70% of that and I would want to use more but like I said earlier, the department I am in, we are fairly new and we don't do a lot of analysis and we don't even do a lot of evaluation of our own projects. We do more of the DD, the design and development. I would say I use about 70% of the Dick and Carrie model that comes from the Addie model.
155	Observation changes the nature of how people approach their work.
	Managers universally say that they don't have enough time but if you did a task analysis on managers you find that there is actually quite large chunks of time that they use for social networking. It is a variable that can fluctuate quite dramatically so as you start to shadow a manager they seem to find a drastically larger amount of time to get things done because they are much more aware of being observed.
156	Anecdotal about doctors and nurses washing hands more frequently when they know they are being observed
	It is like watching in a hospital, if you are doing a study and are trying to analyze disease spread, if you start watching Doctors and write down every time they wash their hands, the number of times that Doctors and Nurses washes their hands doubles. It is really quite drastic, yet Doctors and Nurses will tell you that they wash their hands all of the time but when they are being observed, or when they know they are being observed their behavior changes
	<i>Incomplete or subpar analysis can result in failure</i>
147	Understanding the problem is like insurance against creating a design that doesn't change performance. "One of the problems I see in the field generally is that instructional designers are very quick to take the client's word for what they think the problem is."
	One of the problems I see in the field generally is that instructional designers are very quick to take the client's word for what they think the problem is. There needs to be data, there needs to be verification, we need to make sure we really understand it. If the client misunderstands their own problem and you design a solution for their misunderstanding you will never see performance change.
322	"I certainly have had failures where I have tried to put too much content into an eLearning where I didn't consider the audience or we didn't poll the audience correctly."
	I can certainly tell you about some failures that I learned from. I certainly have had failures where I have tried to put too much content into an eLearning where I didn't consider the audience or we didn't poll the audience correctly.
323	Lack of up-front understanding of the user ended up with them having to redesign something that had already been designed through a "painful process that took us a long time."
	We didn't hit the mark because we were putting information that was too advanced so from that painful process that took us a long time to create that and then to see it fail made me step back a little bit and focus on the learner.
	<i>Proper analysis can return multiples in dividends</i>
162	Anecdotal details about the award-winning training they did. The training proposed based on the findings from the analysis saved the client millions of dollars.
	And what we diagnosed in the analysis was that their employees could not have the work conversation that needed to occur to be able to meet the member expectations and to sell the product that needed to be sold. They couldn't have the conversation. They were ... the huge deficit in being able to talk to other people about what they did. They were afraid. They didn't know the words to say. If they made up their own words they were out of compliance with federal regulations. I mean it was just, it was a snake pit of

	<p>crash and burns. So we diagnosed that what they needed was much less content and a lot more conversation and that's really hard to do in a standalone WBT, I sit by my computer and I just talk to it, that is not going to work. I need a real person who is going to respond, who is going to say dumb things, who is going to laugh at me occasionally and who helps me laughs at myself and allows me to practice the words until I can get it right. I start with the simplest conversation and I build to the most complex. When I don't know the answer here is the performance support system that will give me the answer in 30 seconds or less if I can just stop freaking out and use it. So you practice, practice, practice, practice and you can get that conversational skill to where you are reasonably proficient in less than six weeks if you will do a bazillion (gross exaggeration there) but a lot of role plays. So it wasn't comfortable and the business said, when they saw how much money we saved them, Wow this is eminently scalable because I can hire a couple of trainers to moderate role plays if that is what it takes. I can do this or do that or whatever it needs to be so that those role plays are sustainable because a trainer costs me less than \$70,000. a year and you just saved me a \$1,000,000. I think I can hire a couple more trainers, I got the budget. It was hard to sell them on it because we couldn't anticipate just how much money it was going to save them, only that it would get their employees through and make them competent. We had a difficult time projecting return on investment except to say we think we can make this sustainable and here is how we do proof of concept.</p>
159	<p>Design sounded great to client, but then seemed resource intensive. Solution proposed ended up saving millions of dollars for the company, but they almost rejected the design because it appeared to be costly.</p>
	<p>You look at the gap and say what is it about this training that isn't working so I am going to use the product that was so wildly successful last year. In the sense that what we proposed sounded great to the client in the sense that they wanted shorter training with better trained employees.</p>
bC18	<p>Performed learner analysis and then task analysis.</p>
	<p>After I did the learn analysis I did a quick task analysis and pretty much identified the layers of installation that the technicians needed to know most about.</p>
bC19	<p>Divided content into three subsections. First process was to explain the reason behind the process being taught and how it is properly done.</p>
	<p>The trick was really condensing it down into a consumable format. There are over five different devices. I will show you a little bit. So there are over five different devices that the technicians will need to bring in with them into every installation that they are doing. For instance one item would be this take over module that you see here, another item is working with the mother board already installed at customer residency and then a few other items regarding battery transformer, power supply, ___ with a long jumper wires and other wires available. The idea is, and if my slide will generate a little faster, the idea is to wire these devices for each terminal in the correct method process order, in order for them to work properly. [00:07:44] when looking into the content I essentially narrowed it down to clustering three different types of parts. One part being wiring the zones, another part mounting the zones and the last part is powering the entire panel. So all of this information was divided into those three separate topics with each of these topics I made one part instruction and one part practice activity. So each of these three clusters had those two elements in it. For the first topic would be the zones wiring our panel to the mother board at the customers house, explaining what and why the wires work the way they do and how they accompany the sensors, security sensor that they will be connected to.</p>
bC20	<p>Instructional designer has to understand a great deal of information and be able to represent it correctly as well as generate the material that will help others learn the same content. If we expect to create a training that would take others a week to learn, we should expect at bare minimum a week worth of effort just for the designer to understand the material and then another generous amount of time to prepare material that will help others understand it.</p>
	<p>Once the instruction was done about explaining the hows and whys I gave a quick video analysis of how to get that done. So this is kind of a video instruction of what I previously taught them, so how they can intuitively play with the dragon drop creation I made along with accessing what just popped up which is the instruction panel. I wanted to make this as close to the live environment as possible. The live environment, if they were to really be at a customer's house installing this security panel they would have access to an instructional panel talking about how the wires will be moved around and where they need to be moved to. Having access to these two devices on the top would be the mother board, on the right would be the takeover module and everything else in-between are all the wires that can be played with. Once they go through the instruction, they have the practice activity to play around with, where they get</p>

	their feet wet with everything. For this example it basically talks about moving the high wire, which if you went through the instruction would be all of the yellow wires to port five on the takeover module which would be this little thing here.
bC47	She sat through previous live training to understand what she needed to design. Main tip from that exposure was need to understand how to read the panel.
	Charlotte - Yeah there were a lot of different ___ gone with it. I knew, from the instruction that I sat in, that all the previous new hires had to take before this training was in place, that there was going to be a lot of content to sort through. The main tip I got from that exposure to the training was learning how to read the panel because that would be a necessity in order for a technician to start the process of installing the new panel.
bC48	She felt installers would need to understand what wires did what and why.
	The second part was understanding what wires affect what security sensors and why they did what they did. I think that was the most important part because I think that once a technician understands why they are doing what they are doing they can go back to maybe the second, third or fourth installation and not have to worry about recalling everything they did in training but recall everything they did in their previous installation because it is a type of task where if you do it often enough there are little tips and tricks you can teach yourself, for making it go faster and more effectively.
bC49	Determine the fundamentals of what needs to be understood and then design from there.
	When it comes to the training you need to know all of the fundamentals just to start the task. The task is really meant to learn how to read the panel. Learn how to understand terminals to wires and everything within that vicinity. Having those three or four different objectives needing to be met, I was able to determine those three parts of instruction that related to those three or four objectives and further reduce it down to kind of the bone structure of what needs to be taught and what doesn't need to be taught as much.
bMS56	Analysis doesn't need to happen because they know their audience, their levels and needs.
	we still have our analysis, our analysis doesn't change for our trainings. We know who our audience is, their levels and their needs and so we pretty much skip that on every single project.
bKA9	Designers had to consider the full context of their learner's experience with previous training, with how work happens on the floor, etc.
	[00:06:24] So, typically, in the past, one of the non-instructional things that had been occurring was in an attempt to get peoples questions answered quickly they had what they referred to as floor runners so in a classroom with 30 there might be 4 people whose job it was to run around the class and answer people's questions as they came out working through this web based instruction. It was an extremely inefficient use of resources and it trained them to the wrong behavior on the floor in that they expect someone to come running to answer their questions, a manager, a co-worker, a senior specialist, a somebody and that is not an efficient way to run a call center so they trained them to the wrong behavior from the get go. They wondered why the managers time was spent, 80% of their day was spent answering MSR questions. There are certainly some questions that should be escalated to a manager but at least half of those an MSR can just look it up themselves. They have to feel confident that they got the answer, that they found it, that they gave the right information to the member so teaching them that skill was sort of the sub objectives to this training. I have kind of gone as far as I want to go through this particular module, do you have a question, do you want to ask me more stuff?
	Design Tools
172	Evaluating tools requires an understanding of their affordances.
	So the features for learning and the tools for evaluation as to how do I evaluate this tool vs. that tool, what I tell the client that they should develop it in. How do I choose an LMS? I remember back in the dark ages when we were looking at LMS's and saying this one has a chat room so that must make it better, right. We didn't know how we were going to evaluate the affordances of the delivery mechanism. We should have been asking questions, but we just didn't know back then, about how interactions were structured and what could you program and how were the assessments tracked within the system. We tend to say really silly things when we evaluate tools, if you haven't been trained or haven't developed the insight into affordances.
173	"This will sound really cheesy, but I really like basic tools. There is lots of stuff that you can do if you have reason."
	This will sound really cheesy, but I really like basic tools. There is lots of stuff that you can do if you

	have reason.
175	<p>Designers will often skip deciding deliberately what media element is needed for specific content.</p> <p>"Seldom do you see instructional designers when they go in at the analysis stage say, "what interactions, what things are required to understand this content?" So I can do a sim(ulation) or a demo or a little movie of this piece interacting with this piece because if you don't see it you don't really get it and then I am going to have a bunch of content that I am breaking up with visuals, not because they particularly need a graphic but they become more memorable."</p>
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180	Instructional designers don't know new instructional tool and how to do it effectively. It is not taught in classes.
	But that is very different, when I taught instructional design I certainly did not teach how to create infographics but a lot of the graphical design principals still apply. I have eleven people that I work with right now as instructional designers and two of them know how to create good infographics. I just find that really strange, that we have got this new tool or new way of communication large amounts of information that is only going to become a more heavily used tool for summarizing and creating the interest that drives them into the deeper content. We don't know how to do it. It is like marketing meets instructional design meets graphics, I don't know what it is but we are doing it halfheartedly if at all.
303	No set templates in captivate.
	We really don't have set templates to use.
490	Cornerstone LMS. "It does what we need it to do."
	"What LMS do you guys use here?"
	Cornerstone
505	Appropriate tools can help remove barriers of understanding between differing team members.
	So it is not just the subject matter expert saying here is the content, do what you need to do, it is more of a collaboration of ideas and it makes it a lot easier further down the line and development process reducing the changes needing to be made because that communication wasn't clear before.
515	Uses Dick and Carey model (70%) but doesn't do a lot of analysis or evaluation
	Well quite a bit, the Dick and Carey model is what I follow most. I think it is the easiest way to break down content and especially if it is more thorough. I would say I would use about 70% of that and I would want to use more but like I said earlier, the department I am in, we are fairly new and we don't do a lot of analysis and we don't even do a lot of evaluation of our own projects. We do more of the DD, the design and development. I would say I use about 70% of the Dick and Carrie model that comes from the Addie model.
750	LMS allows you to organize content better.
	I love the benefits of using an LMS, I worked in quite a few, and the working that for students I think it is easier to organize than how I have done it before when there was brick and mortar.
753	Uses moodle.
	Each LMS has its strengths.
	Right now we are using MOODLE I think we are at 2.8 ___ version. I worked in Canvas, I worked in Brain Honey, I liked them all for different reasons, Moodle is very familiar, I have been in it for quite a long time.
765	They use tags to help signal to students specific items that will help them recognize familiar elements right away. This theoretically reduces cognitive load.
	Resource, quiz, so tag words that help the student identify right away what they are going to look at and what they are going to do with it.
766	Media being used -- videos, blocks of text
	Our teachers use everything, we use videos, and they do personal videos where they are doing a short presentation.

768	Books within LMS
	We use books within LMS that break up the text that way a little bit.
803	Moodle is better than others she's seen.
	"How have you found working within that LMS to be? Is it, does it impede your ability to do good design or does it enhance it or is it fairly neutral."
	I have worked in several LMS's and I definitely feel that the one I am working in now, Moodle, is better than what I have seen it before. I don't feel like it impedes.
804	LMS (Moodle) doesn't impede.
	I don't feel like it impedes.
805	For online LMS enhances the experience
	I have worked in several LMS's and I definitely feel that the one I am working in now, Moodle, is better than what I have seen it before. I don't feel like it impedes. I feel that for online it enhances it, I mean there are definitely differences.
806	She helps convert teacher content into online content that fits in the LMS
	Teacher pedagogical methods rather than content -- peer edit, for example.
	And they say I want to do da, da, da, da, da, da, da and I figure out how to put it online because there is always a way, it is just a matter of tweaking what it looks like.
690	Loves Moodle.
	We use Moodle and I just love it.
694	Moodle gives flexibility with layout, etc.
	They all have like a blurb at the top that has learning objectives and a little picture, there is that kind of structure to the class that is really sweet with the LMS but that is because you have the total freedom with Moodle to work, where some of the other LMS's may not be as, I feel that Moodle has a lot flexibility when it come with what the user wants to do with it.
695	Loves moodle. Easy to use. It all makes sense.
	I love working with Moodle. It all makes sense, it has all the features that you can think of using, it has it and it is easy to use.
696	Moodle still under development, but it is "wonderful place"
	Some of the things they are working on just like any website that is that broad and with that many features but overall, yeah I think it is a wonderful place.
697	Google apps also good and might purchase moodle.
	I love the Google apps too so it coordinates really well with Google apps, I heard rumors that Google is a huge provider for Moodles financial backing and we may end up buying them out one day which would be sweet.
23	LMS navigation can interfere with learning through too many clicks between assessments and content areas. The structure of the LMS makes sense logically -- it matches the model of the data structure, but it doesn't necessarily match the mental model of the student. But, perhaps more importantly, it doesn't match the instructional model as intended by the instructional designer.
	just LMS's in general, it really is quite a lot of clicks out because you click the next thing, next on the menu Yes I really to want to start the quiz, Yes I understand that I am starting the quiz, Ok now I am doing the quiz. I have to answer all of the questions before I can get the feedback.
25	Nancy wanted to have quick assessments within her instructional flow, but the way the LMS was constructed, it required students to make several clicks to an assessment area of the site where they would engage the assessment and then required a few more clicks to get back to the flow of the instructional content. It seemed to disrupt her ability to create the type of instructional experiences she wanted to create.
	It just seemed like a lot of overhead for what was supposed to be kind of a fun, see you are really learning something.
28	Assessment engine functions strictly as assessment -- no nuance of less assessment-oriented instructive interaction
	If you are using the assessment engine it feels like a quiz and it will mark you wrong and it will mark you right instead of just saying wow that is an interesting answer, here is what we thought.
94	We have standardized on Brain Honey, so Agilix is the company and Brain Honey is the product.

119	LMS, in spite of constraints, is something she doesn't have a big beef with.
	Just add a couple more little features,
120	She is actually very happy with what the LMS does that she doesn't have to worry about, namely the logistical pieces like grading.
	I am very, very happy with our LMS, I would much rather have it handle all of the logistical pieces like grading and everything so I am very happy with that.
bN25	Uses QTI to format quizzes in the LMS.
	The next thing is the reading check that we talked about, I take that and put it into the format that Dream Weaver likes, which is called QTI which is a standard. Make sure that the directions go in, these are standard directions for all of our reading checks for this course. And then go in and put in the questions, so put in the questions and the correct answers, the feedback and all that kind of stuff. QTI is really straight forward, it is what Brain Honey uses as it's mark up. It is just type of question and then as you can see just really, really straight forward. So type as a multiple answer, what should the score be, I am going to give you a point for each one you get right. Which objective does it map to, we are very careful with the assessments that we can point each question back to a specific outcome.
	<i>Technology strengths and weaknesses</i>
bN29	Satisficing. She would like the technology to work in better ways, but she makes-do with what is available.
	If you get it wrong, this is what you see, if you get it right this is what you see. This is the next question, Smoking causes cancer. So I would really like it if it was easier, like you said a little widget, put your stem here, put your first distracter, your second distracter, correct answer, I would love that but that would take, well our programmers had been working on that for about nine months and hadn't made any good headway on it and we were getting down to the point that we needed to get this course out, so satisficing??If it works it works. So anyway, go through that following my leads.
bKA21	Captivate 6 was a constraint they had to work within. It limited their ability to create the kind of training they could create easily with a more recent version. She also feels client ends up paying more for retrofitting training to old software than they would spend just upgrading their system.
	Katrina - That was asked for by the client and the version of Captivate is still constrained to Captivate 6. On the project I am working on now, which I find an abysmal abuse of WBT. Considering what Captivate can do now, the fact that we are constrained by the client to use such an old version of Captivate I just find criminal. They want lots of interaction, they want lots of things a newer version of Captivate is easily capable of but they don't want to pay to upgrade the system that they currently deliver on and so they end up paying more to vendors like us to build material in ancient software. I mean it is crazy. Sorry, little soapbox, you can tell I am annoyed. [00:12:29]
bSA28	She likes Moodle, but there are capabilities she wished it had that it doesn't.
	You know I really like Moodle, there are, you know I have things in my head that I wish, capabilities that I wish, there are more things that we are not using.
bSN14	Using Google Docs as way to edit content on the site. The Google doc can be embedded in multiple courses, so there's one area to edit and it is reflected in all the courses.
	Automation
	It is really nice because when it is in a google doc that is one thing that is super nice, because then if the admin wants to change something or if something was to change then they could change it once and it would change in all of the courses in the school. That was something I was a huge proponent for and they ended up kind of making that shift in regards to a couple of things. [00:05:14] I was really happy about that.
bSA31	They are working toward implementing a feature to align assessments and other course elements to objectives for future data mining.
	There is a feature in Moodle that every assignment could align to specific objectives, so if a student got 80% on that assessment or assignment, it would say that they had mastered that objective, or that standard or that target at 80%, so we could set what we felt like was mastery, and be able to track all of that and that is really where we are going and headed. We had to do all of that, we work without it being overwhelming and the teachers know we are heading there and when we started at Moodle, it wasn't completely what we wanted and now it is. We just haven't started that piece yet. This year, actually, our goal, our school wide goal is to work on this, on making a very similar look in all of our courses. We

	didn't used to do that. Similar, but at least not exact, everyone has their own twist and then these navigating the course. So these were our two school wide goal to implement this year, the idea is to look towards that. Objective alignment to assessments, specifically where we can look at data, generally from them because we know that the students are meeting the objective with the assignments but what we don't know is that we don't have whole data and which assignment goes to which objective in a week in a module and so that is where we are headed. Does that help? And we are excited about that.
bSA49	Hates the gradebook. And a gradebook override.
	No it is not, although sit there work heavily with Moodle we are, one of the things that we all hate with a passion is the grade book, what they have done is there is a grade book and there is a grade book override called jewel grader and we hate _____. The problem is 75 ways to do your own thing
bSA50	They give feedback to Moodle about things they would like to see.
	and so we are constantly giving Moodle feedback, we attend the Moodle moot every year and work with them and give them our feedback and they have changed things, there are some things that have changed, you know they are slow to, they are slow like lots of things to make those changes. But we do, we try to provide helpful feedback and specific feedback with snips and data to back it so they know we are serious about some things
bSN12	Embedded technologies are improving, which removes some of the weaknesses of using open source, non-proprietary technologies.
	I have actually seen a lot of that in regards to classes, the improvement of imbedding codes and things like that. They are so much shorter now and there is so much less issues.
bSA51	LMS was made by people who weren't teachers.
	and the grade book is ... it is slowly evolving and so it was obviously made by people who weren't teachers.
bSN50	In spite of bugs, Moodle is flexible enough that gives him control as a teacher to provide the kind of content he wants to provide.
	I love Moodle. I actually worked with some other ones and I worked with some other classes that have been written out already, like basically they are bought curriculum that I am teaching and in my experience it is like, I am just a person that is creating. I don't have any control over the bought curriculum and whatever the LMS's have been. I love Moodle and how you really have that, you know you still have those mistakes in Moodle that has a user like my step 4 went to step 6, I didn't have a step 5. That is like, little things that you catch over time but it is just so nice to have that control as a teacher and for the content to be much more exciting to me. You know it is like I created this class, it is everything I wanted to teach and the LMS made that possible. It is really there are little to no tweaks, the only thing with this is grading, it is pretty tricky because you have like a jewel grader and then you have a grade book which is up here. Jewel grader is something that works inside Moodle, it is an outside program. In order to like zero out assignment you actually have to go into the assignment and then go to the bottom view all submissions and then you would zero out things here. It is kind of random where things are but once you get used to it. If you zero out things in the grader then students can't actually submit work again but if you zero out in the assignment then students can submit and students will show up in your jewel grader. I really enjoy the LMS, I think it is awesome.
bSN85	Company has a technology coordinator who works one on one with faculty.
	Mrs. S. W. is our technology coordinator and she works incredibly well with everyone to make sure everyone it kind of able to be a master at it and to be able to do exactly what they want. But it is a lot, it is a learning process. It is nothing, you can't like...
bC85	The flexibility of a tool is often inversely correlated with it's difficulty to implement and/or master.
	One of the more favorite things about Captivate are the variables I can play around with. The thing I love about that is you can do just about anything if you know enough about the standard actions and the more complex actions. Those are great. The difficulty with that is you need to know it well enough that you don't need to worry about using a guide online, about making one special interactivity rather than just a singular quiz question. The thing that I love about Captivate is that I can make assessment and practice activities more interactive rather than just doing multiple choice questions but at the same time it requires a lot of learning on my end in order to make that done and done well. It is kind of an unlimited source with those variables and those opportunities to provide those actions. That would be kind of a love hate thing with Captivate. Captivate is a great program. Adobe, Adobe as a company can do a lot better with providing more practice and training for anyone using their products.

bC91	Built-in widgits make design less customized. "I usually have to adjust my vision for the training to fit the needs of the widget or their last of modifications that I might want to connect with."
	I see. Let me sit on that one for a little bit. I need time for reflection on that. One thing they have are the little interactions that they provide. The little widgets that they have pre-installed with the program. Those should be a helpful thing for designers yet I almost think it impedes the idea of intuitive interactivity and character, for lack of a better word, for training. It makes what should be something more fun and effective, makes it more rudimentary, makes it less exciting to do the training. What I am looking for in interaction or assessment in a training activity, I want to have something that is easily made without a lot of time since time is always an issue in making trainings. My hope is that those pre-installed widgets would be helpful but they are more an impediment if anything should a designer use it. It doesn't allow for a lot of play, not a lot of ways to change it should something need to be changed. It is basically is a come as you go type of widget should you choose a widget to play with, if that makes sense.
bC95	Creating custom interactions is time consuming, she'd prefer to have more flexibility with existing widgets. As a designer I can certainly make those interactions myself but that again increases the production time which increases, or further delays the deadline and that isn't something anybody wants. If I were to change sometime with Captivate itself I would say more intuitive widgets.
bC97	Would like to be able to intuitively alter widgets in captivate. Me as a designer. I think if I had the capability to modify by any means, even if it is a small modification that would be great but that is not an option when it comes to these Captivate widgets.
bMS16	Built in powerpoint. Markus - This one was actually build in Power Point.
bMS17	Articulate to package into e-learning We used Articulate to package it into eLearning.
bMS18	Video recording done through articulate. Video recorder was done in Articulate's video package as well.
bMS19	Articulate quiz maker. We did have some quizzing, I think we had a quiz that was at the end of one of the tutorials that we also used Articulate quiz maker with that.
bMS21	Powerpoint for initial quiz Markus - That particular one was Power Point. Just basically the question came up and then there was a delay of maybe 10 seconds and then the check mark came up.
bMS27	Tool chosen was labor intensive to make changes to. Markus - The design of this was actually pretty tricky, specifically because of the tools that we used. Anytime we had to go back and make changes for instance to any of the little buttons at the bottom it was kind of a labor intensive to back and make changes to all of them. Overall I think it was you know it was making five or six tutorials that are about 35 long, each one.
bPK51	Authoring tools limit ability to create/innovate creative approaches or more visually compelling approaches to instructional design. Patrick - Yeah and in that, some of that is just the authoring tools. I think the reason we were able to break away from some of that is because we had a custom tool. An in-house tool that let us do something. Again it was still template and page based but we were starting to break out of that. I know that even from the time I started, everything that we did was pretty page based and pretty traditional looking and by the time I left we were doing lots, a lot of our stuff was a lot prettier, a lot more like advertising grade looking than like eLearning looking.
	<i>No primary category</i>
385	Example of learner experience -- multiple media (text, graphics, videos), divided into lessons. Each with a knowledge check or quiz It is divided into lessons. The owners access through a main menu. For media we have onscreen text and graphics and videos. We do not have audio narration. The onscreen text is probably the main medium of communication but we also use a lot of graphics. We have some videos. It is divided into lessons and each lesson has some text and some graphics, maybe a video, some kind of quiz or knowledge check at the end.

116	Instructional design is accompanied by a strong sense of providing value, in helping instructors transition a course to a new format.
	What has kept me with it is honestly, loyalty to the faculty. I feel like they have come to trust me and depend on me and I don't want to let them down. I want to keep going and make sure their projects come through.
431	Design problem: Designing the activity to be a simulation.
	"Alright, how do we come up with an activity that can actually simulate this real world thing"
128	Existing training was bogged down with too much material. Designers suggested a reduction in the primary content to train around as part of a wildly successful training recommendation.
	Yeah it is a pretty massive achievement. You don't usually see that kind of return on investment, it is definitely not typical but their previous program was very long and very detailed and had been evolving over ten years into the weeds and gotten away from what they needed. Sort of the 80/20 rule, you need 80% of the material very occasionally and 20% of your content you use all of the time.
131	Client was "gobsmacked" that they were able to have the productivity improvements that resulted from the e-learning experience.
	When they saw how greatly reduced time wise they could get their new hires out onto the floor and they are as productive in all the matrix that they count as folks who had been on the floor for a year. They were absolutely gob smacked that we could get that kind of performance out of folks who had only worked for the company for six to eight weeks.
69	In spite of technological constraints, some designers have some control over individual elements of the experience.
	I have more control over the look, say I want to build a widget or a little game; I have more control over the look of that.
163	Pricing on value pays biggest dividends
	Now, in hindsight, I wish we had figured out a better payment schedule and that we had said here is our flat fee and then we want X number of dollars for every week that we save you in getting them to proficiency because we would have made a boatload of money and we would have all retired.
164	Different pricing methods, including money back guarantee
	Well we are working with the client on some other projects and we are certainly using different funding models for those projects. But it takes a really gutsy instructional designer to say if this doesn't work don't pay me.
581	Marketer brings in new projects.
	On the university level we have a faculty consultant, I am sure Jess will tell you about that, and so she and I work with the marketer who maybe have requests coming in, saying we are a tech school and we don't have any Spanish teachers, do you guys have online Spanish for the first two years, or whatever.
582	Questions come from departments and expand into projects
	We try to respond to those requests and we have faculty who reach out to us. So a couple of years ago the German department reached out to us and was kind of like, so you guys know about online stuff and what do you do and what happens to an online course, you know it just kind of starts through with conversations.
583	They get a lot of work from word of mouth now.
	now we almost don't need to pursue courses they come to us
584	Looks at marketing material to find a need for a course
	then we can look at the marketing information and say Oh, well there is a demand for 321, that class that you take after your mission you have this proficiency level and you can take this proficiency test or there is always a demand for first year
228	Most everything has a component of eLearning now.
	I guess you could make an argument that most everything has a component of eLearning these days.
229	eLearning a part of IoT, and instructor-led trainings as well.
	think you could make an argument that the IOT [internet of things?] would also be eLearning. I think you could make a strong argument for many of the instructor-led trainings because there is usually an electronic component to it.
270	On 5 or 6 projects
	I am on like five or six at the moment.
702	they are just going to scroll through it and not read it anyway.

703	If you make one little change in the directions they are not going to see it and then you are just going to get the work that doesn't have that.
724	I know I did a bunch of virtual field trips type of thing. I was going to Chicago for a wedding so I just brought a camera and did an architectural tour and provided that for a unit in my class. Just thinking actively about how your life can be a part of your class, whether it is this or that I don't know. It totally depends on what class you are teaching but there is always some correlation because if you are the instructor for that class then you as a human being are interested in that subject matter and are doing something to further your education in that so bring your students along for the journey in regards to images or videos.
bPK19	Third phase of performance support.
	After that we had kind of a library of performance support, that was the third phase there. That was our curriculum solution to that. The other issue I have mentioned before was the interactivity so that kind of moves into the next section, that we create these custom web based courses. Do you want me to keep going, do you have any questions?
bKA39	Project built in annual revisions to course.
	Katrina - There is a system built in where it can be updated. All of the content is coded and then you can find the pieces that you need and then update them. They have a team that routinely, like every year, so it is not that regular but the instructors that are responsible for the content have to track all of the changes on a daily and weekly basis to the content in the courses. They make recommendations every six months if there is a lot of stuff changes or every year if it is just details.
bPE17	TAs grade work in online course.
	Penelope - There are some tools that exist for that, she was just uncomfortable using them because this wouldn't be like a formal writing, so those tools generally, the algorithm are pretty formulaic, tied to formal writing in German and she wanted this to be a more informal tone, so. But they are usually like a paragraph, they are not very long and the TA's can quickly....
bPE25	Students still interact synchronously online in the "conversation cafés."
	But they do have those, I think I mentioned those conversation cafés where they just come into a virtual lounge and interact synchronously. So she did build those in and she did build some scaffolding for what they should accomplish when they come in.
bPE33	The students in the online course are submitting material for assessment, to see if they have done well or poorly.
	Penelope - So they have a written essay, like a formal essay. It is a narrative essay. They have these crafting paragraphs, here is this paragraph, it was written kind of elementary language level I guess and so they have to rewrite it in a more sophisticated level. So it would be like taking a whatever, I don't know little kids stuff anymore, a blue's clues book and writing it in a more sophisticated way. It is really helping them use more sophisticated sentence structure, more sophisticated grammar and of course more sophisticated vocabulary. They have, trying to think, you may have already seen it, the film Performance. Here it is the film recitation. Here they record themselves performing a scene from the movie, so they can do it with somebody or they can just do a monologue or whatever but essentially it is developing spoken fluency. So they have to memorize it, they can't read it. The pronunciation should sound good. So sometimes when you are, I mean you know this as a missionary too, did you have discussions on your mission, yeah, ok when you memorized your discussions you don't have to think Oh, did I say that word right because you memorize it the right way, right. But when you start talking, like Oh, let me think about that word for a second, let me think how I say that or whatever and the fluency changes all of that. So by using them in memorized text it is designed to help them just increase their fluency, basically. So at this part of the lesson they submit what passage they are going to do and then at the end of the unit they actually perform it.
bPK16	Certification could be web based or instructor led.
	For the certification courses, the foundation courses were all web based, the certification courses could be web based or instructor led. The people had the choice. There were divided by roles, that was where it was specialized.
bPK18	Online assessment for both web and live training.
	They would have a final assessment that was web based whether they did it in person or web based training.
	<i>Creating own process aids</i>

bN8	Puts in codes for quick comment removal from her document
	<p>Nancy - They are for me because nobody every uses % % for anything so as I am going through the document later to put it into HTML I can be sure I have not lost any of my comments because I just to a search for % % and it will pull up everything that I have added so I can make sure that doesn't show up in the final product. That would be embarrassing.</p> <p>Christijan " And is that a process you just came up yourself or had you seen someone else using it.</p> <p>Nancy - No I pretty much what I came up with myself, I advocate it highly though feel free to pass that along or use it.</p>
575	Format content for input into LMS. This is more of a development issue -- it crosses a fuzzy line -- but she becomes responsible for how the content flows through the LMS.
	Then as the content comes through I will modify it format it so that it will be easily in put it into our LMS,
576	An editor reviews the content after she has put it into the structural flow -- essentially a design document of the content. She gathers the content from the SME, but she is then responsible for the format within the document and then in the LMS.
	Then as the content comes through I will modify it format it so that it will be easily in put it into our LMS, send it to editing, then we HTML and plug it into the LMS and go through QC and on its merry way.
577	Format in HTML and then send through Quality Control. I'm not sure how much of the HTML she does herself. I don't think she does much. I think the LMS editor is WYSIWYG, but HTML can be input to add widgets.
	Then as the content comes through I will modify it format it so that it will be easily in put it into our LMS, send it to editing, then we HTML and plug it into the LMS and go through QC and on its merry way.
429	Doesn't differentiate between what is eLearning design and what is not.
	I don't know if there is even a way to separate what is eLearning vs what is not.
	Patrick - Yeah that is how I feel.
430	Graphic design things as non-elearning design problems
	There are graphic design things.
bSN7	Reformatted contact information to side of screen based on how students used the system and what they needed to see, but change came after implementation had been in place for a while.
	This is my Art 1 class so for our formatting we have, we used to have office hours at the top of the class but then students would have to scroll up, usually we have it so they are in one week so the students couldn't even see the office hours, so we moved them to the side of the window here which is kind of nice.
bN21	Ideally, the full process for an average course will take about a year from start of gathering content to going live. Those with more media objects and interactions take longer.
	For this particular class. From the time we originally talked about doing this until the time Lorelei gave us our stuff was ten years. Lorelei was not involved in the original negotiation. This one is kind of a bad example. For a normal course, what we say is from the time you do the outline and get approval, the content gathering phase we really encourage our instructors to take no longer than five months, mainly because we have found if it takes longer than that it tends to be a procrastination problem -- put off, put off, put off. The guilt starts building and then it just becomes strung out too much. That is what we really encourage. Some people are fast, like our Chinese course that Jen Quinlin was working on, the instructor turned in her first two lessons before Christmas, she just gave us her entire course last week. It can be that fast, others like this particular one, this Physical Science because it was a committee, it was an entire department, they couldn't agree, because they kept going back and forth, we have had four different instructors assigned to this. That one obviously strung out horrendously. But, for a nice contained course what we say is it should take between 3 and 5 months to gather content. Once the content is in, once it comes to me, it really depends how involved it is. Some of our courses like this Physical Science one have a lot of material, a lot of media, a lot of interactivity. Those obviously take longer to create than one that says, OK, open it up here is your outline, read your chapter, here is your quiz and you're done. Those

	kind, fast, fast, there is really nothing to do. Again if you just take a normal course, an average number of lessons, say 12 lessons, and each one has a couple pages of lecture and a few media objects spread through it, in that case we usually say that the design portion will take a couple of weeks of work and the media portion will take a couple of months. So that is really more what we aim for. For just the whole process, what we generally tell our faculty is, if they are committed to getting us content we generally aim to go from planning, just the outline stage to done in a year. So that is all the stages together.[00:13:50]
bKA36	Instructional blueprint as Excel spreadsheet with content -- prescriptive and very detailed.
	Katrina - We developed an instructional blueprint mapping out by module content. It was a very fluid design but if I showed you the document for it you would never believe that was fluid. It was pages and pages of spreadsheet with content. It was very detailed, very prescriptive. We had talked with a significant set of subject matter experts. The problem for a complete redesign of a course rather than just sort of an upgrade is that you are rethinking the basic structure of your content so it was very difficult for the subject matter experts to think of what was the 20% of the knowledge that they used every day.
bN33	They prototyped and tweaked the inline question to make it work the way they wanted it to, with enough question types that made it useful.
	Nancy - We had to make some tweaks with it to get to absolutely what we wanted. She did several types of questions for us, as I was going through looking at the original docs, sometimes a little yes no question was great, sometimes it was an actual multiple, sometimes it was which of these five and it could be three of the five, four of the five, and so multiple answer. Some of them just wanted them to write a reaction sentence and of course we can't really parse through their sentence but we can say you should have included at least these three points. So we have got several different types of questions that we can do of the inline stuff.
bMS8	Could move quickly to other areas
	On the fourth screen is an example of when they click on, looks like the first one on the left they clicked on, the process of regular and special payrolls, it really just gives an overview of what on that particular page, in the app, covers.
bBN38	Developer and content creator develop assessments and "clean it up substantially" compared to what ID provides.
	Brandon - Yeah. But they clean it up substantially. I will put in you know it is going to be a knowledge check on basically this content, you know probably a true false for an eligible. One of the things I wanted to go with on this one, because it made sense, it was sort of a certain kind of program and you gave a brief, brief scenario for describing a person in their situation and the question is are they eligible or ineligible for the program? I wanted to have that consistency throughout so I had like three or four questions in a row that were basically eligible and ineligible, each one of them had like some red herring or some confusion item.
bBN39	Likes to give an easy question to make learner feel confident.
	I also like to give them at least one that is easy so they can pat themselves on the back and say oh yeah, I got that one, it looks like it should be challenging but that they should be able to spot really, really easily. It is good to give people a level of confidence.
bPK17	Cognitive apprenticeship model with modeling and guided practice.
	It mainly consisted of modeling and guided practice and then independent practice. It was kind of a cognitive apprenticeship inspired model there.
	<i>Student response to confusing interaction</i>
bSA44	Students will abandon the course rather than try to figure out what they're supposed to do.
	because let's face it students get stuck; they get stuck and then just turn it off. They don't go ask, I mean we want them to ask for help but most often they get stuck and are done with it. And so what one of the things that we ask our teachers to do and Sarah and I do a lot is go log in as a student.
bSN17	Students interacting online often have questions, when submitting them the teachers aren't able to understand the context of the question, so are working on a solution for helping the students ask their questions better.
	One I know that the electives department is working on right now is how to ask your teacher a question. So that is another one that I wouldn't be surprised to see next year. Basically that is just saying I don't get it or that doesn't work, to phrase your question like ok I am working on this class and I am on this assignment and this doesn't seem to be working here. So then you as a teacher aren't going in this back

	and forth trying to read their mind, I don't know.
bSN9	Using Twitter in course. This works for a live course, where an instructor is engaged with the students and/or students are engaged with an instructor in a semi-synchronous way. Tweets enhance the learning experience by allowing the teacher an easy way to add supplemental content to the course without having to change the full course design.
	Then there is the Twitter feed which is in all of our courses, we use Twitter for a lot of things like all of our student's shout outs but I usually just use it for resources that I think are sweet. If I find something cool online I will just tweet it out with the hashtag so that it shows up in this Twitter feed.
bSA23	Tested courses are given time priority for students and tiered accordingly within the organization.
	Yah, yah, and then we can compare that time to other courses, and obviously our courses, we also have we tier within our courses but we also, when we are talking about curriculum, we tier curriculum. So we have our courses that are tested, English, Math, Science, and we have tier two which is languages and history, we have a tier three which all of those elective classes. And time spent, a bulk of the time should be being spent in Math, English and Science, and don't tell those history teachers, and history is my minor, they get offended. They are really, it is not a tested subject and so while we do place a lot of emphasis on it, it is a tier two course. That is how we kind of _____ through that and then that is how when we are designing courses we say ok tier 1 courses have 2 to 3 assignments per week, [00:20:00] math has more, that is just because of the nature of math. Tier 2 classes should have no more than two, and tier one classes one or maybe two a week it just depends. That is how we help them know, delineate how to format that class _____.
bSN32	Students use checkboxes to help them mark their place in the course.
	So like the watch, read, this is basically it is just two videos of Andy Goldsworthy and then this guy does some rock sculptures and then at the bottom of our resources they have this instruction that they can check mark or basically can check a box to say that they have completed this, cause students are, with the course completion when they turn something in they get check marks in these boxes right here so once they watch this video they can check that and then any assignment, once they turn it in and it gets graded it will either get a green check mark or a red check mark depending on if they passed or if they failed it. I know that some students really like those check marks too, to really keep them on pace for the week, which is something really nice that Moodle has to offer.
bSN34	Using the system to help learners help themselves -- making a difficult process easier.
	Shawn - Yeah the school has added it, it is not required by any means and takes a little, you need to know what you are doing in order to set it up right but it's a great optional feature I feel like. Otherwise I know there are some schools that have students print off a check list and then check things off as they get them done, I mean students aren't going to print off a check list or if they are they are probably going to do it for the first three weeks and then be done with it. This is nice, it's right there, it is easily accessible.
bSN38	Likes to design course so he can see interactivity with the system, even though the better experience for the student might be to have all the material together under a single link.
	I am still working through it, I don't know necessarily, it is fun to see the resource outside of it because then you can see if the student is clicking on that and looking at it and then if they are not then you can work with that student making sure that they do in the future so that they can do better in the class.
	Guidance for students/Training for students on how to use course technology
bSN13	As an online school, and being unfamiliar territory, students need blog to explain how the course will work.
	So this is basically what it looks like from the top left here, so the main content. All of our courses just have in the simple sort of same font which a unique style font is naming the course. We have a navigating the course blog which I think is sweet. It is as nice, as a teacher, because this is something that the students, right when they basically sign up for the school, they can access this material before the classes are open. They can basically learn all these skills, which are huge. The welcome to art 1 is the syllabus to the class. Yeah, just like to how to track your progress. This is the biggest one I refer to all of the time, how to check your grades and teacher feedback. It is just, if you click on it, it will bring up, it is just a google doc that will walk students through how to do this, and you know how to check their grades.
bSA8	They have detailed directions for assignments.
	That is what this looks like and so for example this is what this assignment is going to look like. This one is actually going to be a google doc that they work in and they click here and they work through. Remember I talked about how detailed our directions are, this is a very good example of how detailed

	they are. One of the things I have been working on our teachers with is to make sure Moodle doesn't do it automatically and doesn't ever show how many points things are worth and our teachers don't think about that.
bSN23	Teaching how to use the technology important/inevitable for their students.
	Just because with a lot of students adding late you know your first week you don't want to put too much material in there, just kind of get them slowly started. Basically at this point you are still teaching technology.
bSN53	Instructions have cut down on questions about technology.
	I feel like if the students go through that how to navigate the course blog, I mean honestly it has been so much smoother since we added that this year. Just because they know exactly what to do and with the technology that these students have grown up with I think they are able to just explore and find things when they need it.
bSN54	The design and structure of the site might not match the mental model of students. They must be trained on the interface and then, once that is done, they have much fewer problems with navigating the course.
	You do end up teaching technology for the first two months of the class, when students are just like, I can't figure out anything and they are with their parents and they are frustrated and then you just like alright let's talk on the phone, let's talk through this, let's get you through the process. After that is done it is like what!, students are like crazy in regards to the amount of chat I am getting, If things slow down so much It is like I can breathe Oh I can do this. Whereas those first couple of months is always like crazy. [00:32:39]
bSN57	Tech tools class was happening simultaneously with some other classes, so they weren't getting the tech tools info fast enough to help them in their courses, so the basics were added as a guide accessible from all courses.
	A lot of time if the student was doing their classes besides tech tools they weren't getting this background information of how to basically be an online student. So then they took and consolidated that really important information from tech tools and they put it into every course at the top of the course. Basically too, once you figure it out you can ignore it, it is not really even present, but to make sure that students are all on the same page with the background skills set of how to be an online student, how to navigate the course, how to track your progress, how to check your grades, how to complete assignments, discussion forums, quizzes and how to take a screen chat. Basically that is probably their frequently asked question, you know what were the most asked questions at our school that people constantly had to answer.
bSN59	Teachers don't want their jobs to be answering logistical questions, they want to teach their subject.
	It is not like you are trying to work yourself out of a job answering questions but I want my job to be how do I improve on the color shading here, I don't want the question to be how do I complete this discussion forum.
bSN78	Proud of achieving passing grades for all students this year.
	This year is the first year that I had even close to everyone passing the class so I was pretty proud of that.
bSN79	The hone in on two successes and two weaknesses to get more granular to see what seems to be working well and also to consider ways to improve.
	Then it asks for two resources activities that were successful, that were design successful and provide quantitative and qualitative evidence so then I go through and do quantitative and qualitative ways that the class was successful and then in this it asks things that were unsuccessful and again quantitative and qualitative and then it instructs us on how to gather this data, where to go and what they are actually looking for. You basically go to your jewel reports, comparison reports, and activity comparisons and then you are looking for what stands out, high/low grades, engagement hits, and activity completion is a big one. If students are engaged in something but they are not completing it, it is like a little bit of a red flag for me. Why are they accessing this but they are not actually getting a grade on it, they are just looking at it and being overwhelmed and so they are getting out of there, something like that. I will look at their resource and try to figure it out, how to improve it and make it simpler. What resources are being viewed, that is the thing that kind of made me draw attention to the titles and what things are being labeled.
bSN80	Views current culture of gaming as means to educational end.
	And in regards to this kind of video game, 3D culture that I know in some sense is seeming like this hip things that sort of online schools are accessing. I feel like that is a simple rephrasing of the information,

	you put it into a game and it is still the same learning experience so how can you do that in a more traditional LMS and that is kind of what I found I guess. These are ideas that I am working towards.
bSN83	New teacher training covers teaching, flow of courses, essentials of LMS for getting started, grading, Google chat, etc. By month 4 or 5 teachers are generally comfortable.
	So any new teacher, every year, they will have this new teacher training where they will actually go into the office and basically it kind of goes with the how, the natural flow of what a teacher needs to know. So the first new teacher training before school starts, they are just learning the basic essentials of what they need to know that first three weeks. How to grade something, how to use google chat and the very basics of basics. The next one they are getting a little bit more in tune with the different ways to grade and the different ins and outs of the LMS and basically by the 4 month mark, 5 month mark you have been there enough and have enough experience that you feel comfortable and anything that they would teach you, you could basically figure out.
bSN84	They hold faculty developments every month or two. Moodle training is part of that retreat.
	Every single faculty development, we have faculty retreats every month or every other month depending on the schedule of it but every single one we have some sort of a new, you know this is Moodle, let's go over this again because I know teachers have had questions. Basically anything teachers are asking questions about or anything updated to the system we have formal training on it.
	<i>Reason for implementing eLearning</i>
bC9	Online training will help reduce costs.
	First reason is training proximity, a lot of our technicians have face to face training but in terms of cost we want to reduce that and slip over to online training as much as possible.
bC10	Online training also provides opportunity to improve installation success rate. There is a clear metric of success for the training.
	The other reason why we wanted to do the training was to really convert the face to face training into an online training not only due to proximity purposes but also to refurbish it, modify it to the point where failure rate that the technicians had will be further reduced and increase the success rate. Just to give you an idea, for every 100 requests to have the installation done 33% came back where the technicians had to go back and remodel or modify the previously installation that was done because it was done poorly and the installation was not really doing its job. We want to reduce that 33% failure rate as much as possible so the goal of the training was to really make sure that the new technicians, who receive the training, afterwards have a 100% accuracy rate with installations.
bC12	Existing training was in person, one-hour with no breaks, no practice.
	Charlotte - Really at the beginning the idea was put into place. I had a meeting with one of the trainers in this region, talking about the instruction they had there and the instruction that they had in place at that time was a one hour instructional time frame of them going through the entire content without any breaks, breaking it up, without putting any practice activities in there. Essentially just learning the information and hopefully retaining it and then applying it a day or two later. They wanted to make sure some sound instructional methods were put into place where that knowledge could be retained and a practice with the content could be done a lot better.
bC16	Training shown was primarily for new hires. Although some new hires had similar relevant experience, most did not.
	Charlotte - Ok, cool. A lot of these technicians that this training is meant for are all new hires. So some of them from the learner analysis conducted have done things similar to this before with other security companies. Others they have some knowledge because they are HVAC technicians and work a lot with thermostat panels which are very similar to the panels they will be installing for this kind of task.. Most of the people for the new hire groups, they don't have a lot experience with this. It is kind of across the board knowledge and either knowing the process or not knowing the process at all.

Data location key for interview one.

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