Faculty Perspectives on Teaching Methods for Online Undergraduate Finance Students

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Abstract

Existing teaching methods in undergraduate courses reflected that institutions can improve students' learning experience in a structured finance program. The concern was the lack of consistent teaching methods used to develop competencies that had an impact in student performance and learning experience in online finance courses. The problem was that effective teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) used in online undergraduate finance courses had not been particularly identified in developing competencies that are instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012). The purpose of this qualitative single case study was to examine the perceptions of online finance faculty on the teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) in developing competencies that are instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012; Yin, 2014). This single case study used a qualitative approach to examine the factors of the practices that instructors use in online finance courses. A single case study approach existed in exploring the areas where findings might have been conclusive, with a smaller sample number and more semi-structured method (Yin, 2011). The purposive sample consisted of 10 subject matter experts with similarities in professional background, teaching experience, and teaching online finance courses. The sample population was obtained from a Facebook group of educators who taught finance in an online environment. The semi-structured, open-ended interviews were conducted to examine online finance educators' teaching experiences and perceptions. ATLAS.ti was used as an analytical tool to store, code, organize, and analyze the data. Findings from the study

included themes relating to educators' perceptions of teaching methods used in online undergraduate finance courses. The first research question focused in student-centered learning, which resulted in themes such as engagement, diverse learning, student-center relationship, innovation and creativity, and challenges of this learning environment. The second research question focused on collaborative learning, which resulted in themes such as group work, social loafing, and challenges from working with groups. The third research question focused on high-quality learning, which resulted in themes such as learning activities, real-world application, critical and analytical skills, feedback, challenges faced by instructors, and optimal teaching methods. Future research should study the teaching methods that develop competencies in undergraduate finance courses from students' perspectives or teaching methods to graduate level students from either educators or students' perspectives.

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Chapter 1: Introduction

Existing teaching methods in undergraduate courses reflected that institutions could improve students' learning experience in a structured finance program (Ming, Kwan, Kadir, Abdullah, & Yapal, 2009). The concern was the lack of consistent methods used to develop competencies that had an impact in student performance and learning experience in online finance courses (Carrithers & Bean, 2008; Hui & Koplin, 2011; Lopez & Patron, 2012). It appeared that course components in online finance courses were of similar design to courses in any subject (Pimpa, 2010). Although there had been substantial research on course content, an in-depth understanding regarding the effectiveness and teaching methods in undergraduate level finance courses had not been fully explored (Ming et al., 2009). Adult learners had more difficulty learning concepts and applications in finance than other business courses due to its quantitative nature (Ming et al., 2009; Sizoo, Jozkowskia, Malhotra, & Shapero, 2008). This made it critical for adult learners be taught financial concepts and applications effectively in order to develop critical thinking and analytical skills (Carrithers & Bean, 2008; Dohm & Shniper, 2007). Often, courses did not provide the interdisciplinary awareness and perceptions necessary to make decisions in real life business environments (Teal & Krishnan, 2011). As learners tried to relate theory to a real working environment, they are faced with challenges due to inconsistent information and complicated tasks (Freda & Mara, 2011). Cultural factors also impacted students from an interest to learn via online, such as their primary language, learning methods, and communication style (Pimpa, 2010). These factors had an impact on students' readiness and willingness to participate in online learning (Pimpa, 2010). Also, how involved students are in their learning is

influenced by personal experiences from certain cultural backgrounds (Pimpa, 2010). These factors influenced the apprehension that most students are likely to not enroll in a finance course, unless it is a program requirement.

Employers have demanded higher education degrees today more than ever (Betts, Hartman, & Oxholm, 2009). Future employers expected graduated students to comprehend how business operated across all functions (Wansi & Liu, 2012), as financial expertise is regarded as critical to business success (Sizoo et al., 2008). The Occupational Outlook Handbook of 2012-13 from the U.S. Department of Labor also predicted that growth in finance careers are expected to increase about nine percent from 2010 to 2020. For this reason, how educators effectively taught finance provided an essential foundation for the working adult learners (Ming et al., 2009).

Online education has been a fast growing segment of higher education (Carrol & Burke, 2010), that provided adult learners the opportunity to pursue their education while maintaining or seeking employment (Betts et al., 2009). According to Babson survey, online enrollment increased 32 percent by 2011, with an annual enrollment growth of 9.3 percent (Allen & Seaman, 2013). College students who had completed at least one course online had increased by 570,000 for a total of 6.7 million (Allen & Seaman, 2013). The number of academic professionals slightly increased from 41.4 percent in 2006 to 44.6 percent in 2012 (Allen & Seaman, 2013). By 2015, 37% of students attending colleges and universities were enrolled in online programs (Holmberg-Wright & Wright, 2012).

Adult learners opted to obtain degrees from online programs as they continued to work when they acquired an education. Convenience and flexibility were the main

advantages that students pursued their education in online programs (Holmber-Wright & Wright, 2012). As a result, was an increased growth of online finance degree-seeking students (Betts et al., 2009). However, adult learners enrolled in an online finance course may or may not be familiar with the basic concepts used in the working world environment (Carrithers & Bean, 2008; Freda & Mara, 2011). For this reason, many academic professionals had concerns about the quality and effective teaching methods offered in online courses (Carrol & Burke, 2010). The improved quality and value of education for online students in the discipline of finance was of most concern to higher education (Ardalan, 2006; Ming, Kwan, Kadir, Abdullah, & Yapal, 2009; Pimpa, 2010). The objective of providing quality and effective teaching methods was of precedence due to the increase online finance degree seeking students (DeGagne, 2009).

Background

Online education has grown more than it was expected over the last decade. As an alternative to achieve educational goals, it became the preferred method of learning due to its flexibility and convenience while balancing family and work life (Chang, Lawrence, & Prakash, 2012). Many learners found it difficult to start or even finish their education due to the demand of work pressures, leaving limited time for the family. Online learning provided the opportunity to balance work and family, while attending school without leaving home.

Life circumstances made it a necessity for learners to obtain a degree (Hodge & Lear, 2011). Some wanted to obtain a degree to have a better job or establish a career. Some wanted to finish what they had started, but due to life challenges could not (Chang, Lawrence, & Prakash, 2012). Some were forced to get a degree due to competition in the

workforce, due to the recent recession and economic downturn. Some served in the military, which prevented them from being physically present to attend school (Artino, 2010; Kuruvilla et al., 2012). As a result, there were various motives or forced circumstances for adult learners to enroll in academic programs to achieve a degree. Higher learning schools increased online courses in their programs to provide distance learners the opportunity, flexibility, and convenience to help achieve their educational goals (Allen & Seaman, 2013; Holmber-Wright & Wright, 2012; Kuruvilla, Norton, Chalasani, & Gee, 2012).

In the meantime, employment competition was growing larger, placing a greater demand on candidates to have college degrees and competencies to fit transparently into the working environment. Therefore, potential candidates or those awaiting job promotions had to fulfill their education to be considered in a competitive job market. Most employers sought competencies, such as analytical, critical thinking skills, communication, decision-making, attention to detail, math, using information, utilizing resources, working in teams, and technical skills (Dohm & Shniper, 2007; English, Manton, Sami, & Dubi, 2012; Occupational Outlook Handbook of 2012-13, 2013) to be a competent candidate. Consequently, learners who sought a career in the field of finance expected their chosen online program to help acquire these competencies.

Many schools offered finance courses as part of their online program. Most students were genuinely interested in the subject of finance as part of their chosen concentration. On the contrary, some students took finance courses because it was a requirement of their program (Pimpa, 2010). Nevertheless, most were apprehensive of taking an online finance course due to the complexity of topics or its quantitative nature

(Ming et al., 2009; Sizoo, Jozkowskia, Malhotra, & Shapero, 2008). Therefore, the need to establish effective methods of teaching finance to online courses was critical for successful learning and to acquire the skills demanded by the real-life working environment. Research could be found on various learning styles and processes in student learning; however, it was limited on the focus of effective teaching practices for online undergraduate finance courses (Chang et al., 2012). Most importantly, the focus on effective methods to develop critical thinking and analytical skills (Robbins, 2011) was limited in online finance courses. Although, there were many studies on the different types of methods used to teach or learn the subject of finance, little research was available on the methods used in teaching online finance courses effectively (Chang et al., 2012; Ming et al., 2010). For that reason, the emphasis of this study was to examine the faculty perspectives of the teaching methods used in online finance courses that contribute to developing competencies expected by current or potential employers.

Statement of the Problem

Existing research on effective teaching methods could be found on either measuring student performance or evaluating essential factors for successful learning in an online environment (Chang et al., 2012). The problem was that effective teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) used in online undergraduate finance courses had not been particularly identified in developing competencies that are instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012). In order to examine the faculty perspectives on effective teaching methods, a qualitative single case study was conducted to identify the practice used in developing competencies in online undergraduate finance courses (Yin,

2014). Developing critical thinking is considered as the most important reason of obtaining a formal education because the ability to think critically is vital for success in the present day as new information is continually being created (Marin & Halpern, 2011). Analytical skills extends the problem-solving reasoning process to inquire further into unclear, larger scaled issues (Robbins, 2011).

Developing competencies in critical thinking and analytical skills had an impact in students' overall performance and learning in online undergraduate finance courses (Carrithers & Bean, 2008; Hui & Koplin, 2011; Lopez & Patron, 2012). Teaching effective methods to online finance students developed strong critical thinkers to analyze complex finance problems, define the data, and communicate effectively (Carrithers, Ling, & Bean, 2008). Teaching students how to be good thinkers was important for memorization and the ability to solve problems independently (Carrithers & Bean, 2008; Robbins, 2011). Nevertheless, students had difficulty in applying finance concepts to difficult problems because they had not been particularly taught or asked to practice (Carrithers & Bean, 2008). Examining effective teaching methods to develop critical thinking and analytical skills used in real world scenarios enabled learners to understand the problems they faced in a changing working environment (Hui & Koplin, 2011; Meyer & McNeal, 2011).

Purpose of the Study

The purpose of this qualitative single case study was to examine the perceptions of online finance faculty on the teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) in developing competencies that are instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu,

2012; Yin, 2014). The aim of this research was to acquire the perspectives of the teaching methods used in online finance courses that are effective in developing critical thinking and analytical skills in undergraduate level students as expected in the workplace.

The sample population was obtained from a Facebook group of educators who taught finance in an online environment. A purposive sampling method was used to recruit qualified educators to participate in semi-structured interviews. An interview instrument was developed consisting of open-ended questions is to be used to interview 10-15 online finance educators. Based on recommended sample sizes, 10-15 participants were considered sufficient for a single case study (Patton, 2002; Stake, 2010; Yin, 2014). The sample group consisted of faculty who had experienced teaching finance courses to online undergraduate students. ATLAS.ti was used to code and organize the data for efficient and accurate analysis of results.

Theoretical Framework

The structure used to teach finance in online undergraduate level courses had not been particularly identified in developing competencies that are instrumental in the working environment. Online finance courses must integrate real-life working environment, problem-solving circumstances with current text-based learning (Hui & Koplin, 2011). A course designed and centered on a constructivist framework was critical to the success of an online course (Chitanana, 2012). A constructivist approach supports educators to construct a collaborative, reflective, and interactive online learning environment designed to enhance active participation and encourage effective learning (Chitanana, 2012; Ruey, 2010). An effective learner-centered environment combined

teaching methods, learning activities and evaluation tools within a course (Janor, Rahim, Rahman Auzairy, Hashim, & Yusof, 2013).

The environment in which learning takes place was of most significance to adult learners. Constructivist theory states that learning is a development in which learners construct new ideas based upon their existing knowledge impacted by their environment (Mashaw, 2012; Nor, Hamat, Azman, Noor, & Bakar, 2011). Constructivism is fundamentally a theory about how individuals learn by discussing or asking questions, exploring, solving problems and assessing what they currently know in order to create more knowledge (Nor et al., 2011; Ruey, 2010; Temiz & Topcu, 2013).

The main objective of the teacher within the constructive theoretical framework was to lead students through activities and experiences that encouraged meaningful learning (Andrew, 2007; Banger, 2005). Involving learners in an online environment provides them with time to reflect, embrace and personalize the information in order to develop critical thinking and apply what they had learned (Andrew, 2007; Mashaw, 2012; Nor et al., 2011). Teachers with a high level of teacher efficacy were more effective in the students' learning and their involvement to enhance academic achievement (Bangert, 2008; Temiz & Topcu, 2013). Students with a higher level of self-efficacy were more confident; hence, they performed better.

The platform to deliver the content and enable active learning was facilitated by effective teaching methods within a course (Ruey, 2010). Teachers who implement constructive-based teaching had greater confidence in their abilities and encouraged positive student learning (Temiz & Topcu, 2013). The ability to teach creatively was regarded as an important element of developing a student's cognitive and problem

solving abilities (as cited in Shieh & Chang, 2014). Developing a student's creativity helped develop the capacity to originate ideas and actions as well as prepare them to manage life effectively (Shieh & Chang, 2014). A social environment helped stimulate learners' creativity in a social setting that supports independence, competence, or participation in a task (Shieh & Chang, 2014). This type of teaching encouraged learners to participate in reflective learning which led to personal growth, professional growth and significant change, which is the basis of Constructivist Theory (Nor et al., 2011).

Adult learners opted to obtain their degrees through online education as they no longer had to make a choice between family and their education (Legg, Adelman, & Levitt, 2007). Numerous studies had compared online distance learning courses to traditional coursework with similar evaluations on students and faculty (Shachar & Neumann, 2010). As online education continued to grow, the theory applied to the design of distance learning must be examined as many assessments had focused on the traditional environment. The significant increase in online education required an enhancement of effective teaching methods for valuable student learning. The constructivist theory supported the online student population based on its characteristics (Hunter & Krantz, 2010). The effectiveness on how teachers delivered material for effective student learning was of most importance. Educators' interactive teaching materials should support their instruction to provide learners with understanding and reinforce the teaching-learning process (Karaduman & Gultekin, 2007). Students had to be stimulated to use critical thinking skills, engaged with other students and created their own knowledge based on what they had learned coupled with their own life experiences (Karaduman & Gultekin, 2007; Kolb, 2015).

Research Questions

The focus of the research questions was to examine the teaching methods used in online undergraduate level finance courses instrumental in developing competencies instrumental in the working environment (Al-Mubaid, 2014; Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012). The teaching methods employed in online finance courses (i.e. student-centered learning, collaborative learning, and high-quality learning) were of importance to students' accomplishment in education and career opportunities. The fundamental questions used in this study gained faculty perspectives to determine the teaching methods used in online finance courses in developing competencies instrumental in the working environment. The following questions expanded on this objective:

Q1. What were the perceptions of finance instructors related to student-centered learning in developing competencies in online undergraduate level finance courses?

Q2. What were the perceptions of finance instructors related to collaborative learning in developing competencies in online undergraduate level finance courses?

Q3. What were the perceptions of finance instructors related to high-quality learning in developing competencies in online undergraduate level finance courses?

Nature of the Study

The purpose of this study was to examine the perceptions of online finance faculty on the teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) in developing competencies that are instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012). The study emphasized how faculty interpreted the perceived effectiveness of instructional practices used in an online finance course. Faculty construed course design and content

differently, and preferred to match teaching methods with learning styles of their online students (Berry et al., 2011; Carlson, 2013).

The qualitative approach is an appropriate research method that explored the factors of the practices that instructors use in online finance courses. The single case study helped in identifying effective practices used by faculty with online undergraduate level finance students to develop competencies significant to students' success in the real world (Chang et al., 2012; Stake, 2010; Yin, 2014). The objective of employing a single case study approach was to explore on an area where findings might be conclusive with a smaller sample number and more semi-structured method (Stake, 2010; Yin, 2014). The research questions were designed with the purpose to examine effective teaching methods to help develop competencies, such as critical thinking and analytical skills. This supported the constructive model, which asserted that the truth was comparative and it was dependent on someone's perspective (Baxter & Jack, 2008; Stake, 2010; Yin, 2014). The findings in the study offered instructors the opportunity to have a greater sensitivity to, and a better consideration of, their students' learning when implementing effective teaching methods (Byrne, 2006).

The interview questions were designed by the researcher to address the purpose of this study. Different types of semi-structured, open-ended questions were used in the interviews (Yin, 2011). Formal online interviews were conducted electronically through Skype, a video call service, with another person via computer and tablet on a real time basis (Yin, 2014). The survey was geared towards faculty's teaching perspectives from their past and current experiences of methods used in teaching undergraduate finance in an online environment. The participants were a purposive sample consisting of 10-15

online finance educators who were currently teaching or have taught at various proprietary four-year universities. After obtaining the Institutional Review Board's (IRB) approval, a consent to request participation in the research study was requested to the administrator of a Facebook group on online business and finance educators. The administrator actively helped with publicizing the study and encouraged participation (Leahy, 2013).

Data collection assisted with the objectives of establishing the construct validity and reliability of the evidence (Yin, 2014). Computer files enabled the organization, documentation, and coding of the collected data and research notes to increase its reliability (Yin, 2014). Maintaining all collections of evidence prevented any data from getting lost due to carelessness or bias. The data was coded in a three step process referred to as *in vivo*: open coding, axial coding, and selective coding (Yin, 2011). An analytical tool, ATLAS.ti, was used to store and organize the data from the survey for efficiency and accuracy. A tentative conclusion was drawn based on the evidence with the greatest weight for each question (Yin, 2014), which also led to recommending future course of actions (Yin, 2014).

Significance of the Study

This study contributed to the understanding of methods perceived to be effective in teaching finance to undergraduate level online learners. Faculty who taught finance courses often tailor courses to the standards used in face-to-face environments. The teaching methods implemented in online finance courses were of importance for students to develop competencies, such as critical thinking and analytical skills in education and for career opportunities. Instructors awareness of deficiencies in teaching methods were

needed in order to identify the effective techniques that captured students' interests and comprehension (Spielhofer, Kerr, & Gardiner, 2010).

Faculty construe course design and content differently, and prefer to match teaching methods with learning styles of their online students (Carlson, 2013). The qualitative approach was used to explore the factors of the practices that instructors use in online finance courses. Students were not as successful in achieving full comprehension of concepts and applications due to lack of effective or inconsistent teaching methods in supporting learning outcomes. In addition, learners perceived finance courses to be rather complex with mathematical formulas that seemed complex to learn in an online course. Faculty provided their understanding and experience of course content and delivery in order to match teaching methods to students' learning. Instructors must have been aware of deficiencies in teaching methods in order to identify the effective techniques that captured students' interests and comprehension (Spielhofer, Kerr, & Gardiner, 2010). Most importantly, faculty should have had thorough understanding of planning activities for an online course that are interesting, motivating, and self-directed (Schmidt, Hodge, & Tischida, 2013). This was significant as it is helped in the development of critical thinking and analytical skills. The findings in the study offered instructors the opportunity to have a greater sensitivity to, and a better consideration of, their students' learning when implementing effective teaching methods (Byrne, 2006). As a result, students achieved their degrees with the fundamentals of textbook learning incorporated with real-life working experiences.

Definition of Key Terms

Adult Learners. The students categorized by age (typically over 25) and by their

life experiences. Many learners were workers, parents, or community members who returned to gain skills for advancement in their field (Coulter & Mandell, 2012). Some learners were divorced or widowed who either enter or return to school to obtain skills that enabled them to become marketable in the job market (Nadesan, 2004).

Andragogy. This term was used to describe the art and science of teaching adults (Knowles, 1978) with "the need to know, self-directedness, the role of experience, intrinsic motivation and readiness to learn" (Conaway & Walden, 2010, p. 2886).

Asynchronous. This was a method of communication among faculty and students that did not take place at the same time (Singh et al., 2010). For example, email correspondence was a preferred method of communication in which the sender and receiver did not have to be on the same time zone or place to convey a written message.

Blended and Hybrid Courses. These types of courses delivered material and interacted with instructor both face-to-face and online (Caruth & Caruth, 2013).

Blogs. Blogs were also referred as Weblogs, which were used for posting announcements, personal views or thoughts in a chronological order (Singh et al., 2010).

Certified Financial Planner (CFP). A professional who assisted clients in achieving financial well-being (CFA Institute, 2013).

Collaborative Learning (CL). Collaborative learning was teaching through a coordinated and shared environment with different activities to support student's interaction (Tsai, 2013).

Face-to-face Classroom. For this study, a face-to-face classroom was referred to as a traditional classroom held at a specific time and location in where the instructor and students are physically present. Face-to-face instruction consisted of courses delivering

zero to 29 percent online, including traditional and web based courses (Allen & Seaman, 2013).

Financial Manager. A financial manager is usually employed by a financial services firm or corporation. The manager is subject to the professional and ethical standards of the Finance profession while providing financial reports, investment activities, strategies and plans for the long-term financial health of the organization or clients (Occupational Outlook Handbook, 2012).

Kolb Learning Style Instrument (LSI). Kolb (1984) developed a questionnaire to identify types of learning styles: convergent, divergent, assimilative, and accommodative.

Learning Management Systems (LMS). A course management systems used as a staging tool to create and manage course content, delivery, assessment and communication in an online environment (Singh, Mangalaraj, & Taneja, 2010).

Learning Style. The manner in which learners most effectively perceive, process, store, and recall what they learn (James & Gardner, 1995).

Online Course. A courses that deliver at least 80 percent of its content online (Allen & Seaman, 2013) and interact with instructors via online (Caruth & Caruth, 2013).

Online Education. This was a learning structure where students learn from a distance from the facilitator of the instructional material. The content of the course was delivered via the Internet using a combination of instructional media is used (Harnett, St. George, & Dron, 2011).

Online System. This system allowed students to maintain in frequent communication with their instructors and peers in any place (Pimpa, 2010).

Pedagogy. This term was used to describe the art and science of teaching children (Knowles, 1978).

RSS. These were communication feeds that provide automatic updated content from section(s) of a site (Singh et al., 2010).

Skype. An online video and audio call service used to chat with another person via computer or tablet on a real time basis (Yin, 2014).

Synchronous. Synchronous is the communication within a course in which the interaction between parties was in real time. For example, holding a live seminar in a course has the instructor and the students communicate at the same time (Cox, 2005).

The Global Association of Investment Professionals. Global Association of Invvestment Professionals is a non-for-profit association for investment advisors that provides educational programs and services (CFA Institute, n.d.).

Traditional Class. Students and instructors met at the same time in a face-to-face environment. The most common methods used include lectures, class discussion, team projects, presentations and lab work (Singh et al., 2010).

Web Conferencing. Live presentations and discussions which incorporated both verbal and non-verbal communication forms to enhance student learning and participation (Singh et al., 2010).

Wikis. Wikis were server-based software used to create and edit the content on a web page (Singh et al. 2010).

Summary

The problem was that effective teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) used in online undergraduate finance

courses had not been particularly identified in developing competencies that were instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012). The purpose of this qualitative single case study was to examine the perceptions of online finance faculty on the teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) in developing competencies that were instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012; Yin, 2014). A constructivist approach supported educators to construct a collaborative, reflective, and interactive online learning environment designed to enhance active participation and encourage effective learning (Chitanana, 2012; Ruey, 2010).

Constructivist theory states that learning is a development in which learners construct new ideas based upon their existing knowledge impacted by their environment (Mashaw, 2012; Nor, Hamat, Azman, Noor, & Bakar, 2011). Constructivism is fundamentally a theory about how individuals learned by discussing or asking questions, exploring, solving problems and assessing what they currently know in order to create more knowledge (Nor et al., 2011; Ruey, 2010; Temiz & Topcu, 2013). The purposive sample consisted of instructors who are subject matter experts with similarities in professional background, teaching experience, and had taught online finance courses. The data was collected via interview questions geared towards faculty's teaching perspectives from their past and current experiences of methods used in teaching undergraduate finance in an online environment. A tentative conclusion was drawn based on the evidence with the greatest weight for each question, which led to recommend future course of actions (Yin, 2014). The responses collected help examine the effective teaching methods used in online undergraduate finance courses to contribute

to the development of coursework that helped develop critical thinking, analytical skills and deeper knowledge of finance subjects in students' learning. Once all the responses and conclusion were analyzed, a revision of the findings validated the constructivist theory framework had been identified with research results.

Chapter 2: Literature Review

Existing teaching methods in undergraduate courses reflect that institutions can improve students' learning experience in a structured finance program (Ming, Kwan, Kadir, Abdullah, & Yapal, 2009). The concern is the lack of information on the effective methods used to develop competencies that have an impact in student performance and learning experience in online finance courses (Carrithers & Bean, 2008; Hui & Koplin, 2011; Lopez & Patron, 2012). The purpose of this qualitative single case study is to explore the teaching methods instrumental in developing competencies used in online finance undergraduate level students. There is a greater significance placed at the effectiveness of teaching methods to gain critical thinking and analytical skills as online enrollment and employer demands continue to increase (Otter et al., 2013; Wiechowski, 2010; Wansi & Liu, 2012). The literature review will discuss the aspects that prompt adult learners to obtain an education in an online environment and the current teaching practices, and the learning environment in online programs. The review will finish with a discussion of teaching methods, competencies, and working environment.

Documentation

The references for this study were obtained from Northcentral University Library. The search engines and research databases uses were ProQuest, SAGE Journals, Science Direct, and EBSCOHost. The research was limited to peer-reviewed scholarly articles, full-text articles, and books. The key words used were *online education, online learning, online courses, online finance courses, finance courses, teaching methods, teaching strategies, faculty teaching, constructivist theory, critical thinking, analytical thinking, qualitative research, sampling, student learning, collaborative learning, high-quality*

learning, learning styles, employment qualifications, and graduate skills. The resources used for APA Style were obtained from APA Style and Purdue Online Writing Center.

Online Education

Online education is the fastest growing section of higher education (Carrol & Burke, 2010). Initially referred as distance education, it was created for learners who could not attend regular school or university due to social, medical, financial or geographical reasons (Lei & Gupta, 2010). In 1992, there were less than 10 states in the United States who had online education programs (Atchley & Wingenbach, 2011). By 2002, 9.6% of students enrolled in post-secondary education were enrolled in an online course (Allen & Seaman, 2010). By 2011, online enrollment increased 32%, with an annual enrollment growth of 9.3 percent (Allen & Seaman, 2013). Online learning has evolved from face-to-face to blended, or solely to online programs (Caruth & Caruth, 2013). The challenges of the economy have had an impact on the demand for face-to-face and online courses, with greater infinite demand for online courses (Allen & Seaman, 2013; Kuruvilla, Norton, Chalasani & Gee, 2012). Basically, all higher education students would have participated in some form of online education during their college years (Sener, 2010). A number of academic researches validate the significant, rapid growth and preferred option of higher learning education (Bristow et al., 2011). For this reason, online education is becoming a standard practice in higher education (Caruth & Caruth, 2013). The Sloan Consortium states that online education has a higher growth rate than higher education (Allen & Seaman, 2010). There are at least 160 schools providing online educational programs (Bristow, Shepherd, Humphreys, & Ziebell, 2011). For example, 66% of higher education institutions accounted for an

increase in demand for new online courses and programs, whereas 73% experienced an increase in demand for existing online courses and programs (Allen & Seaman, 2013; Ortagus & Stedrak, 2013).

Adult learners are experiencing the necessity in obtaining a degree to attain a new job or career advancement (Hodge & Lear, 2011). They are interested on a finance education that provides the knowledge and tools to be competitive within the work force (Wansi & Liu, 2012). One of the most significant factors of online education growth is professional development and lifelong learning (Artino, 2010; Kolb, 2015; Lease & Brown, 2009) to develop individuals to their full potential as people, family members, and human beings (Kolb, 2015). Adult learners are also enrolling in online classes due to the recession (Mulig & Rhame, 2012). For this reason, education is an important factor to enable the development of required skills to compete for better job opportunities or higher earnings, or even for displaced workers (Betts, Hartman, & Oxholm, 2009; Hodge & Lear, 2011). However, adult learners have time constraints and limitations due to job and family responsibilities. Learners explore options on how, when and where to attend school, while managing work and family life. Consequently, adult learners are searching for quality online programs to obtain a college degree (Betts, Hartman & Oxholm, 2009). Online education provides accessibility for learners while they continue to work, support family responsibilities, and obtain a college education (Sena, 2010). More importantly, online learning provides new access for those who did not have the requirements to be eligible to attend college (Sena, 2010).

Online learning has provided the opportunity to reach students at any time (Caruth & Caruth, 2013), which has become a preferred method of learning (Chang, Lawrence &

Prakash, 2012). Most adult students work full-time with personal obligations that benefit from the engagement and learning in online classes (Wiechowski, 2010). Learners enroll in online courses because of flexibility, convenience, a new means of learning, self-paced, minimal travel and satisfaction of online classes (Atchley & Wingenbach, 2011; Kuruvilla et al., 2012; Vernon, 2013). In addition, online education itself has experienced growing pressures due to economic downturn, government and foundation initiatives, and simply, the necessity of lifelong learning (Sener, 2010). Learners are likely to enroll in online courses as the can benefit from the flexibility to better manage daily schedule of work, school, home, and social lives (Mahoney, 2009). Even military students opt for online classes as a valued opportunity to continue with their education (Artino, 2010; Kuruvilla et al., 2012). Most importantly, students prefer the synchronous communication as they can take courses based on their schedule and time (Atchley & Wingenbach, 2011).

It is evident that competition for online education enrollment has increased based on the annual enrollment growth of 9.3 percent (Al-Salam, 2011; Allen & Seaman, 2013; Kolowich, 2009). According to a Babson survey, online enrollment increased 32 percent by 2011. College students who have completed at least one course online have increased by 570,000 for a total of 6.7 million (Allen & Seaman, 2013). By 2015, 37 percent of students attending colleges and universities will be enrolled in online programs (Holmberg-Wright & Wright, 2012; Sener, 2010). Although, 85 percent of learners enroll in college with an idea of a career path, 37 percent would not continue if they thought a degree would have no impact in job opportunities (DuPre & Williams, 2011). These trends suggest that online education is a significant part of lifelong learning

(Artino, 2010).

Teaching Practices

In the 21st century, higher education is establishing the foundation on how faculty teaches and how students learn over the next decades (Hainline, Gaines, Feather, Padilla & Terry, 2010). The need for quality online instruction is of precedence for institutions that offer online programs (Schmidt et al., 2013). The continued growth of online education demands competent faculty to take ownership and engage efficiently (Al-Salam, 2011) for effective learning. Competencies can be associated with behaviors or skill sets, standard or quality performance, extent of knowledge, skills, and abilities (Al-Salam, 2011). Faculty must be involved with the type of competencies required in an online program as well as the necessary elements to achieve these competencies (Al-Salam, 2011). Competencies should be part of the integration of information communication technology into education as an appropriate approach to be an effective instructor in online learning (Al-Salam, 2011). These competencies include "content and pedagogy, collaboration and networking, social issues, and technical issues" (Al-Salam, 2011, p. 7). Consequently, effective teaching involves adapting to students' needs, applying meaningful examples, facilitate the course effectively, encourage students to do their best, deliver a valuable course, communicate effectively, and show concern for student learning (Al-Salam, 2011; Jacobs, 2013; Mashaw, 2012; Nor et al., 2011; Schmidt et al., 2013).

The success of online education is a direct correlation on how effective a course is designed (Brannagan, 2012). The prevalent growth of the Internet has a direct impact on the increase of interactive technological media to teach and learn (Ruey, 2010). There

are three key areas to successful learning in an online course. First, integrate an energetic component that students can interact with. Second, the navigation in the course should be easy and not technically complicated. Lastly, provide training and technology support right from the beginning of the course. This provides a safe comfort in knowing that someone can help if technology difficulties are experienced (Beshoff & Gibbons, 2011).

Course design allows instructors to apply activities focused on learning, interaction, and overall quality. It is suggested that a well-designed online course can be effective in teaching adult learners (Lim, 2005) as it primarily focuses on learning. Instructors are able to clearly describe expectations, guide students to explore the differences in opinion, and provide the necessary feedback (Rubin & Fernandes, 2013). It can potentially challenge students to progress from their comfort level and achieve effective learning (Chen, Jones, & Moreland, 2014). The challenge that might exist is that some faculty is not familiar or comfortable with developing online courses due to the knowledge of technology that it requires (Schmidt et al., 2013). Knowles established that students do learn effectively when course activities are tailored to their individual needs and environment (Ruey, 2010). Students learn effectively by acting and observing results of their actions, instead of listening to others as to what they should be learning (Shieh & Chang, 2014). For this reason, a curriculum should be built around students' needs and interests (Knowles, Holton, & Swanson, 2012).

In designing a social constructivist learning environment, there are six instructional principles to consider:

- interactive learning (interacting with the instructor and peers, rather than engaging in isolated learning)

- collaborative learning (engaging in collaborative knowledge construction social negotiation, and reflection)
- facilitating learning (providing a safe, positive learning environment for sharing ideas and thoughts)
- authentic learning (connecting learning content to real-life experiences)
- student-centered learning (emphasizing self-directed, experiential learning)
- high-quality learning (stressing critical thinking skills and learners' reflection on their own lives) (Ruey, 2010, p. 709)

Online instructors must be challengers by requiring learners to incorporate past experience and current knowledge and experience to effectively connect with course content (Chitanana, 2012; Jacobs, 2013). The teaching approach has substantial effects on students perceptions as to the skills needed for a successful outcome (Chiang, Nouri, & Samanta, 2014). For example, students in a non-traditional introductory financial accounting course are likely to develop skills and abilities than a traditional course because there is less emphasis on the technical material (Chiang, Nouri, & Samanta, 2014). The course content does not have students so focused on the technical process, which helps develop communication, critical thinking, and teamwork skills (Chiang, Nouri, & Samanta, 2014; Jacobs, 2013).

Students will benefit from a higher level of learning when instructors are good listeners (Al-Salam, 2011) and create an effective learning environment (Jacobs, 2013). Online instructors must create opportunities for students to engage with other students, with the teacher, and course content (Chitanana, 2012). By taking the initiative and being involved with students, the instructor creates a receptive and engaged course. The

effectiveness of students' learning will depend on how well they feel connected to the instructor (Jacobs, 2013).

Instructors can also be involved within their own community to prevent from feeling isolated from their peers. This type of involvement creates a collaboration in which they can have the support and assistance of peers in the development and delivery of the online course (Crawford-Ferre & Wiest, 2012). By participating in a community of practice, this facilitates their own learning as they can exchange ideas and help each other in teaching online (Crawford-Ferre & Wiest, 2012). Currently, roles and competencies are created by the experts in online education, which limits the input on the online instructor (Baran, 2011). Therefore, it is essential that instructors show their own roles, competencies and ideas about online learning to prevent them from taking a submissive role (Al-Salam, 2011; Baran, 2011).

Students are more encouraged by becoming more actively involved in the course, which leads to the development of critical thinking skills (Jacobs, 2013). An instructor can also become a mentor whose role would be to construct an environment that is appropriate for thinking, creation, social interaction, and discovery learning (Fox & Stevenson, 2006; Mashaw, 2012). The effectiveness of mentoring can be measured by comparing pre- and post-mentoring exams given to the students, which have shown to improve students' academic performance (Fox & Stevenson, 2006).

Multiple subjects in finance are perceived to be difficult and not so easily grasped to undergraduate students (Ming et al., 2009). Instructors can find difficulty in establishing effective teaching methods to online finance undergraduate students that would lead into an acceptable success rate. However, early and frequent engagement

between instructors and students, especially during their first year of college, can improve students' experiences, learning and motivation which ultimately have an impact on the success rate (Vernon, 2013). A teacher with creative abilities must be active and innovative, challenge and facilitate, and proficient in the respective area of discipline (Shieh & Chang, 2014). For example, establishing office hours and the use of discussion boards provide online learners options to engage in communication with the instructor and other students (Fricke & Agrawal, 2012). Meeting with the instructor during office hours provides the opportunity for students to receive feedback to apply to their current task.

The educational experience must be balanced between instructor, learner and course content of which provides meaning to the learning experience (Nor et al., 2011). Motivating and encouraging learners through expression and exploration help develop reflective learning to further personal and professional growth (Nor et al., 2011). An online finance course must include the tools that are most effective in both teaching and learning. Most importantly, the focus of instructional design on the motivation to learn has a direct effect on the effectiveness of an online delivery (Mashaw, 2012). The effectiveness of an online course depends on how the course is delivered (Jacobs, 2013). Faculty must have the thorough understanding of planning activities for an online course that are interesting, motivating, and self-directed (Schmidt et al., 2013).

Engaging students in other preparation requirements also contributes to the overall learning effect. For example, reading course material is a requirement to gain knowledge in fundamentals that will contribute to the comprehension of specific subjects (Nor et al., 2011). As reading material changes from printed text to online/digital text,

the reading behaviors, and the skills and strategies used change as well (Nor et al., 2011). Readings in online formats provide learners time process and internalize the information to help develop construction of knowledge, which leads to reflective learning (Nor et al., 2011). Learners are also involved in reading supplemental material available in multimedia forms, such as video or audio (Nor et al., 2011).

Students benefit from a profound learning where they can provide ideas, solve problems, and apply concepts in future courses and career (Jacobs, 2013; Rubin & Fernandes, 2013). The quantitative aspect of finance material is one of the most difficult aspects for a student to master (Bland & Cutshall, 2011). Students seem to learn more and perform better when a prerequisite testing for quantitative knowledge has been completed prior to taking a finance course (Blaylock & Lacewell, 2008; Grover, Heck, & Heck, 2009). For example, requiring a prerequisite course benefits the students in their analytical skills and study habits (Blaylock & Lacewell, 2008; Grover et al., 2009). The knowledge and testing gained from a quantitative perspective has a positive impact on the performance of a finance course. Therefore, the design of prerequisite courses as well as the design of the finance program is a priority (Blaylock & Lacewell, 2008).

Courses that have homework problems face a learning challenge as watching someone solve them is not enough to understand or become proficient. Online homework management systems have shown to provide learners an opportunity to practice working out problems assigned while getting immediate feedback (Morgan, 2013). Hence, web-based homework may provide student the opportunity to understand the course material better (Bland & Cutshall, 2011; Morgan, 2013). In addition, they offer online support via videos, details in solving similar problems and other multimedia

aids (Morgan, 2013). This provides the students with multiple tries in solving the problem correctly before a final submission. However, the number of assignments must be reasonable as numerous assignments can be an overload the student (Jacobs, 2013) as it limits a collaborative environment needed in online courses. Grading rubrics, helpful hints, and succinct instructions also help guide and assist learners in their learning (Brannagan, 2012).

Establishing a clear communication in the beginning of the course sets the tone of what is to be expected and makes the students feel at ease. Communicating expectations and guidelines help both students and instructors have a clear understanding of what is required (Ku, Akarasriwworn, Rice, Glassmeyer, & Mendoza, 2011). Students can be prepared to participate in their online course when they have been given clear expectations and guidelines (Ku et al., 2011). Incorporating communication, cooperation, compromise, complement, and commitment within the course structure enables students to have a better working relationship while developing effective communication (Chou, 2012). This supports both asynchronous and synchronous learning, which are the primary means of communication.

Asynchronous communication is an effective tool for group communication and cooperative learning that promotes engagement within the students (Ku et al., 2011). Students are given the opportunity to engage in conversation with their peers and the academic community to solve learning challenges. Technology has enabled the platform for learners to interact and experience various media, such as discussion forums, e-mail, chatrooms, and many other resources (Chitanana, 2012). This type of technology-based platform provides an opportunity for constructivist learning due to access to resources in

a student-centered environment, in which content learning is relevant to practice (Boton & Gregory, 2015; Chitanana, 2012).

In the online environment, learners are encouraged to actively engage in learning in the classroom through discussion, negotiating ideas, arguing view points, and solve problems as a team. The online discussion board is the primary means of facilitating student-student interaction (Chou, 2012). Threaded discussions help assemble a sense of community, develop advanced thinking, and provide an opportunity to collaborate with others (Ku et al., 2011). Reflective thinking cannot be separated from action and critical reflection is the effort to disconnect from the external world to construct meaning, even though the validity of the meaning is based in experience (Shieh & Chang, 2014).

An asynchronous discussion board supports students' need for flexibility by allowing them time to read, to reflect and to respond to their peers' postings as well as participate when able to (Ku et al., 2011). Students are able to expand their knowledge by learning from others' perspectives (Chou, 2012). Motivating students to post timely responses and replies to classmates improves their sense of participation and learning, which impacts the students' achievement (Ruey, 2010). This type of communication creates a transformative learning environment by using a variety of asynchronous management tools in learning platforms, such as Blackboard or eCollege, which provide access to course materials 24- hours, 7-days a week (Jacobs, 2013; Mayes, Ku, Adarasriworn, Luebeck, & Korkmaz, 2011). By using innovative techniques within these management tools, it increases expression due to interaction with classmates through writing (Jacobs, 2013; Mayes et al., 2011). It also helps improve problem solving and critical thinking due to peer guidance, and group communication and collaboration

(Jacobs, 2013; Mayes et al., 2011). Hence, it provides the vital learning experience in an interactive setting where students engage, build knowledge, and apply critical thinking (Chitanana, 2012).

Social activities support the development of critical thinking in an asynchronous discussion forum and the quality of responses increases when an instructor implements critical thinking elements or a guest speaker is present in the discussion (Chou, 2012). There are other factors that can be implemented in an instructional framework to promote online asynchronous discussion:

- Blogging: Collaborative Learning/ Instructional Strategies
- Skype: Instructor's role/ Mentor Support/Communication
- Podcasting: Course Guideline/Resources
- Facebook: Collaborative Learning
- Wiki: Collaborative Learning/Instructional Strategies (Chou, 2012)

However, after the implementation of active online discussions, students seem to have changed their preference from asynchronous to synchronous learning (Beshoff & Gibbons, 2011). In synchronous communication, students are able to communicate at the same time using text chat, audio-conferencing, videoconferencing, or online white boards (Ku et al., 2011). It provides the opportunity to receive immediate feedback, the real-time pace of the discussions, the ease of completing a chat in one session, and the challenge of engaging in critical thinking and learn from others (Beshoff & Gibbons, 2011). These communication tools promote effective learning environments by encouraging students to attain deeper learning (Ku et al., 2011). Combining asynchronous and synchronous communication tools to deliver online course content is

thought to be usable, of quality and of value in students' satisfaction (Ku et al., 2011). They also provide flexibility for the students to learn by providing the technology while supporting independent and innovative learning styles (Ku et al., 2011).

Current technologies and their continuous implementation have made an impact on both online teaching and learning (Nor et al., 2011). Through the active process of learning, students can either be encouraged to progress or discouraged from further improving (Mashaw, 2012). It is important for instructors to stay current with technology developments to help students in the course to stay interested in the subject. The fast growth of the internet has produced vast opportunities to improve a finance education (Zhuoming, 2011). Finance instructors are highly encouraged to implement internet-based skills in their teaching (Zhuoming, 2011). Even in a face-to-face environment, students prefer that lectures, course material, quizzes, and gradebook are delivered online (Zhuoming, 2011). For example, technology enables lectures to be incorporated in the design and delivery of the course to support a constructive approach, in which the focus changes from knowledge to knowledge construction (Boton & Gregory, 2015). Although finance would still be regarded as a difficult subject to learn for most business students, the technology that internet-based applications have may provide the most effective teaching tools (Zhuoming, 2011). From a pedagogical perspective, the achievement of students' learning is most evident (Zhuoming, 2011).

Adopting and learning technology is an indispensable requirement for instructors (Al-Salam, 2011). The effectiveness of an involved online instructor depends on the continuous training and support of technology (Fish & Wickersham, 2010). Instructors must remain familiar and comfortable with technological advances and related software

to the subject they are teaching. Staying current with technological innovations and networking with peers who teach the same subjects, helps instructors stay current with advances in their discipline (Al-Salam, 2011; Fish & Wickersham, 2010). From an adult learner's perspective, certain classroom challenges can be discouraging, which decreases the effectiveness of learning. Some studies have associated student stress with technology issues, collaboration issues, and lack of trust with online learning (Mashaw, 2012). Although advances in technology have enabled for students to become familiar with computers and the internet extensively (Bland & Cutshall, 2011), it can be a stress factor for some which can decrease learning effectiveness (Mashaw, 2012). Other challenges to consider that prevent students' success are based on "auditory learning style, basic computer skills, communication issues, college status, isolation, and resource accessibility" (Varner, 2013, p. 16).

Other studies in effective teaching have recognized that students have a positive learning experience when materials from related disciplines are integrated. For example, the Institute of Management Accountants (IMA) explains that integrating finance and accounting together result in a more effective strategic viewpoint (Leauby & Wentzel, 2007). Another study shows that carrying over knowledge, skills and attitudes from communication courses to finance provides students the qualities to apply within the discipline (Stretcher, Hynes, & Maniam, 2010). These alternate means of integrating disciplines benefit the students into building the foundation of cross-disciplinary understanding (Walstra, Harrington, Dougras, & Pollastrini, 2012).

Learning Styles

Learning styles is referred as the different ways people process and retain

information (Berry, Settle, & DePaul, 2011). Establishing teaching effectiveness is an important pursuit for instructors. However, learning styles should not be used to determine learning strengths and weaknesses, but as an indicator of the type of learning a student prefers (Berry et al., 2011; Carlson, 2013). Most importantly, students learning styles can be affected by their educational experiences (Berry et al., 2011; Chen, Jones, & Moreland, 2014). In implementing instructional strategies to assist students to transform their experiences into knowledge, it is essential to understand their learning needs and learning styles (Shieh & Chang, 2014).

The adult learners collect experiences which constitute to be a sound foundation for learning. A study conducted by Bale and Dudney (2000) compared andragogical versus pedagogical methods in adult learners. The andragogical theory assumed that adult learners prefer a more self-directed learning (Bale & Dudney, 2000). Also, they are more interested in the topics they study as they can relate and apply to their life or work environment (Bale & Dudney, 2000). Andragogical learners want to gain knowledge based on performance or expertise (Bale & Dudney, 2000). On the contrary, pedagogical learners depend on how the instructor facilitates the course. They prefer for the instructor to be responsible for what and how a topic should be learned. These learners are assumed to have limited experiences, who are primarily motivated by grades, competition and the possibility of failure (Bale & Dudney, 2000). They are mainly concern with how much knowledge to gain, which may be useful at some point in the future (Knowles, 1970; Bale & Dudney, 2000).

Adult learners in finance education prefer a combination of both methods instead one more than the other. A study focused in business students to determine preferences

in learning methods indicated there is a benefit in establishing a hybrid approach with both andragogical and pedagogical methods in financial education (Bale & Dudney, 2000). The results recommended specific teaching strategies incorporating both methods suitable for undergraduate finance courses. Research studies support that effective learning and student achievement is a result of matching students learning styles or preferences and teaching methods (Bale & Dudney, 2000). In pedagogy methods, learners prefer a standard curriculum where andragogical curriculum must be flexible to support the motivation to learn (Knowles, 1978). Consequently, the study showed that adult learners significantly preferred andragogical learning methods that provide clear direction, useful and meaningful applications of financial tools, and focus in student participation.

Instructors tend to develop their teaching styles based on their experience and what has worked on the past (Berry et al., 2011). Hence, instructors find comfort to teach in styles that match their own learning (Berry et al., 2011; Carlson, 2013). This can disengage the instructor and the student, which impacts their learning. A disparity between the learning styles of faculty and students can result in undesirable outcome, such as difficulty learning, poor attention and performance (Berry et al., 2011; Chen, Jones, & Moreland, 2014). In a course of finance, this can add to the existing complexity of the material alone (Berry et al., 2011). In addition, learning styles can impact in the working environment when a company extends continuing professional education (Chen et al., 2014).

The challenge lies in the differences between student learning and teaching practices. Students have "different backgrounds, strengths and weaknesses, interests,

ambitions, sense of responsibility, levels of motivation, and approaches to studying" (Felder & Brent, 2005, p. 57). Simultaneously, instructors also have different teaching approach. Some prefer to lecture, others prefer to demonstrate problems or activities, others focus on applications, and others emphasize in memorization, and others in understanding (Felder & Brent, 2005, p. 57). The importance is to understand learning styles to provide the diverse needs of students that will improve critical thinking and problem-solving skills (Felder & Brent, 2005). Faculty have the responsibility to learn how students prefer to learn, to improve weaker areas of their cognitive process, and to adjust the teaching and testing strategies for an effective learning environment (Filbeck & Smith, 1996). It is important to address student learning preferences, even though finding a method to fit each student's learning style might not be possible (Felder & Brent, 2005).

The Myers-Briggs Type Indicator (MBTI) is the most widely and used learning preference questionnaire by business, education, and counseling to assess the strength of individuals' preferences (Felder & Brent, 2005; Filbeck & Smith, 1996). MBTI is based on Carl Jung's theoretical work, who observed that some psychological preferences are a key element in judgment and interaction with the world (Filbeck & Smith, 1996). Later on, Katherine Briggs and Isabel Myers (mother and daughter duo) researched and expanded upon Jung's Theory of Psychological Types. MBTI is recognized as a valid theoretical instrument to measure personality variations, which is a valuable tool to examine student performance (Felder & Brent, 2005; Filbeck & Smith, 1996). It measures the strength of individuals' preferences, which yield 16 types of preferences, where each can also share certain characteristics of the other. The four dimensions are:

- Extroversion vs. Introversion tells where individuals prefer to focus their attention. Extroverts would focus on active discussion and cooperative learning, whereas introverts prefer lecturing and individual assignments.
- Sensing vs. Intuition investigates how information is acquired based on their surroundings. Sensing would focus on applications and operations, whereas intuitors emphasize on science and math fundamentals.
- Thinking vs. Feeling assesses how individuals make decisions. Thinkers emphasize on objective analysis, whereas feelers emphasize on interpersonal considerations in decision-making.
- Judgment vs. Perception measures the orientation to the environment. Judgers focus on adhering to the syllabus and meeting assignment deadlines, whereas perceptors emphasize on exploring ideas and creative problem solving (Felder & Brent, 2005; Filbeck & Smith, 1996):

The MBTI has been a useful tool in business management and education to determine the personality types that would be more effective in middle and upper management positions (Filbeck & Smith, 1996). It has also been used to connect personality with job satisfaction in different work settings. Most importantly, MBTI has been used to examine the relationship between learning styles and classroom performance (Filbeck & Smith, 1996). It allows a more comprehensive evaluation of personality, learning style, and learning process (Filbeck & Smith, 1996). This is a contradiction to Kolb's model of the learning process where learning transpires as a person moves through concrete experience, reflecting observation, abstract conceptualization, and active experimentation (Filbeck & Smith, 1996). Hence, MBTI

types engage in numerous elements of the learning process in different ways.

A study conducted by Filbeck and Smith (1996) applied MBTI along with an assessment of what they value in terms of instruction in the Corporate Finance class in order to assess the students' personality preferences and learning styles. The study found significant correlations between different learning styles and MBTI personality types. This outcome might challenge instructors to determine the teaching method to include all students in the learning process. However, it can be used to influence the type of assignments or types of questions to use in exams. For example, a student with a sensing personality has an advantage in quantitative multiple-choice or open-ended questions (Filbeck & Smith, 1996). At the same time, the intuitive student many have any advantage on open-ended theory questions (Filbeck & Smith, 1996). Therefore, instructors may find of benefit to discuss of ways in which students can use their learning-style preferences to maximize on how they approach their learning (Filbeck & Smith, 1996). From a curriculum perspective, it can encourage more innovative teaching and testing methods. For example, instructors can encourage students to further analyze the patterns and connection between course materials, be creative and innovative when solving problems, and understand concepts and difficulties (Filbeck & Smith, 1996). Ultimately, by developing these skills, students are more prepared to deal with the real-life business environment (Filbeck & Smith, 1996). MBTI differentiates the ways students handle learning tasks, respond to different methods of instruction and classroom settings, and formulate career goals (Felder & Brent, 2005).

From an experiential learning perspective, Kolb's Learning Style Inventory, learning involves a four-stage cycle (Chen et al., 2014; Kolb, 2015). The first cycle is the

concrete experience, when a learner encounters a new experience. Next, the reflective observation pulls from past experiences to perceive the new experiences from different perspectives. Then, a person creates theories and solutions to the new issues in the next phase of abstract conceptualization. Finally, the development of concepts leads to active experimentation, in which the theories and solutions are tested and applied (Chen et al., 2014; Kolb, 2015). These dimensions of perceiving and processing information are related to four learning styles: diverging, assimilating, converging, and accommodating. This particular framework of Kolb's learning styles has been widely used in business disciplines. Most importantly, learning styles have an impact in the working environment because supervisors and trainers must determine how to facilitate and support performance in employee development (Chen et al., 2014).

A study assessed accounting and nonaccounting majors in undergraduate level courses to determine if learning styles were different between students enrolled in online courses versus traditional courses (Chen et al, 2014). The largest group of nonaccounting majors consisted of finance majors. The results showed that assimilating was the common learning preference, closely followed by converging for traditional students. Online students leaned toward a converging style, followed by assimilating. Both online and older students preferred a converging style, where younger and in-class students preferred assimilating style (Chen et al, 2014). Online students are inclined to be convergers due to the preference of "abstract conceptualization and active experimentation to transform experience into knowledge" (Chen et al, 2014, p. 50). Traditional students are inclined to be assimilators relying on reflective observation and abstract conceptualization (Chen et al, 2014). Online students embrace opportunities to

actively engage in experiential learning (Chen et al, 2014). Most importantly, a difference in learning styles also exists with finance majors due to quantitative and technical topics in course material (Chen et al, 2014). Consequently, it is essential for instructors to incorporate instructional activities that will help develop learners' skills of testing theories to developing solutions (Chen et al, 2014). Instructors can include interactive and experiential learning tools, such as the use of a clicker to respond to a conceptual and problem solving question (Chen et al, 2014). This provides an opportunity to develop more critical thinking and problem solving skills, which are prevalent in the converger learning style (Chen et al, 2014). Employers prefer accounting and finance professional to possess strong analytical skills, which are flexible and will adapt to different situations (Chen et al, 2014).

Learners' success in online finance courses will depend on the appropriate teaching methods tailored to the types of learning styles (Fricke & Agrawal, 2013). In 1983, Howard Gardner developed the theory of Multiple Intelligences (MI) used by many as an approach to learning in adult education (Lopez & Patron, 2012). One of the most dominant types of intelligences is the interpersonal style is the in which students learn from working with others (Lopez & Patron, 2012). Yet in most courses, instructors emphasize lectures, memorization of concepts and the use of PowerPoint slides, which is not the most effective learning to interpersonal intelligence. These learners would learn effectively through online group discussions, blogs, wikis or some type of live activity (Lopez & Patron, 2012).

A method to measure students' learning is the use of assessments to determine the level of deficiency on learning outcomes which helps the instructor to identify specific

areas to focus on (Bristow, Shepherd, Humphreys, & Ziebell, 2011). Assessments can be embedded within an assignment, a particular problem or a test question. Regardless of how they are embedded in the course, assessments ensure that learning outcomes have been achieved, to contribute to the overall goal of the University of meeting requirements in order to award a degree (Bristow et al., 2011).

Learning Environment

The main objective of the constructivist theory of learning specifies that a student's entire psychological, physiological, and emotional energy must be involved in the learning process, ultimately affected by the environment (Mashaw, 2012; Nor, Hamat, Azman, Noor, & Bakar, 2011). Learning is a continuous process of experiences involving a construct of meaningful, applicable knowledge (Kolb, 2015; Mashaw, 2012; Nor et al., 2011). An effective approach to enhance learning by transforming experiences into knowledge is regarded as experiential learning (Kolb, 2015; Shieh & Chang, 2014). For this reason, educators should create social, interactive, and learner-centered learning environments for the opportunity to actively engage in experiential learning opportunities to effectively improve learning (Kolb, 2015; Shieh & Chang, 2014).

Understanding learning styles can improve teacher effectiveness, in addition to helping learners to ascertain their ideal learning strategies (Elliot, 2006). Hence, it is essential that parts of the social environment, such as communication, interaction, participation, engagement or other motivational factors are not ignored (Mashaw, 2012). Institutions must recognize how students learn effectively in an online environment to boost student success in online courses (Liu, 2011). However, they must also understand and implement effective teaching methods for students to learn successfully. From a

teacher's perspective, many studies have acknowledged aspects that impact teaching effectiveness, such as the design and organization of the course, the active participation and interest of the instructor, the sense of community, active participation and discussion by the students, the extent of the concepts covered, study aids, student capabilities, application exercises, and grading procedures and policies (Brannagan, 2012; Mashaw, 2012). From a student's perspective, the determination to succeed is based on factors such as "college status, flexibility, goal commitment, GPA, graduating term, interaction quality with peers and teachers, online comfort, personal growth, relevance, satisfaction, self-efficacy, self-motivation, social presence, support, and time management" (Varner, 2013, p. 16).

The progression of online education and teaching online require for faculty to establish different practices in the courses and the learning environment (Caruth & Caruth, 2013). Degree-seeking adult learners in online programs have increased; shifting the focus in implementing and/or improving curriculums is essential. Although, there are many studies on the different types of methods used to teach or learn the subject of finance, little research is available on the methods used in teaching online finance courses effectively (Chang et al., 2012; Ming et al., 2010). There is limited evidence on the evaluation of effective teaching methods for a successful online course (Chang et al., 2012). Higher education is pressured to prepare adult learners who are able to learn, understand, and develop critical and analytical skills; thus, affecting how faculty teaches and how students learn over the next 10 years (Hainline et al., 2010). Unfortunately, there is not a model or an efficient method to measure the effectiveness and quality of an online course (Mashaw, 2012). Nevertheless, it is essential that an online course is

developed effectively and efficiently to have a positive impact on the student and course performance (Mulig & Rhame, 2012).

A study conducted by John Lim (2005) investigated the effects of online teaching versus traditional classroom to determine the effectiveness of students' learning and success. The research encompassed demographics, students' background, satisfaction and "perceptions of the instructional delivery, course and instructor, quality of learning, quality of communication, and support" (Lim, 2005, p. 81). The study indicated that students in online education performed better than students in a traditional classroom (Carrol & Burke, 2010; Lim, 2005). Although there were no significant differences in student satisfaction as to their learning experience and instruction, online learners ranked the overall quality of course, learning and communication with the instructor significantly higher than students in a traditional classroom (Lim, 2005).

Student-Centered Learning

An effective learning environment combines teaching methods, learning activities, and evaluation tools within a course. An education method integrating these areas is the Student-Centered Learning (SCL) approach, which focuses in on the learners and their needs, instead of depending on the teacher's input (Janor, Rahim, Rahman Auzairy, Hashim, & Yusof, 2013). This approach involves curriculum, teaching and learning activities, and assessments, which students use as a learning tool, such as the classroom setting, flexibility of the curriculum, teaching methods, evaluation policies, and course content (Janor et al., 2013). SCL has a great opportunity to be an effective learning approach in a setting where employment positions demand skilled job candidates (Janor et al., 2013).

SCL can be integrated into finance courses, which can improve the academic and general skills of future graduates as demanded by employers (Janor et al., 2013). There are several advantages to this student-learning process. For example, it enables learners to take control of their own learning and less dependent on the teacher's instruction (Janor et al., 2013). SCL focuses the student's abilities, interest and learning style to shift the change from changing to learning (Janor et al., 2013). They set their own learning goals and establish the resources to actively acquire knowledge (Janor et al., 2013). Since the student becomes the center of the learning experience, the teacher moves to more of a supporting role as a facilitator. A study conducted in accounting courses to compare the overall outcome showed that a teacher-centered environment had a decline in the students' tests scores, and the student-centered environment had a significant increase in the students' test scores (Janor et al., 2013). Hence, SCL helps develop skills and be cognizant among the students.

Several studies have discussed the numerous advantages of SCL, such as:

- taking into account students' diverse learning needs and increasing their retention of both knowledge and skills;
- increasing student's motivation and promotion of peer communication;
- engaging students actively in learning, which reduces disruptive behavior;
- allowing students to develop greater self-confidence, as they are accountable for their own learning responsibilities;
- building stronger student-teacher relationships;
- encouraging student innovation and creativity through deep learning, while promoting discovery/active learning;

- developing characteristics of lifelong learners- motivation through student's responsibility and independence,
- providing the opportunity for social acceptance and self-confidence and also improving mental ability
- enabling students to develop generic skills, such as effective participation when working as part of a team, communication and negotiation skills, effective decision making and independence; and
- emphasizing the effective use and communication of knowledge to address enduring and emerging issues and problems in real-life contexts. (as cited in Janor et al., 2013, p. 110)

From a teaching perspective, in a brick-and-mortar setting, finance courses are commonly taught in a traditional lecture format. After the instructor's lectures, tutorial or question-and-answer session follows. This type of teaching method primarily focuses in content and delivery of the lecture. Thus, students are limited to receiving the knowledge without active participation. Using this method, students are not as engaged, limiting the effectiveness of learning. For example, the class environment can become uninteresting if the class environment is primarily instructive; the teaching can be one way which learners become passive listeners and passive knowledge recipient; and learners do not actively participating in the learning process (Janor et al., 2013). The limited engagement would create a passive learner, which is common in a traditional classroom (Jacobs, 2013). In an online environment, students actively participate in the learning process. They learn to apply new ideas to solve problems, which require them to analyze and think critically. In turn, this will help learners develop the competencies to successfully

complete an online course (Jacobs, 2013).

The SCL method supports instructors by implementing other teaching methods, such as case studies, class or group discussion, group projects and presentations. For example, case studies enable students to reflect on their insights while communicating their viewpoint of the subject being explored (Boton & Gregory, 2015). This type of approach helps develop teamwork skills and to apply knowledge to real-world scenarios (Janor et al., 2013). Unfortunately, many institutions and educators state to be applying SCL methods without implementing the actual practice (Janor et al., 2013). Within SCL, some of the tasks are problem-based learning (PBL), which gives learners the opportunity to study and learn from analyzing the problems provided (Janor et al., 2013). PBL is student-centered, whereby students working in small groups are able to produce the necessary information to respond to, or solve, a specific problem. This method gives students the ability to create curiosity, acquire competencies, and learn critical thinking and problem solving skills (Janor et al., 2013). It also allows learners to use appropriate learning resources that aids to acquire lifelong learning skills (as cited in Janor et al., 2013). Most importantly, the students learn to work on a cooperative environment, fostering communication and interpersonal skills, and become stronger within a diverse learning community. Ultimately, PBL encompasses industry and graduate requirements in problem solving skills, effective communication across disciplines, and work with others in solving problems (Janor et al., 2013).

Collaborative Learning

Constructivist online learning environment in which there is collaboration and interactions helps students actively and effectively learn than a passive learning

environment. It is of great interest to help adult learners to learn more practically and effectively in the online learning environment (Ruey, 2010). Cooperative or collaborative learning is a method of teaching where the instructor provides the parameters and requirements of activities, while students interact to complete the assigned tasks (Hosal-Akman & Simga-Mugan, 2010). This environment allows learners to construct a scaffold for critical thinking and allow classmates to help each other, exchange resources and information, give and receive feedback, challenge and encourage each other, and reflect on progress and process (Chitanana, 2012). Cooperative learning develops collaboration between team members while each student is responsible of their own academic performance. This type of group learning involves students and assists them in learning the subject while practicing (Hosal-Akman & Simga-Mugan, 2010).

John Dewey believed that students ought to learn through constant interaction with others (Shieh & Chang, 2014). Therefore, instructors can create a collaborative learning environment where students can share their learning experiences and work together in given tasks (Chou, 2012), which results in greater student satisfaction (Jacobs, 2013). A competent online instructor should integrate collaboration and team learning strategies (Al-Salam, 201). However, the some online educators assume that students have the ability to work together to solve problems. It is essential that the instructor demonstrates problem solving techniques that encourage the students to work together in when working together. The students can benefit from this type of learning by actively participating in the group activities (Hosal-Akman & Simga-Mugan, 2010), which results in greater student satisfaction and lifelong learning (Jacobs, 2013). Groups of four to six students are effective as it develops social skills in decision-making, team work and team

management as well as professional success (Hosal-Akman & Simga-Mugan, 2010).

From both teaching and learning perspectives, encouraging social communication between students using electronic media is important in a collaborative learning environment (Chou, 2012). Social loafing is present when one or more group participants do not work as hard or contribute as much as the rest of the members. For example, students who actively participate in an online discussion are affected by those who lack participation. When a student does not participate or contribute towards the group's discussion or task, there is a decline in positive attitudes towards online collaborative learning (Chou, 2012). Students become frustrated with the inability of contacting one another. Hence, it is important for instructors to limit social loafing in collaborative learning to support successful learning experience (Chou, 2012). Instructors must find ways for students to actively interact in the course. The level of engagement in a course has a direct impact on a student's attitude (Jacobs, 2013). When a student's level of interaction increases, their positive attitude increases. The interaction can encompass both discussions with other students as well as instructor feedback. Instructors can reinforce the course material, which encourages the level of engagement in the learning process (Jacobs, 2013). It is also essential to provide adequate learning support for students who are not as proficient or have the ability to ensure they do not feel they are not learning (Shieh & Chang, 2014).

High-Quality Learning

High-quality learning stresses critical thinking skills and the students' reflection on their own lives (Ruey, 2010). Critical thinking develops the ability to focus on issues and solve problems through a guided process by which the results are justified by reason

and evidence (Shaw & Holmes, 2014). The key is to identify the areas of the learning design that will improve on the engagement of activities for the students to have a high-quality learning experience (Mattick & Knight, 2007). For example, in a constructivist, dialogical instructional approach would emphasize the *why* and learning about *how*, rather than just guide learning (Ruey, 2010). Students are encouraged to learn by discussing or asking questions, arguing, negotiating ideas, exploring, solving problems individually or as a team (Nor et al., 2011; Ruey, 2010; Temiz & Topcu, 2013). A high-quality learning environment focuses on the following four areas:

1. How do learning activities support learner engagement? - Students are enabled to become involved with learning the tasks by employing previous interests and understandings.
2. How does this learning activity acknowledge the learning context? - Students are placed in a real-context environment, in which real world skills are assessed and are easily transferred from learning context to professional practice.
3. How does the learning activity seek to challenge learners? - Students are provided with supportive knowledge-based structures to extend the given information as part of a problem-solving situation.
4. How does the learning activity provide practice? - Students are able to demonstrate what they are learning, receive feedback, apply criteria to their effective learning, and practice with activities that would result in good examples of the expected outcome. (Boud & Prosser, 2002; Hedberg, 2002)

The perception of students of the learning and assessment environment is important as it is challenging to predict (Mattick & Knight, 2007). The methodology to

design a curriculum that predicts student perceptions of the learning environment is important for lifelong learning outcomes (Mattick & Knight, 2007). Understanding this perception enables informed, targeted developments. Students learning is more effective when the instructor provides guidance as to when and where to use a strategy in a particular situation (Lenz, 2006).

Practice opportunities enable students to use situational information to selected and apply the strategies effectively under new circumstances (Lenz, 2006). For example, problem-based learning is supported in high-quality learning by encouraging independent study, interest in topics, and the ability to relate ideas (Mattick & Knight, 2007). Students are able to choose and prioritize what to study, which boosts their confidence in solving problems and apply critical thinking (Mattick & Knight, 2007). Assessing the students has an impact on what is learned and how, to promote high-quality learning and position it constructively between teaching and assessment (Mattick & Knight, 2007). Educators must ensure students are learning the more effective strategy than what is taught, and how the strategy helps them learn or meet the expected task to assess performance (Lenz, 2006). Faculty should provide constant feedback while students are actively working on their tasks in order to motivate and improve their higher-level thinking abilities (Brannagan, 2012).

Many instructors attempt to teach and develop critical thinking within the context of their course. For example, a finance class implemented the use of client memos to evaluate critical thinking skills of finance majors (Weisel, 2012). In a discussion forum, open-ended questions or inquiries stimulate further discussion on a topic to promote critical thinking (Beshoff & Gibbons, 2011). Positive or encouraging comments

provided as a reply, let learners know that their ideas contributed to the quality of the discussion. This reinforces students' contributions, promotes further discussion, and focuses on the important points of the dialogue. This is more evident in the synchronous online learning environment, where critical thinking is achieved by the encouragement, supportive comments, and posing challenging questions (Beshoff & Gibbons, 2011).

Students also tend to learn best through experience (Kolb, 2015). Internships, work/study assignments, structured exercises, role playing, and gaming simulations are examples of experience-based learning, which play a bigger part in the courses of undergraduate and professional programs (Kolb, 2015). For example, online games can be integrated in homework assignments as they provide simulated scenarios that the learner may not possibly come upon (Chen et al., 2014; Huang & Hsu, 2011). The gaming simulations are able to demonstrate consequences of risky financial decisions. The simulated scenarios offers low-cost, safe, fun, and realistic environment where students can practice what they have learned in class (Huang & Hsu, 2011).

The active involvement of the instructor should be quick, applicable, and with constant feedback to the students (Fish & Wickersham, 2010). When instructors take the initiative to communicate frequently, students feel interest about their progress (Fish & Wickersham, 2010). Students who received direct, consistent feedback are more satisfied and have a better academic performance than students who receive feedback as a group (Fish & Wickersham, 2010). Prompt feedback is also essential to the learner than receiving comments or advice at a later time (Rowe & Wood, 2008). Students' interest and engagement in the course can be greatly enhanced with timely feedback to help in achieving learning objectives (Shieh & Chang, 2014).

Feedback comes in different forms, such as written/verbal, specific/general, or group/individual which is most effective in meeting adult learners' needs (Rogwe & Wood, 2008). Although learners are expected to be accountable for their learning, the responsibility of the online instructors is critical in providing timely feedback, engaging students to participate in discussions, and provide summaries or comments on topic issues and the end of each discussion (Ruey, 2010). Building on previous learned knowledge, or scaffolding, aids learners to reach the next level of development progress achieved by the feedback provided from the instructor. This builds confidence and effectiveness of the skill learned (Brannagan, 2012).

Value of Competencies

Kolb (2015) referred to learning as the process where knowledge is produced through the transformation of experience. Learning is regarded as a constant sequence of existing experience, changing to observation and reflection, developing abstract concepts, in order to engage in active experimentation (Kolb, 2015; Shieh & Chang, 2014). The objective is to help learners to apply their knowledge and skills to make decisions and resolve problems (Shieh & Chang, 2014). Critical thinking is the ability to address an issue and solve the problem through a methodical process, in which the end result is accepted by reason and evidence to uncover a deep meaning (Shaw & Holmes, 2014; Weissberg, 2013). It produces a progressive sound, well-grounded, and valid understanding of a topic (Wichadee, 2014).

Adult learners must have the critical thinking skills to gain and absorb knowledge effectively and efficiently in order learn and perform well in both academic and workplace environments (Nimalthasan & Valeriu, 2010; Saade, Morin, & Thomas,

2012). The acquisition, understanding, and use of knowledge require a variety of learning approaches, reasoning, and the desire to do so (Saade et al., 2012). Critical thinking is an important ability that individuals must achieve in order to be successful in an academic and professional environments (Saade et al., 2012). It is a skill that helps differentiate information from being false, incomplete, or obsolete. Individuals tend to make decisions, create thoughts, make conclusions, and evaluate opinions as part of everyday life.

Learners must be able to evaluate complex situations in their professional and personal lives (Weisel, 2012). Critical thinking skills take students past the usual memorization, comprehension, and application of facts (Weisel, 2012). A critical thinker in a finance course must be able to pose or identify finance problems, research the problem from various perspectives, find and analyze all relevant data, visualize and evaluate alternative solutions, and propose a best solution and construct an effective justification of chosen solution (Carrithers et al., 2008). Therefore, students must demonstrate the ability to analyze a situation by gathering information and synthesizing it to achieve a conclusion. However, in general, individuals do not associate facts or evidence, only perception, when assessing a situation. A critical thinker distinguishes between logical reasoning and personal opinion (Saade et al., 2012). Although critical thinking is a significant aspect of life, it is a challenging goal to attain. Unfortunately, most learners do not acquire critical thinking skills in business classes as the emphasis is directed towards development of knowledge (Weisel, 2012).

Critical thinking involves others in developing and examining ideas, with clear presentation and credibility, while assessing and challenging others' ideas (Whichadee,

2014). Three critical elements to are key to critical thinking: what, why, and how. First, the *what* element demonstrates "characteristics of an intellectual mode of thinking, such as applying a logical, reasoned, rational, academic, or scholarly approach to thinking whereby justifications are accomplished through reason and evidence" (Shaw & Holmes, 2014, p. 101). Views and assumptions are not acceptable means for justification. The statements provided must be supported by a cited source of reference to provide validity and credibility. In all, what people learn is the outcome of learning of recognizable knowledge and skill from collected experience (Kolb, 2015). Second, the *why* element observes the importance of critical thought. For example, why should someone think critically? Critical thought impacts individuals, communities, and cultures because it enables enhanced thinking abilities and extended scope of knowledge. When reason and evidence provides justification, a person's thought can generate new knowledge, ideas, and solutions (Shaw & Holmes, 2014). This is the part where different perspectives of opinions based on prior knowledge are more evident. It might also add deeper insight into a known concept expanding the thought process into the *how* element (Shaw & Holmes, 2014), which is how learning takes place (Kolb, 2015). This third element of critical thinking is an intellectually methodical process that encourages thoughtful judgment, reflective decision-making, and reasoning based on evidence (Shaw & Holmes, 2014). The process suggests methods to increase awareness of critical thought to obtain the basic critical thinking skills and prevent deficient thinking (Shaw & Holmes, 2014). This expands the thought process into inquiries of in what way something has taken place or is evident. It is a reliable assessment in creating an effective connection between education and work (Kolb, 2015).

American education has long been criticized due to concerns that graduates lack the ability to compete successfully in a global environment (Weisel, 2012). Increasingly, business leaders have also expressed concerns about the education received business students (Weisel, 2012). In most business classes, the focus is in developing knowledge; the emphasis is not in teaching critical thinking. From a teaching perspective, the apprehension is whether an undergraduate student can develop and perfect their critical thinking skills in their business program (Weisel, 2012). These concerns revolve around the lack of problem solving and strategic planning skills that learners are not exhibiting critical thinking skills as demanded by the global economy (Weisel, 2012). Students are required to apply critical thinking skills in decision making to be successful in the business world. However, some debate that analysis, skepticism, and judgment are as important, or more important, than practical knowledge (Weisel, 2012). Nevertheless, students are expected to demonstrate critical thinking in some of their coursework.

The Association to Advance Collegiate Schools of Business (AACSB) accredits schools of business and international business schools that maintain high quality education and improves the abilities of school graduates (Weisel, 2012). It requires that business schools teach learners to develop critical thinking as part of the undergraduate program. Although developing critical thinking can be rather complex, universities do use different methods and give emphasis to different skills to achieve the expected goals (Weisel, 2012). Every course has learning objectives for students to achieve, which is used an assessment guidelines. These learning objectives use measurements that defined critical thinking by The Center for Critical Thinking. Critical thinking is the mental process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and

evaluating information to obtain an answer solution (Al-Mubaid, 2014; Saade et al., 2012, p. 1609). Consequently, accredited schools must demonstrate the development of critical thinking skills by providing learning outcome assessments. Although, the AACSB does not have specific guidelines or measures to accurately evaluate whether students achieved learning objectives or not (Weisel, 2012).

Finding ways to assess critical thinking skills in business programs is a challenging part of planning and implementing (Weisel, 2012). However, some schools have implemented measurement tools to assess learning outcomes, to include critical thinking. For example, some schools measure critical thinking by a Collegiate Learning Assessment (CLA) to assess a learner's ability to integrate a multidimensional material to achieve a logical conclusion (Weissberg, 2013), while others use online surveys (Saade et al., 2012). For a qualitative perspective, feedback can be obtained through discussion forums (Saade et al., 2012). Another option is through international critical thinking tests, which determine if students are able to analyze, evaluate, and judge information from several sources of information (Saade et al., 2012). Using rubrics has made assessments difficult due to the constant modification to course assignments. Even though the different methods of assessment do not measure how the students arrived at their answers, instructors and students ultimately benefit from the measurement of critical thinking levels (Saade et al., 2012).

Critical thinking implies for an individual to critically evaluate the logic and validity of information, develops evidence to support or negate views, analyzes situations carefully, and converses the subjects in order (Nimalthan & Valeriu, 2010). Therefore, critical thinkers support their own views as wells as seek others' perspectives. Critical

thinking leads into developing new solutions useful for problem solving and decision making. This process leads to creative thinking, which involves the mind to conceptualize the problem and determine alternative ways to solve it. Hence, critical thinking and creative thinking partake in the complexities of problem solving and decision thinking (Al-Mubaid, 2014; Nimalthasan & Valeriu, 2010). Taking a step further, problem solving leads to analytical thinking for vague situations requiring a student to identify, question, or create a problem to solve (Robbins, 2011). Reasoning becomes an essential component of problem solving and analytical thinking to provide a rational response based on the problem's outcome (Robbins, 2011).

Working Environment

The global financial environment is experiencing fundamental changes. Future finance graduates must focus in acquiring expected to have the skills and abilities as a result of these global changes (Baeten, Kyndt, Struvyen, & Dochy, 2013). This demand is a result of the direction that financial institutions must fundamentally change the ways in which they conduct business, the development and implementation of reforms to strengthen financial stability, and the collaboration in crisis management across the financial industries (Baeten et al., 2013). In addition, the methods that graduates are applying their technical skills and knowledge, and the tools used are rapidly changing as well (Kyng, Tickle, & Wood, 2012). However, technical knowledge and skills are not sufficient. They must be able to apply their knowledge forte in a professional workplace with professional tools (Kyng et al., 2012). "Financial managers usually have concrete, specific goals, and keep a close watch on financial variances in order to be prepared to react if and when necessary" (Brannagan, 2012, p. 80). In order to manage these

challenges, everyone in financial institutions, financial industry, and private sectors must possess the capabilities of knowledge and skills to succeed in these areas. For this reason, most employers expect future graduates to develop critical thinking skills, analytical skills, communication, decision-making, detail, math, using information, utilizing resources, working in teams and technical skills (Dohm & Shniper, 2007; English et al., 2012; Occupational Outlook Handbook of 2012-13, 2013).

The demand for employment in the financial services industry has increased in financial related fields faster than other occupations (Occupational Outlook Handbook of 2012-13, 2013). The Bureau of Labor Statistics projects 1.2 million new jobs, 17.3% growth, in business and financial operations occupations between 2010 and 2020 (Lockard & Wolf, 2012). From 2006 to 2016, personal financial advisors and financial analysts occupations were expected to grow by 41 percent and 33.8 percent, respectively, which were the two most rapid growth areas in business (Dohn & Shniper, 2007; Walker, 2009). As of 2013, the Occupational Outlook Handbook 2012-13 stated that financial analysts positions is expected to grow 23 percent from 2010 to 2020, still faster than the standard for all professions. Employers are seeking candidates who can quickly adapt, learn and integrate within the high performing business environment (Hodge & Lear, 2011; Occupational Outlook Handbook of 2012-13, 2013). Potential employees must persuade future employers that they will add value to the company, have a sound knowledge of the field and understand what total business value consists of (Hodge & Lear, 2011). Financial services are considered essential for economic growth and development; hence, a finance education is vital for the demands of skilled employees (Janor et al., 2013). Therefore, learners associate the quality of the program with the

value in the preparation for their career in evaluating college options, which is a critical aspect for job placement (DuPre & Williams, 2011).

Adult learners are interested on a program that provides the knowledge and tools to become competitive within the work force (Wansi & Liu, 2012). For example, graduates are expected to know Excel in the workplace, more than any other specialty software (Kyng et al., 2012). Almost all graduates working in different financial services positions use Excel at least 60% of the time, along with a variety of other software packages (Kyng et al., 2012). Although there is minimal formal training provided in college course, graduates are employable when they have sound Excel skills (Kyng et al., 2012). Close to 80% of academia believe that having spreadsheet skills are very important or essential for employment (Kyng et al., 2012). However, verbal and written communication skills are attributes that consistently appears at top of the list of preferred employment qualities (English et al., 2012). In 2008, the Students in Free Enterprise surveyed employers on the importance of workplace; skill set and proficiency in employees versus how prepared were college graduates (Dohm & Shniper, 2007). The study showed that employers experienced the largest gap in problem solving, leadership, communication and project management skills (Dohm & Shniper, 2007). Therefore, students need to be better prepared with competencies that employers seek, such as analytical, critical skills, communication, decision-making, detail, math, using information, utilizing resources, working in teams and technical skills (Dohm & Shniper, 2007; DuPre & Williams, 2011; English, Manton, Sami, & Dubi, 2012; Kyng et al., 2012; Occupational Outlook Handbook of 2012-13, 2013).

Although it is important for students to be aware of the qualities employers are

seeking, it is essential for faculty to know their students' thoughts on the significance of work place qualities to enhance their understanding and focus on the most important characteristics in their courses (English et al., 2012). At times, new employees are disappointed by the difference between the reality of the workplace and their expectations (Barnett, 2012). Nevertheless, employees are motivated by having interesting, challenging work where they can grow and be recognized. Similarly, corporations recognize the critical aspect of interpersonal communication abilities to enable employees' productivity and engagement (Hyne, 2012). Employers are expecting candidates to have exceptional communication abilities, work ethics, initiative, and be able to work in teams (English et al., 2012; Parent, Nielsen-Dube, Stowe, Schartz, Sendal, & Cain, 2011; Stowe, Parent, Schwartz, & Sendall, 2012). Good communication is directly related to business success because it encourages and helps develop healthy workplace relationships (Hyne, 2012; Willis, Wilkie, & Gracey, 2012). Incorporating communication activities with the traditional analytical skills and subject knowledge supports learners' professional development (Alshare, Lane, & Miller, 2011; Stowe et al., 2012). A survey from the Center for Professional Excellence at York College of Pennsylvania indicated that most of new hires lack professionalism. Ironically, the characteristics of professional employees that were mostly pointed out were personal interaction (34%) and the ability to communicate and listen (25%) (Hyne, 2012). Similarly, the characteristics associated with unprofessionalism were poor communication skills and poor grammar. Poor communication skills are also associated with poor writing skills (Willis et al., 2012). Since professionalism is associated with good verbal and written communication skills, colleges must encourage professionalism

traits among adult learners (English et al., 2012; Hyne, 2012). Employers see graduates who have excellent writing skills to help the organization to accomplish its goals (Parent, Nielsen-Dube, Stowe, Schartz, Sendal, & Cain, 2011). Poor writing skills equate low productivity, which is critical as employees are expected to do more with less (Parent et al., 2011). The likelihood of a candidate with deficiency in writing skills will not be hired or considered for promotions (Parent et al., 2011). Adult learners would benefit from a communication course focusing on interpersonal communication to develop intellectual abilities, critical thinking, leadership, practical skills and teamwork (English et al., 2012; Hyne, 2012; Stowe et al., 2012; Willis et al., 2012). Although, presentation skills and effective writing are critical as well, they should be incorporated in any business course (Stowe et al., 2012). Part of developing communication competencies should involve group projects and presentations, writing and involving learners in professional organizations. Business communication instructors collaborating with organizations help improve the business environment that our adult learners are seeking (Hyne, 2012).

As much as good communication skills, reliable work ethic, able to work in teams and take initiative are valued, employers also value relevant work experience and leadership (English et al., 2012). These competencies are important for both employers and employees to achieve an efficient and positive work environment (Barnett, 2012). Experiential learning links education, work, and personal development by emphasizing the connection between the classroom and the real-world environment (Kolb, 2015). For example, internships and cooperative work experience assist adult learners to prepare for the transition to work environment, while acquiring the competencies employers' expect

(Barnett, 2012; English et al., 2012; Kolb, 2015). The work responsibilities that interns experience allow learners to develop realistic work expectations, which are not significant until they are integrated in the work environment (English et al., 2012). Along the same lines, employers are also looking for a particular distinguishing attribute, such as genuine and positive attitude (English et al., 2012). They prefer to hire employees with positive attitudes as skills can be taught much easier than to someone who presents challenges (English et al., 2012). However, the importance of having a positive attitude is not been emphasized in the learning environment. Adult learners are expected to learn job responsibilities, develop technical skills and people skills quickly in order to succeed in the job. A genuine positive attitude help learners to transition into real-life work much easier and faster. Therefore, it is of importance to a college business curriculum to identify these characteristics to assist students in preparing them to obtain a position (English et al., 2012).

Summary

The problem in this study is that effective teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) used in online undergraduate finance courses have not been particularly identified in developing competencies that are instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012). The purpose of this qualitative single case study is to examine the faculty perspectives of the teaching methods used in online undergraduate level finance courses instrumental in developing competencies expected by employers (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012; Yin, 2014). The literature review examined the aspects that attract adult learners to obtain an education in an online environment, the current

teaching practices in online programs, teaching methods for student learning, and the skills that employers expect candidates upon gaining employment or promotions. Online learning has become a preferred means of education because of the flexibility and convenience it offers while balancing home, work, and school. Most importantly, it provides the opportunity for professional development and lifelong learning (Artino, 2010; Kolb, 2015; Lease & Brown, 2009) to develop individuals to their full potential as people, family members, and human beings (Kolb, 2015).

The need for quality online instruction is a priority for institutions that offer online programs (Schmidt et al., 2013). A constructivist approach supports educators to construct a collaborative, reflective, and interactive online learning environment designed to enhance active participation and encourage effective learning (Chitanana, 2012; Ruey, 2010). The educational experience must be balanced between instructor, learner and course content of which provides meaning to the learning experience (Nor et al., 2011). Students benefit from a higher level of learning when instructors engage in an effective learning environment (Jacobs, 2013).

Learning styles are the different ways people process and retain information (Berry, Settle, & DePaul, 2011). The challenge lies in the differences between student learning and teaching methods. The Myers-Briggs Type Indicator correlates learning with personality, learning style, and learning process (Filbeck & Smith, 1996). MBTI applies personality preferences to differentiate the ways students handle learning tasks, respond to different methods of instruction and classroom settings, and formulate career goals (Felder & Brent, 2005). Applying Kolb's Learning Style Inventory, online finance

students tend to be convergers who embrace opportunities to actively engage in experiential learning (Chen et al, 2014).

A student-centered environment combines teaching methods, learning activities and evaluation tools to focus on the learners and their needs (Janor, Rahim, Rahman Auzairy, Hashim, & Yusof, 2013). A constructivist online learning environment in which there is collaboration and interactions helps students actively and effectively learn. High-quality learning stresses critical thinking skills and the students' reflection on their own lives (Ruey, 2010). Critical thinking is an important ability that individuals must achieve in order to be successful in an academic and professional environments (Saade et al., 2012).

In experiential learning, learning is a continuous process of experiences involving a construct of meaningful, applicable knowledge (Kolb, 2015; Mashaw, 2012; Nor et al., 2011), which is regarded as an effective approach to develop learning by transforming experiences into knowledge (Kolb, 2015; Shieh & Chang, 2014). Adult learners gain thorough knowledge and competencies to perform well in both academic and workplace environments (Nimalthasan & Valeriu, 2010; Saade, Morin, & Thomas, 2012). Future finance graduates must develop the skills and abilities due workplace demands as a result of global changes (Baeten, Kyndt, Struvyen, & Dochy, 2013). For this reason, most employers expect future graduates to develop critical thinking skills, analytical skills, communication, decision-making, using information, utilizing resources, and working in teams (Dohm & Shniper, 2007; English, Manton, Sami, & Dubi, 2012; Occupational Outlook Handbook of 2012-13, 2013).

Chapter 3: Research Method

The purpose of the qualitative single case study was to examine the perceptions of online finance faculty on the teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) in developing competencies that were instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012; Yin, 2014). The study aimed to acquire the perspectives of the teaching methods used in online finance courses that were effective in developing critical thinking and analytical skills in undergraduate level students as expected in the workplace. This study examined the teaching methods that faculty used in an online finance course perceived to be effective in developing competencies. The sample consisted of 10-15 educators who taught finance to undergraduate level students in an online environment. This chapter contained a discussion of the research methodology, population, sample, materials, and data collection, processing and analysis. The chapter concluded with assumptions about the population and design, study limitations, delimitations, and ethical assurances.

The qualitative research questions provided the desired focus to ensure that the purpose of the study was addressed successfully. The research questions for this study intended to examine the faculty perspectives on effective teaching methods in online finance undergraduate level courses instrumental in developing competencies expected in the working environment (Chang et al., 2012; Stake, 2010; Yin, 2014). The research questions for this study were the following:

Q1. What were the perceptions of finance instructors related to student-centered learning in developing competencies in online undergraduate level finance courses?

Q2. What were the perceptions finance instructors related to collaborative

learning in developing competencies in online undergraduate level finance courses?

Q3. What were the perceptions of finance instructors related to high-quality learning in developing competencies in online undergraduate level finance courses?

Research Methods and Design

The chosen research methodology related to the research question and the purpose of the research. The qualitative single case study approach was the appropriate research method to examine the perceptions of faculty of the teaching methods that instructors employ in online finance course for students to acquire competencies expected by current or future employers. A case study is based on the need to understand how and why or to describe an existing phenomenon with its real-life context to derive meaning (Patton, 2002; Riege, 2003; Yin, 2014). A qualitative single case study was the appropriate research design to inquire on the practices that instructors apply in online finance courses where findings might be conclusive with a smaller sample number and more semi-structured method (Stake, 2010; Yin, 2014).

The study emphasized how faculty interprets the perceived effectiveness of instructional practices used in online finance courses, allowing the research to examine through the perspectives and experiences of others (Baxter & Jack, 2008; Stake, 2010; Yin, 2014). A qualitative single case study research design entails the exploration of a complex phenomenon from various perspectives to gain a comprehensive understanding of that phenomenon (Yin, 2014). It allowed the researcher to understand the experiences of the faculty who were involved in effective teaching practices. A case study depended on the constructions of the participants through their stories, to give emphasis to the faculty perceptions based on their own experience of the phenomenon (Stake, 2010). The

use of a case study was appropriate for finding the understanding of the meaning of faculty experiences in teaching online undergraduate level finance courses (Riege, 2003; Stake, 2010; Yin, 2014). This supported the constructive model, which asserts that the truth is comparative and it is dependent on someone's perspective (Baxter & Jack, 2008; Stake, 2010; Yin, 2014).

Construct validity identified an appropriate operational measure in this case study (Riege, 2003; Yin 2010). A challenging perception of a case study is that it tends to be rather subjective in developing an operational set of measures based on preconceived notions (Riege, 2003; Yin 2010). This might be a result of the close and personal contact with the people or organizations to be examined (Riege, 2003; Yin 2010). Subjective judgment was prevented during the research design and data collection to improve construct validity and reliability (Riege, 2003; Yin 2010). The researcher was guided by the standards of converging evidence by developing a study database to include case study notes, document, and narratives (Yin, 2014). The overall quality of the case study was maintained by establishing a chain of evidence (Yin, 2014). The reliability of the case study supported future research to achieve similar findings provided that operations and procedures were consistent (Riege, 2003).

Population

The study focused on faculty who were involved in teaching online undergraduate level finance faculty courses. The population of online faculty was not easily accessible or available due to differences in time zones. Interviews were conducted via the Internet using Skype as a video call service. A focus group was not practical because faculty were located in different states and were not able to meet face-to-face (Meyer & McNeal,

2011). The target population were educators who had taught or were currently facilitating at least one online finance course, who can provide their perspectives on the methods they perceive to be effective. Data collected from the interviews were responses relevant to the study's research questions. The faculty perception on the effectiveness of their teaching methods in providing quality education to students was evaluated to enhance the students' satisfaction and learning (Chang et al., 2012).

Sample

The sampling method for this research was based on the purpose of the study. Sampling in a case study was particularly suitable for revealing a phenomenon and for extending a relationship (De Massis & Kotlar, 2014). In a qualitative study, informants provide a significant approach and understanding than others in unique extreme cases (Abrams, 2010). Single cases provided an opportunity for extraordinary research access (De Massis & Kotlar, 2014). To define a sample universe, participants met an inclusion criteria to determine eligibility for the interviews. The inclusion criteria included educators with similarities in professional background, teaching experience, and who had taught at least one online finance course. This single case study illustrated the faculty perspectives of the best practices of teaching method while the real-life context and challenges of delivering the methods were conveyed (Leahy, 2014).

A purposive sampling strategy was employed to select individuals based on the study purpose with the expectation that each participant provided unique and valuable information to the study (Suen, Huang, & Lee, 2014). The goal of purposive sampling was to select the specific study units that resulted in the most significant and sufficient data (Yin, 2011). The strategy of purposive sampling was to exercise judgment on the

best perspectives provided on effective teaching methods, and intentionally invite those with the particular perspectives into the study (Abrams, 2010; Yin, 2011). The purposive sample included educators who had experience in teaching finance and had taught at least one course to undergraduate level students in an online environment. Gathering data from instructors created different circumstances from unique individual experiences (Yin, 2014) as teaching methods used in online finance courses had not been proven successful.

The sample size of participants used for this qualitative study was based on the practical reality of research requiring a provisional decision on sample size at the initial phase (Leahy, 2013). A phenomenological research involved samples of carefully and purposively selected individuals who share a common experience to obtain in depth patterns and relationships of meaning (Abrams, 2013) capturing the uniqueness of the events (Yin, 2011). A parameter of an approximate sample size was determined, with a minimum and a maximum (Leahy, 2013). A sample size of 10 online finance educators was sufficient to gather information (Yin, 2011) and achieve data capacity for the research study (Sue, Huang, & Lee, 2014). The members of this faculty population were not identical, in which sample size was determined by data saturation (Sue, Huang, & Lee, 2014).

An approval to request participation in the research study was requested to the administrator of a Facebook group, Make a Living Teaching Online. The group of administrators actively helped with publicizing the study and encourage participation from it members (Leahy, 2013). The Facebook group consisted of business and finance educators who supported peers and share professional interests in online education. The participants had similarities in professional background, teaching experience and teaching

finance courses online. The sample was preferred based on their availability and willingness to be voluntary participants of the study.

Materials/Instruments

The interview questions were designed to address the purpose of this study. Different types of semi-structured, open-ended questions were used in the interviews (Yin, 2011). Online interviews were conducted via Skype, an online video and audio call service (Yin, 2014). Formal interviews were conducted electronically through an online chat with another person via computer or tablet on a real time basis (Yin, 2014). Conducting online interviews enabled reaching a population who were not accessible or available at the same time due to logistics or time zones (Leahy, 2011; Meyer & McNeal, 2011; Yin, 2014). A Skype connection was an electronic source that allowed dialogue and interpersonal interactions to collect evidence for this research study (Yin, 2014).

The interview questions consisted of demographic and perception questions. The demographics questions filtered results based on gender, race, age, full-time or part-time online faculty, finance subjects taught, undergraduate levels taught, highest degree and major, professional qualifications, certifications and awards, overall number of years of teaching experience, number of years teaching finance online and in traditional setting. The perception questions focused on the faculty perspectives of the teaching methods that were instrumental in developing competencies. The responses to the interview questions facilitated data collection, processing, and analysis to address the purpose of this single case study.

Data Collection

The administrator for the Facebook group was contacted after obtaining the

Institutional Review Board's (IRB) approval, to publicize the research study and encourage participation in the research study (Leahy, 2013). Once the researcher had been contacted by a volunteer participant, an interview time via Skype was coordinated. An informed consent form was provided to acknowledge to the participant that there is no pressure to participate in the research study (Yin, 2014). The interview questions consisted of semi-structured, open-ended questions to eliminate perceived pressures. The Skype online interviews enabled the researcher and participant to partake in dialogue and interpersonal interaction to collect the responses to each of the research questions (Yin, 2014). Participants were asked if their teaching experiences pertained to undergraduate students only, and whether at least one online finance course had been taught meet the inclusion criteria. The interviews were completed within 45-60 minutes.

Data collection gathered the information to support the objective of establishing the construct validity and reliability of the evidence (Yin, 2014). A strong design strengthened the validity of the study and made certain the data collected accurately addressed the purpose of the research study (Yin, 2011). The use of semi-structured interview questions helped support construct validity and reliability of the research method (De Massis & Kotlar, 2013). A valid study had properly collected and interpreted the data to reflect an accurate conclusion that represented that the real world was studied (Yin, 2011). Internal validity encompassed credibility and accuracy of the interpretation of the research study. External validity ensured the findings were generalized in deducing conclusions about a population. Reliability is the extent that the same results were obtained if the study were conducted again following the same steps (Yin, 2011). The accuracy in measuring and recording information to collect sufficient

data was important for the reader to agree or disagree with the researcher's interpretation (De Massis & Kotlar, 2013).

Data Processing

The process began with receiving permission to proceed with the study, collecting the data through online interviews, and analyzing the data. Participants were informed that the information collected was confidential and for the sole purpose of the research study. Data processing involved converting the data collected from the semi-structured interviews into a format that was easily analyzed (Yin, 2014). Computer files enabled the organization and documentation of the collected data and research notes separated from existing research to increase its reliability (Yin, 2014). Securing all collections of evidence prevented any data from getting lost due to carelessness or bias. The case study would demonstrate an increase in construct validity, which generally increased the quality of the case study (Yin, 2014).

Data Analysis

Qualitative research was based on the collection and interpretation of experiences, which had activities, sequence, place, people and context (Stake, 2010). The data analysis began with identifying the evidence that addresses each of the research questions sequentially. An explanation building technique was applied to analyze the case study by building a rationalization of the case (Yin, 2014). The phenomenon was explained to specify set of connections as to how and why something happened (Yin, 2014).

The data was coded in a three step process: open coding, axial coding, and selective coding. Open coding generated categories and their properties by addressing the participant's responses by finding a common theme (Yin, 2011). In axial coding,

each category was linked to a subcategory to reevaluate the responses based on similarities and differences (Yin, 2011). Selective coding helped integrate and process each category by generalizing the data in order to make sense (Yin, 2011). ATLAS.ti was an analytical tool that was used to store and organize the data for efficiency and accuracy (Yin, 2014). This qualitative software made it easier to maintain accuracy and organization of the analysis process. The software assisted in keeping track of important text, and compare and contrast data.

Triangulation established credibility with the consistency of findings through different methods and data sources (Patton, 2002). Under constructivist criteria, triangulation captured and reported multiple perspectives instead of one singular truth (Patton, 2002). Triangulation was applied in four ways in this study. First, interviews were transcribed and checked for accuracy. Second, a copy of the interview transcript was e-mailed to each participant to review for accuracy and consistency of the transcription (Patton, 2002). Participants were asked to reply to the e-mail within 48 hours of receipt validating the accuracy of the transcripts. Third, findings from the interviews were triangulated with existing studies on teaching practices and learning environments. Fourth, the researcher's thoughts of the participants' responses were compared with the results in the study with her own experiences, existing studies, and validated interview transcriptions (Golafshani, 2003).

During the analytical phase, it was essential to return to the purpose of the case study to maintain focus (Yin, 2014). Therefore, it was important to reflect on the significance of the theory to the original intention. A tentative conclusion was drawn based on the evidence with the greatest weight for each question (Yin, 2014). This also

lead to recommend future course of actions (Yin, 2014). Once all the responses and conclusion were analyzed, a revision ensured that the constructivist theory framework had been identified with research results.

Assumptions

The participants were assumed to respond openly and honestly to the survey and open-ended questions (Yin, 2014). It was also assumed that participants were faculty with current or prior experience teaching finance to online undergraduate level students. Participants were assumed to respond to the interview questions open and honestly based on their experiences with undergraduate online finance courses, rather than graduate online finance courses. The expected findings were assumed to be based on participants responding to the interview questions voluntarily (Yin, 2014).

Limitations

There were some potential limitations in this study. The first limitation was that the data to be collected was limited to the participants in this case study. The responses could not be assumed to represent a larger population of online finance faculty. Another limitation was how the responses were to be interpreted. The interpretation was inadvertently biased based on the previous experience of teaching finance to undergraduate level students exclusively in an online environment over the last nine years. Additionally, I attended college as an adult learner in an online environment. Lastly, the experience in working with adult finance students in online courses might influence the interpretation of the survey responses.

Delimitations

This research study was limited to faculty teaching to only undergraduate finance

courses. The perspectives to determine effective teaching methods were strictly from a faculty perspective, not students or administrators. Interview questions were formulated to allow instructors who had taught online finance courses at undergraduate level to answer openly and honestly. The online interviews were flexible to the participants' availability. The interview setting was quiet and free from any distractions. The participants were assured confidentiality and anonymity.

Ethical Assurances

The Institutional Review Board's (IRB) approval was sought prior to collecting any data for this study. This ensured that compliance of ethical standards of conduct for research was met. An approval seeking participants in the research study was requested to the administrator of a Facebook group of business and finance online educators. The interview disclosed the informed consent form of the study. Potential participants were not asked to sign the informed consent form or names, or any other identifying information to ensure anonymity. Participants entered the research voluntarily and with adequate information. This ensured they were protected and eliminated the potential psychological harm that the study imposed to the participants. Participants were not exposed to risk as they did not have anything to gain or lose by answering questions unethically or inaccurately. All participants were treated equal with no distinction based on experience, age, deprivation, competence, merit and position. For this reason, there was no concern with ethical dilemmas associated with the collection of information.

Summary

This qualitative case study examined the faculty perspectives of teaching methods used in online undergraduate level finance courses instrumental in developing

competencies expected by the working environment. This chapter provided details on the research methods to be used to gather data via online interviews. A reasoning of using a qualitative case study approach was explained as the appropriate research method for this study (Yin, 2014). The population consisted of educators who had experience in teaching finance and had taught at least one course to undergraduate students in an online environment. A purposive sample size of 10 was sufficient to gather the necessary data. The collected data was stored in computer files, coded, and analyzed using an analytical tool, ATLAS.ti. The research assumed that participants responded voluntarily, honestly and openly to the survey questions. Perceived pressure was eliminated by assuring confidentiality and anonymity during the interview. Ethical measures were taken by providing a consent form and maintained anonymity of participants.

Chapter 4: Findings

The purpose of the qualitative single case study was to examine the perceptions of online finance faculty on the teaching methods in developing competencies that were instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012; Yin, 2014). The study aimed to acquire the teaching practices used in online finance courses focused on student-centered learning, collaborative learning, and high-quality learning that were effective in developing critical thinking and analytical skills in undergraduate level students as expected in the workplace. This study adhered to the concept that a single case study design can examine the broad nature of a program by using a representative case (Yin, 2011). A case study facilitates the in-depth investigation of the phenomenon within the real-world context to provide understanding (Patton, 2002; Yin, 2011). Triangulation consisted of the transcription of individual audio recorded interviews of the interview responses. The study addressed faculty perceptions of the teaching methods used to develop competencies in online finance courses.

A purposeful sample of online faculty was used for this study. The participants were teachers who have taught finance to undergraduate level students in an online environment. A total of ten online faculty consisting of six female and four male teachers participated in the study. The faculty consisted of five White and one Hispanic female teacher, and two White and two Black male teachers. The participants ranged in age from 31 to 69 years old. The teaching experience ranged from 3 to 21 years teaching finance, 3 to 18 years teaching online, and 3 to 18 years teaching finance in online courses. Three participants' educational degrees consisted of three Masters in Business

Administration, one Doctor of Philosophy in Finance, one Doctor of Philosophy in Business Administration, and five Doctorate of Business Administration.

Table 1

Demographic of Online Finance Faculty

Participant Number	Age Group	Gender	Ethnicity	Online Faculty (FT, PT or Both)	Highest Education	Years Taught Finance Online
Participant # 1	60-69	Female	White	FT	DBA	3-6
Participant # 2	40-49	Female	Hispanic	Both	PhD BA	15-18
Participant # 3	50-59	Male	White	PT	PhD FIN	7-10
Participant # 4	50-59	Female	White	PT	MBA	3-6
Participant # 5	60-69	Male	White	PT	MBA	3-6
Participant # 6	40-49	Male	African American	PT	PhD BA	3-6
Participant # 7	31-39	Female	White	PT	PhD BA	3-6
Participant # 8	31-39	Female	White	Both	DBA	7-10
Participant # 9	50-59	Male	Other	PT	DBA	3-6
Participant # 10	50-59	Female	White	Both	MBA	3-6

Each of the participants participated an individual interview via online chat, in which audio was used to audio-record their responses from open-ended questions. A total of ten online finance faculty participated in the interviews. This chapter provides the thematic results of the interviews, the open-ended responses, the interview questions, and chapter summary.

Results

The study consisted of individual interviews of open-ended questions via online chats. Ten participants participated in semi-structured interviews who answered the open-ended questions. All participants currently teach or had taught online finance courses to undergraduate level students. The researcher assigned a number to each participant to ensure anonymity in the report of the data collected. The interviews took

approximately 30-45 minutes to collect demographics and responses to each interview question. The interviews were audio-recorded to facilitate the transcription of the responses. The researcher transcribed each individual audio-recorded interview into Microsoft Word after the completion of the interviews. For triangulation, a transcription was sent to each participant to review for accuracy.

The interview responses were analyzed using ATLAS.ti to store, code, and organize the data for efficiency and accuracy (Yin, 2014). This qualitative software made it easier to keep track of important text to compare and contrast for analysis purposes. A thematic analysis was used to facilitate the structuring and illustration of themes (Attride-Stirlin, 2001) based on the participants' perceptions. The first step in the thematic analysis was to reduce the data by coding the responses into manageable and meaningful text segments (Attride-Stirlin, 2001). The codes were guided by specific topics or words recurring in the text (Attride-Stirlin, 2001). The material was dissected into sections or specific quotations. Open coding categorized the text to help find a common theme (Yin, 2011). Axial coding linked each category to subcategories to find similarities and differences (Yin, 2011). Selective coding integrated and processed each category by generalizing the text in order to make sense (Yin, 2011).

RQ 1. What were the perceptions of finance instructors related to student-centered learning in developing competencies in online undergraduate level finance courses?

The data collected from the responses addressing student-centered learning (SCL) first research question indicated various perspectives in an online finance classroom. The data shows the thoughts and experiences on instructor engagement, student-teacher

relationship, innovation and creativity, and challenges faced in student-centered learning.

Table 2

Student-Centered Learning Perspectives

Categories	Subordinate Themes	Patterns
Student Engagement	Instructor behavior	Individual attention Availability Meaningful dialogue
Diverse learning	Material presentation	Learning style Culture Communication
Student-teacher relationship	Build a connection	Empathy Availability Motivation
Innovation and creativity	Limited opportunity	Difficult Lack of options Resourceful
Challenges of SCL	Various perspectives	Student perception Time management Instructor delivery

Theme 1 Student Engagement. Teachers have experienced that individual attention is important to students. Participant 1 stated, "I greet each student individually and in the introduction forum, I always add something personal that they talked about. I add my own experience or comment on it." Participant 5 stated that "To engage with the students successfully, you have to find some lever that stimulates their thought and usually that is something that applies to them either personally or professionally." The

individual attention given to students can take a variety of ways. In addition, Participant 5 best practice is "To use current events to stimulate conversation and to provoke thought to get students to try to apply the conceptual mind to the real-world events, especially if I can bring it as close to home as possible." Participant 7 feels that an important part is "just motivating students to be as passionate about the material as I am...So, it is just finding ways to make students really want to learn this stuff instead."

Participants used other methods to engage with students. Participant 8 stated that "one of the biggest ones for me is giving them my cell phone number and they can call and leave, if they miss me they leave a message." Participant 1 states, "I am in my classroom every day. It is rare that I am not. I answer their emails sometimes within 15 min and they say that I am always so involved with them." Participant 8 felt that "a five minute phone call sometimes can take care of everything they needed instead of waiting. And, I think it keeps them engaged when they get their questions answered fast, quickly and keep moving on with the material."

Some participants felt the discussion boards provided the most opportunity for engagement. Participant 7 says that it is important to get "them to engage more often, the more often they work with the material, the more comfortable they will feel with you and the material, the more likely that they will be successful." A teacher felt that

> "The most important thing is the online forums for discussion. I break down the course objectives into the discussion items, and then keep the discussion going throughout the week....It is important because it increases the understanding, but the most important part of it all is that it makes the people a part of the class, and

> once they are engaged, they are learning more. Their overall outcomes are better (Participant 4).

Participant 7 said, "I like to use stories, news or articles, examples. Something that's just not actual material, but something more real life that they can relate to and engage in." Participant 7 further stated that "students that do really engage and share experiences and ask questions, I find that they do a lot better in the course best than those who post 'I agree'." In addition, Participant 8 likes to "record videos, and teach some of the basic content on video so that they can follow along with that."

Theme 2 Diverse Learning. Participants had a common understanding that "As an instructor, you are not able to identify the learning style of every student but you provide avenues by which every student will have an opportunity to learn based on this individual learning style (Participant 9). Participant 2 supported this with the statement that "the material must be presented in several different ways." Participant 8 believed that "a lot of people learn better seeing and hearing things, than they do reading about it in a textbook." Participant 4 likes "to show a video...So not everyone can read a text, quickly understand the text, especially knowing this math stuff. So, sometimes a 3-minute video just describes it a lot better." A difference in a finance course is that

> It is so quantitative that it just focus on the quantitative part because what happens is that students go out there to go to interviews, and what they're doing now in finance and unlike other areas, is that they're actually giving placement exams in jobs. (Participant 3)

Others believed that "understanding the nationalities and personalities, the cultures and heritages, the student background, the background of the student is very

important" (Participant 6). Participant 9 felt that "Students who come together in online course, come from various backgrounds, various life experiences, various work experiences." Another perspective is "looking at diversity being special needs students....Sometimes these students need a little bit more time to complete a problem (Participant 1).

Theme 3 Student-Teacher Relationship. Participants related the importance of being to build a connection with the students. Participant 6 stated that "the biggest practice is to develop trust with the student and think that my primary way of doing that is convincing the student that their success is my success." To build rapport,

> "One of the things I do with students is acknowledge where they are. So, they will say for instance, they are going through this problem or this struggle. And, sometimes if you just hear them, it builds rapport with them. So you say, 'oh, I understand that you're going through this.' So, really just being there as a sounding board sometimes I think that's all that they need. Someone to hear that they had a real problem and not treat them like a number but be aware that they are real human beings (Participant 1).

The end result can be rewarding in where "those students that I had to work with through the most challenges are the ones who will then come back and ask me for reference letters....They will give me feedback about what they are doing now with their lives" (Participant 8).

Being available through "personal emails...They love phone calls...We text, and addressing them my name all the time in the classroom helps too. They feel comfortable with me and feel like they can ask questions, ask advice, help when they need it

(Participant 10). Participant 5 stated that "I am always available to them. I have office hours but I'm open to outside of office hours. I'm open to phone calls. I respond very quickly, even if it's just to say I saw your email; I'm researching the problem; I'll get back to you in a little while."

Participants stated that keeping the motivated made a difference. Participant 7 said "I kind of view myself as 75% teacher, 25% cheerleader....They think that this is a real person that really cares about me." Participant 9 believes the following: "that doing those things enables the students to form a relationship with me that would enhance their learning experience. Because if students do not connect with the instructor it becomes more challenging for them to complete the courses his successful."

Theme 4 Innovation and Creativity. There were differences in opinion in where there is not "a lot of room for innovation and creativity in the classroom" (Participant 4). Participant 1 said, "It's difficult to be creative in a finance course. It is very objective, the only place I think I can be creative is in a forum where I like to know most of the questions in my classrooms." Participant 4 also added, "I don't have a lot of opportunity to do a lot, just some instructional technology, and a lot of media." Participant 3 believes that "innovation and creativity is worthless in the undergraduate level in finance." However, Participant 6 states, "I do like to do because it comes up in a lot of the courses that I teach is ethics and applying things in the real world. It's kind of creative, but I guess but in a way it's more like creative thinking." Participant 7 thinks that

> ...innovation tends to focus more on the technology aspect. The things that are available to use to really create new methods of learning and things of that

nature. I believe that creativity is something that exist already within us. I think that we can find ways to creatively impact the lives of others.

Theme 5 Challenges of Student-Centered Learning. Participant 1 said, "They think you are going to be online setting and think this is going to be a piece of cake. It is not, it's harder to do online because you can't hide in the classroom." Participant 2 stated that the challenges that students "face is time management. They have a lot of commitments, job, family. They have a lot of commitments to do for school." Participant 3 has experienced that the total lack of interactivity of human activity which is a pervasive problem in online teaching, and then it's only going to get solved when the technology catches up." Participant 7 thinks that "the biggest challenge is delivering within the confines of what is given. In my experience, you are limited to the classroom tools that you have to have and the material, assignments, discussion questions are all designed for you." Participant 5 "tried to do some voluntary chats and they haven't worked successfully. I've never really gotten but 10-15% participation."

Another challenge is "keeping up the new development in the field of finance and ensuring that we are providing students with the most accurate and sound information that's there" (Participant 5). In addition, Participant 5 feels that

> ...the challenge that we have to make sure, because we don't want students leaving with information that is no longer valid; just because the course curriculum has not caught up to what is going on. I think that this is what is a part of student centeredness. That we need to find a way to ensure that instructors of finance are maintaining and continuing to research and focus on the changes that are taking

place in finance, in the world of finance, regardless of what the curriculum may be saying in that sense.

RQ 2. What were the perceptions finance instructors related to collaborative learning in developing competencies in online undergraduate level finance courses?

In collaborative learning (CL), participants experienced a higher involvement in maintaining group work interaction and contribution. The perspectives generated advantages and disadvantages in managing group work, addressing social loafing, and overcoming challenges in collaborative learning.

Table 3

Collaborative Learning Perspectives

Categories	Subordinate Themes	Patterns
Group work	Collaboration	Student benefits Encouragement Knowledge
Social loafing	Participation	Lack of understanding Working remotely
Challenges in CL	Engagement	Quantitative Replication of work

Theme 1 Group Work in Collaborative Learning. Participant 2 tells students "that it is a good idea to get together to discuss topics related to the course." Participant 9 sees the benefit from it because "Students, who come together in online course, come from various backgrounds, various life experiences, and various work experiences. So, when they are able to collaborate in groups, it does nothing but enhance their learning experience." The importance is given to group work as "It's all about collaboration and

reminding them that it's okay to work together. To encourage them to bounce ideas off each other and hey, have another student proofread your work." Encouraging students to work together because working

> "together works best if you (teacher) start with a strong foundation. So a lot of times I put together like a team contract. It has subheadings and they have to create basically their own terms that says as a team this is what is important to us. Here is the deadline that we agreed to meet during the week. Setting them up ahead of time to have their own team expectations, so that they collaborate better that way (Participant 7).

Theme 2 Social Loafing. Unfortunately, social loafing is what is experience "a lot of the time... To prevent it, make sure that everyone is participating. You have to stay on top of them" (Participant 2). To control this concern, Participant 1 "I do try to put the teams together where they are going to benefit. The stronger ones will usually go after the ones who are weaker." On the other hand, Participant 9

> "found that students' lack of understanding of technical terms. If you talk about ratio analysis, there are some students who do not have a clue what that is. So, I think as an instructor, it is my job to first of all identify all of the terms in whatever subject, or whatever topic, with dealing with.

Participant 5 experiences the same challenges with social loafing because "is a hurdle that we try to overcome and how students can function as a team similar to a remote work group that functions as a team. Hopefully, there is some technology that will help us with that." To help avoid it, Participant 7 receives "a red flag or a heads up from team members to say 'there is a problem here' or 'no, everyone is getting along pretty well and

contributing, so there are no issues'."

Theme 3 Challenges of Collaborative Learning. One of the challenges experienced with group work is that "some students just wouldn't engage. So that makes it tough for all the rest of the group...If I don't do my work and we are on a team, you will have to pick up the slack." From a subject perspective, Participant 3 feels that

> "It is impossible at this point in time because the big problem is that finances is so quantitative and so problem specific and there's only one answer, right. So it makes it makes it much less interesting to have students to work together in this environment.

Participant 2 allows them to help each other with homework; however, it "gets little dangerous because then they start working together in the problems and sharing homework solutions....Then, all the sudden, I get the same homework for different students and it looks exactly the same." In addition, Participant 7 tries "to coerce them into more collaboration just through higher expectations for their peer responses. Talking to each other with more than just a sentence that says 'hey I agree'.

Q3. What were the perceptions of finance instructors related to high-quality learning in developing competencies in online undergraduate level finance courses?

In assessing the teaching practices to deliver a high-quality learning environment (HQL), there were common experiences in the types of learning activities, real-world applications, critical thinking and analytical skills, and feedback. In addition, participants experienced challenges and preferred alternative methods of teaching if given the opportunity to implement.

Table 4

High-Quality Learning Perspectives

Categories	Subordinate Themes	Patterns
Types of learning activities	Learning assessment	Instructor guidance Practice Types of activities
Real-world application	Variation	Illustrative Correlation Employers
Critical thinking and analytical skills	Problem solving	Workplace expectation Assessment Variety of activities
Feedback to Students	Different types	Informality Students' reaction
Challenges in HQL	Motivation	Instructor priority Engagement
Preferred Teaching Methods	Enthusiasm	Quality assignments Interactive learning Technology

Theme 1 Types of Learning Activities. Participants stressed the importance of learning activities in the courses for students' overall learning. Participant 10 felt that learning activities were "important because adult learners want information that is immediately useful. They want information they can use the minute they walk out the door." Participant 9 experienced the importance of "guiding them on ways they could find information when they're struggling and how to recognize especially when you're talking about in a financial analysis course." However, Participant 7 said that "Assessing the student is difficult because they may not have had good directions of what you are

looking for to begin with." Participant 7 further stated, "...if you have very, very clear expectations, very clear assessment methods, you can communicate things very, very well, and see very quickly how well they are learning and apply it."

Participant 3 lets "students repeat the questions until they get them right and then I don't penalize for errors on their homework." This practice was supported "when we took all of the homework and we took all the quizzes online. We went from 70% failure rate in financial management to where 90% of students did better with same material." To support the same concept, Participant 4 looks "for all online games or quizzes that are over beyond the normal curriculum that are fun. That students can actually test their learning skills and their knowledge."

From another aspect, "Case studies add value to first identify what is the problem before you then apply any analysis, measures to solve that problem" (Participant 8). Participant 6 said that case studies are great tools "to get students to apply what they've learned and measure the level that they are retaining from the course."

> In order to assess things well, in my humble opinion, you need a really good rubric tailored to that assignment..... it is really effective for them because they can see ahead of time exactly what you are looking for in applying that skill in a real-world context form, or whatever context is that you are asking them to demonstrate or show. (Participant 7)

Theme 2 Real-life Application. In the application of real-life context, Participant 6 stated,

> "I like to give quick examples of how students use finance unknowingly everyday of their single life. Whether it's going to the grocery store, whether it's going to

> the local bank, writing a check, whether it's going to the car dealership to buy a vehicle or whether it's going out on the market to look for a home.

From the same perspective, Participant 5 said, "I literally found an old picture of a bond certificate that was a bearer bond, with some of the coupons attached. People did not believe that that is how things were done 25 years or less." Participant 7 prefers to

> Encourage them to how they did the research, which in my mind that is what employers want them to do. They don't need to know how they memorize data, they need to know how to problem solve, and go to the internet and go to the right site, which forces to do the research and problem solve.

Participant 6 said, "I always bring new content into the classroom." The thought process is that "Those type of films; independent researchers who are doing work, going above and beyond the status quo who are opening eyes and ears to alternatives in the field of Finance" (Participant 6). Also, "We have them build portfolios and invest over the term and report back what happened with that portfolio. Even though it is pretend....They do learn that process and if they would want to invest, now they've been through that process" (Participant 8). The bottom line is that "Whether it's something that is in the corporate world or even simply trying to use a concept, such as time value of money, and how it applies in their real lives when they are confronting real life decisions" (Participant 5). Participant 9 expressed that "real world situations can enhance the ability to be prepared for what happens when they leave the classroom and enter into business environments that is now global."

Theme 3 Critical Thinking and Analytical Skills. Participants' perspectives on critical thinking and analytical skills were similar. Participant 4 expressed that students

"don't have a deep enough understanding of what critical thinking and problem solving skills are. I feel that they also are not well-versed in what the workplace demands of what those skills are." Participant 9 stated that "students may come into the classroom not being prepared. But by the time they leave, they should have the skill necessary to make them adapt quite easily to what happening in the real world."

> If we adjust the way that we are assessing students, I think this would improve on the critical thinking level of students. I think when you're putting real life situations to apply a learning principle, a technique, you tend to critically think because it's going to force you to look at how many ways I can apply this in a particular situation. (Participant 6)

"The best way to have that accomplished is assigning problems that would give students the opportunity to apply the concepts in solving the problems" (Participant 9). "I provide them with some of my own tutorials and my own videos showing them how to work through problems, how to do problem solving" (Participant 10). However, participant 2 stated,

> That is a double edge sword because if you make the homework too hard, then they won't understand the concepts because they will be focused on the homework. But, if you make it too easy, then they're not thinking critically. So, it is a matter of having a balance between the two.

To help students do better with problem solving, Participant 3 has experienced that

> ...the two best (homework manager) systems that seem to do that is Pearson's MyAccountingLab and MyFinanceLab. They immediately get feedback where they take the question and immediately get the answer. They didn't wait for days

> to get the answers and then they forgot what the question was. That one thing we know in psychology about learning, that the tighter and the shorter the feedback loop that more efficient the learning is.

From another perspective, Participant 1 said that "the questions in the exams are big ones to try to get them to do critical thinking. You have to, along with the forum, that have the two questions with them; two opposing viewpoints where they can argue a little bit."

Theme 4 Feedback to Students. This is an area where participant supported its importance. "I found that personalize those comments in their feedback and to not be as formal, tends to serve a greater purpose on my feedback and they understand it" (Participant 6). Participant 6 further stated, "I might be not as formal in my feedback. I believe that feedback should be almost like I'm having a conversation with the students."

There were several approaches provided in giving feedback. Participant 5 prefers "the Socratic method is the best to use. To continually ask questions, to continually challenge what someone might say and ask them to elaborate." Another is that although

> The standard is the summative feedback, the most important is the formative feedback. That's the informal stuff throughout the week that helps them move a little bit forward in their understanding. Then also the week to week formative feedback that is not necessarily the score, but it's helping them deep in their skills whether they're the best learner in the class or the weakest learner. (Participant 4)

Participant 8 has been emphasized to use

> the sandwich approach. I think it works sometimes and the whole this is how your amazing, this is how you fix it, this is how you amazing again. And, it works and it's definitely positive way to give feedback. I don't think it works for

every student every single time. So it's really about being flexible and feeling the style of the student.

Participant 10 likes to

use a lot of rubrics and that's because everyone likes them." However, "I don't feel like rubrics cover everything. So I really give a lot of other written feedback in addition to because rubrics, to me, are a little bit too precise and don't really go outside the box."

Theme 5 Challenges of High-Quality Learning. Some challenges found in supporting a high-quality learning environment were directed towards instructor motivation. Participant 7 that "holding a higher quality expectations, a higher standard in the classroom when that is occurring in a university becomes a huge challenge." Participant 9 stated that "students do not feel that the instructor is motivated. If the instructor does not have high expectations, then the student themselves will not be motivated and they will not have high expectations." Therefore, "If the student is not engaged and I created a wealth of knowledge and resources it doesn't matter. I think engagement is the number one challenge that we have and the other can sometimes be technology" (Participant 8).

Theme 6 Preferred Teaching Practices. Participants had preferred practices they would like to implement if given the opportunity. Participant 7 said, "I would have the most detailed, highly specific, both assignment prompts and rubrics because it makes things easier for the students and the instructor." Participant 6 stated,

I would like to see more live sessions, interactive sessions, and even that they are not live to the point that we're able to interact on conference calls, or Skype, or

> whatever, or adobe connect. I think those are wonderful tools now because there's more of an interaction online. We tend to believe that online means that we don't have to be face-face. I believe online is an extension of learning; weather is on ground or online. I believe it is still a learning process and interactions with student and teacher is vitally important to the learning process.

Along the same perspective, "I would love to have a more interactive mode of delivery so something like a Google hangout where the students could actually get on and you can see their faces as well during the chat" (Participant 8). Also, "I think that a live lecture is always good. It's not always easy or possible...but, it's really effective. You bond with the students, you feel like you bond with the classroom, you belong to a group and it's very effective" (Participant 10). From a technology perspective, "I would use more problems solving, problem simulation" (Participant 4). "I like the homework management programs because they provide feedback as you're doing the homework" (Participant 2)

Evaluation of Findings

The findings of this study found that online finance faculty had similar perspectives of teaching methods that would help develop competencies in undergraduate students. The analysis of the data highlighted the methods that would be valuable in supporting student-centered learning, collaborative learning, and high-quality learning environments. Several of the findings were consistent with prior research provided in Chapter 2.

Research Question 1. The findings on student-centered learning centered around engagement, diverse learning, student-teacher relationship, innovation and creativity. There were some highlighted challenges as well that prevented successful execution of

teaching practices. The main theme of impact in this learning environment was the engagement in the classroom. Students success in the course from the beginning to end depend in the level of engagement that the instructor exhibits. The engagement can help discover the diverse learning needs of the students, from different learning styles, background, or disabilities as well as build rapport. It was a common practice to provide different instructional tools to meet the diverse learning needs. Providing adaptive learning tools helped students learn the material from different perspectives. Faculty expressed the importance of building a connection with the students. It was essential for faculty to be easily accessible to students via email, phone, or text to help them feel more comfortable in reaching out when needed. Since the conceptual and quantitative aspect of finance subjects can be challenging to understand and learn, teachers found that innovative and creative instruction were difficult to deliver in the online classroom. One of the challenges experienced by faculty was the variety of commitments that the students have preventing them from being fully engaged and active in the course. From the same perspective, some students believed that the online setting was going to be much easier than a traditional brick and mortar school. Lastly, it was of importance for faculty to be current with trends in the finance world, in order to deliver real-life situations to the classroom.

Research Question 2. In collaborative learning, the areas of most significance were group work, social loafing, and challenges in supporting efficient team work. Faculty have mixed experiences with supporting group work. Some found benefit from the aspect of collaborating with classmates, by encouraging them to help one another with assignments, and learning from a diverse group of backgrounds and experiences.

However, not all students in group work would gain benefit from working in teams. Social loafing existed in groups, which provided a hurdle for members to contribute equally to the task assigned. This would result in lack of engagement, which was already an overall challenge of group work. Instructors experienced that consistent engagement with the groups was necessary in order to keep participation active. Another challenge with group work was helping each other with homework assignments that would lead to everyone submitting the same work.

Research Question 3. The findings in high-quality learning lead to demonstrate that this is the environment in which most learning takes place. Faculty perceived that students wanted to learn information that was readily useful in their lives. It was of importance that there were a variety of assignments such as problem solving, quizzes, online games, or case studies, in order to facilitate learning and a measurement of assessment. Rubrics were found to be a valuable tool of assessment. However, it was critical for students to be well informed with set expectations of assignment objectives and outcome for the grading rubrics to be an effective method of assessment.

Real-life context in learning activities was a critical aspect for students to associate what they were learning with their life experiences. Students were perceived to be better prepared for the working environment when the course material was related to real-world situation. From the same perspective, incorporating real-world practices and events in learning activities would help develop critical thinking and analytical skills. Homework managers were preferred in order to provide students with problem solving scenarios that would force critical thinking and analytical application. Faculty expressed

the importance of developing these skills because employers would benefit from students who could be easily integrated in the workplace.

There was importance placed on the impact of feedback. There were several approaches used by instructor found to be effective in helping students learn and improve from the outcome of their assignments. However, instructors not setting high expectations of themselves was perceived to be a challenged in supporting a high-quality learning environment. This would be have an effect in motivation, which would be reflected in the classroom. Lastly, there were a variety of practices that faculty would implement if given the opportunity to do so. Faculty placed importance of highly specific assignments with illustrations and detailed rubrics. In addition, interactive modes for instructional delivery and engagement with students, such as live sessions, Skype, or Google Hangouts to build a connection with the student as an extension of learning.

Summary

The purpose of the qualitative single case study was to examine the perceptions of online finance faculty on the teaching methods in developing competencies that were instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012; Yin, 2014). The study aimed to acquire the teaching practices used in online finance courses focused on student-centered learning, collaborative learning, and high-quality learning that were effective in developing critical thinking and analytical skills in undergraduate level students as expected in the workplace. The data collected was coded, stored, and organized using ATLAS.ti. Coding the data enable for the data to be categorized in themes in order to make the results easier to interpret.

The first research question focused on the perceptions of finance instructors in relation to student-centered learning. The themes were categorized in engagement, diverse learning, student-center relationship, innovation and creativity, and challenges of this learning environment. It was important to note that how the instructor behavior had an impact on the overall engagement of the students. Diverse learning was achieved through the delivery of material to meet different learning styles, culture, and means of communication. Student-teacher relationship was important to build a connection with the student by showing empathy, being available, and motivating the students. Innovation and creativity had limited opportunity to be delivered based on the quantitative concept of the subject of finance. The challenges faced by instructors were based on student perception of expectations, time management, and instructor delivery on material.

The second research question focused on collaborative learning from a faculty perspective. The themes were categorized in group work, social loafing, and challenges from working with groups. Although there were benefits associated with group collaboration, the instructor was often involved in the encouragement of participation. This was primarily due to social loafers who do not actively participate in the group assignments based on the perception of their lack of understanding of the material. The course work in finance is perceived to be difficult due to its quantitative nature. Students like to work together to solve difficult problems. However, this results in the same solutions provided to the instructor, which lacks originality of students' work.

The third research question focused on the perception of instructors of high-quality learning. The themes were categorized as learning activities, real-world

application, critical and analytical skills, feedback, challenges faced by instructors, and optimal teaching methods. The successful assessment of learning activities is affected by instructor guidance, the amount of practice, and the types of learning activities. Real-world application must be illustrated within the material of the course, be correlated to assignments, and integrate expectations of future employers. Students were more receptive of feedback when delivered in an informal manner, yet supported by rubrics. The challenges faced by instructors were their own motivation of and engagement with the course they taught. Instructors would be enthusiastic if they were able to implement preferred methods of teaching methods, such as quality assignments, interactive learning, and the technology to support homework labs and problem simulation.

Chapter 5: Implications, Recommendations, and Conclusions

Existing research on effective teaching methods could be found on either measuring student performance or evaluating essential factors for successful learning in an online environment (Chang et al., 2012). The problem this study addressed was the teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) used in online undergraduate finance courses had not been particularly identified in developing competencies that are instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012). The purpose of the qualitative single case study was to examine the perceptions of online finance faculty on the teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) in developing competencies that were instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu, 2012; Yin, 2014). Developing competencies in critical thinking and analytical skills has an impact in students' overall performance and learning in online undergraduate finance courses (Carrithers & Bean, 2008; Hui & Koplin, 2011; Lopez & Patron, 2012). The implementation of teaching methods to develop critical thinking and analytical skills used in real world scenarios enables learners to understand the problems they faced in a changing working environment (Hui & Koplin, 2011; Meyer & McNeal, 2011). Emergent themes of teaching practices from semi-structured interviews were used to examine the methods used in online finance courses that help develop developing critical thinking and analytical skills. The aim of the research was to contribute to existing literature on faculty perceptions of practices in online finance courses that will help to prepare students with the competencies expected by employers.

The researcher conducted semi-structured interviews with 10 finance instructors who taught finance to online undergraduate level students. The interviews were conducted via online chat and were audio recorded for accuracy of responses. The responses were transcribed and sent to the participants to review for accuracy. A qualitative single case study approach was the preferred method to examine the perceptions of the teaching methods that instructors employ in online finance course for students to acquire competencies expected by current or future employers. A case study supported need to understand how and why or to describe an existing phenomenon with its real-life context to derive meaning (Patton, 2002; Riege, 2003; Yin, 2014). It was also an appropriate research design to inquire on the practices that instructors apply in online finance courses where findings might be conclusive with a smaller sample number and more semi-structured method (Stake, 2010; Yin, 2014). This supports the constructive model, which asserts that the truth is comparative and it is dependent on someone's perspective (Baxter & Jack, 2008; Stake, 2010; Yin, 2014).

Limitations

A number of limitations where noted in this study. The first limitation is that the data collected was limited to the participants in this case study. The responses could not be assumed to represent a larger population of online finance faculty. Another limitation was that participants may have responded to questions instinctively about teaching experiences from other online courses. A third limitation was how the responses would be interpreted by the researcher. The interpretation may be inadvertently biased based on the previous experience of teaching finance to undergraduate level students exclusively in an online environment over the last nine years. Additionally, the researcher attended

college as an adult learner in an online environment. Lastly, the experience has been working with adult finance students in online courses, which might influence the interpretation of the interview responses.

Ethical Assurances

IRB approval was received before the collection any data, and research was restricted to IRB requirements. Participants were assured of the confidentiality of their responses in writing before the data collection process. Participants volunteered for the study and a signed informed, which included a thorough explanation of the nature of the research and that there was no pressure to participate in the research study. By signing the consent form before data collection, participants confirmed the understanding of the purpose of the research and their willingness to participate. Participants were assured that the interview questions would be used for research purposes only and would be and that their responses would be kept confidential.

This single case study examined the experiences of online finance faculty on the teaching methods in student-centered learning, collaborative learning, and high-quality learning in order to gain understanding of the methods used to help develop competencies that are of benefit in the working environment. This chapter addresses the implications drawn from the literature review as it pertains to each question. Recommendations for further research have been provided. The chapter concludes with a summary of the research conducted in the study.

Implications

The qualitative research questions provide the desired focus to ensure that the purpose of the study is addressed successfully. The research questions for this study

intended to examine the faculty perspectives on effective teaching methods in online finance undergraduate level courses instrumental in developing competencies expected in the working environment (Chang et al., 2012; Stake, 2010; Yin, 2014).

RQ1. What were the perceptions of finance instructors related to student-centered learning in developing competencies in online undergraduate level finance courses?

Research Question 1. This research question was designed to examine the teaching methods used to in a student-centered learning environment in developing competencies. Five questions were developed in the interview to understand teaching practices of student engagement, diverse learning, student-teacher relationship, innovation and creativity, and challenges faced in student-centered learning. A teacher with creative abilities must be active and innovative, challenge and facilitate, and proficient in the respective area of discipline (Shieh & Chang, 2014). The results from the interviews led to significant findings.

Teachers have experienced that the engagement in an online course is significant to students. Students are engaged when the instructor demonstrates individual attention, are available to them, and have meaningful dialogue. Teachers with a high level of teacher efficacy are more effective in the students' learning and their involvement to enhance academic achievement (Bangert, 2008; Temiz & Topcu, 2013). The first impression given to students is in the introduction forum. This is done through highlighting materials from their introduction to comment with personal or experience breaks down the anxiety of starting a new course. When the instructor personalizes the attention, it makes students feel comfortable and will motivate them to learn and actively

participate in the course. The instructor frequent engagement the discussion forums enables students to understand the material, increase their learning, and increase the interaction with peers. The continued growth of online education demands competent faculty to take ownership and engage efficiently (Al-Salam, 2011) for effective learning. Early and frequent engagement between instructors and students can improve students' experiences, learning and motivation which ultimately have an impact on the success rate (Vernon, 2013). It is essential to motivate the students to learn and make them feel comfortable to ask questions. The use of discussion boards and establishing office hours provide online learners options to engage in communication with the instructor and other students (Fricke & Agrawal, 2012). In addition to being available during office hours, instructors have found that being accessible via telephone or respond to their emails in a short time frame gives students individual attention to their learning needs.

There can be a disconnect between student learning and teaching practices. In the online classroom, diversity is identified as learning styles, cultural differences, and communication. Students have "different backgrounds, strengths and weaknesses, interests, ambitions, sense of responsibility, levels of motivation, and approaches to studying" (Felder & Brent, 2005, p. 57). The materials must be presented in different ways to try to match to the way they learn. Some instructors experienced that students learn better seeing than hearing. The use of videos helps the student to convert context to application. The quantitative aspect of finance makes it challenging for some students to further their thinking during problem solving. The importance is to understand learning styles to provide the diverse needs of students that will improve critical thinking and problem-solving skills (Felder & Brent, 2005).

From the perspectives of student-teacher relationships, it is of most importance to build a connection with the students. The findings indicated that acknowledging who they are, develop trust, and be empathetic stimulates their motivation to succeed in the course. Helping students with difficult tasks in the classroom establishes a connection with student's enables that can continue after the course has ended. The difference is to be there for the student, to listen to their concerns, and be understanding of personal issues. Students will benefit from a higher level of learning when instructors are good listeners (Al-Salam, 2011) and create an effective learning environment (Jacobs, 2013). One teaching practice is to be available via phone, text, or personal emails. Students ask feel they can ask for advice whenever is needed. The connection lies when students know that there is a real person that cares about their learning needs and success in the course. The effectiveness of students' learning will depend on how well they feel connected to the instructor (Jacobs, 2013).

In an online finance course, being innovative and creative can be a challenge. There were differences in opinions as to how much innovation and creativity could be implemented. Some instructors thought it was difficult or there was no value because of the quantitative aspect of finance. Innovation was applied through instructional technology, such as media and videos. This is an area that instructors do not have the time to develop. However, staying current with technological innovations and networking with peers who teach the same subjects, helps instructors stay current with advances in their discipline (Al-Salam, 2011; Fish & Wickersham, 2010). Innovation helps the creative aspect by implementing real-world topics or current events in the discussions or in the course. Developing a student's creativity helps develop the capacity

to originate ideas and actions as well as prepare them to manage life effectively (Shieh & Chang, 2014).

There were challenges faced by instructors in delivering a student-centered learning environment. First, it starts with the perception of the student that an online course is easier than a brick-and-mortar environment. Online courses are more challenging because it takes a different level of dedication to be involved, complete assigned reading and assignments, be active in discussions, and feel comfortable within the means of technology. Students must take initiative of their own learning, identify how they learn effectively, how to use their time efficiently, and while managing family and/or work responsibilities. Student-centered environment enables students to take control of their own learning and less dependent on the teacher's instruction (Janor et al., 2013). They cannot rely on the instructor to manage their involvement in the course.

Another challenge for instructors is to deliver instruction by adhering to established content, assignments, and format. Instructors have limitations on how much external content can be integrated in the course. Instructors attempt to personalize their courses with the use announcements or in the discussions to provide the information that they deem essential to student learning. However, the challenge that might exist is that some faculty is not familiar or comfortable with developing online courses due to the knowledge of technology that it requires (Schmidt et al., 2013). One instructor stated that instructors must concentrate in researching and in the changes in world of finance. Consequently, instructors must focus in developing their own knowledge in staying current with financial topics and technology in order to be deliver effective teaching

practices. Staying current with technological innovations and networking with peers who teach the same subjects, helps instructors stay current with advances in their discipline (Al-Salam, 2011; Fish & Wickersham, 2010).

RQ2. What were the perceptions finance instructors related to collaborative learning in developing competencies in online undergraduate level finance courses?

Research Question 2. The focus of this research question was to examine the teaching practices used group work, social loafing, and challenges of collaborative learning. Not all instructors had the experience in of having group work in their courses. Some instructors stated that they did encourage group work for a couple of reasons. Students who work in group develop teamwork skills by communicating with each other, brainstorming, and completing tasks. They also help each other with challenging assignments that require problem solving, which helps develop critical and creative thinking. Collaborative learning allows learners to construct a scaffold for critical thinking and allow classmates to help each other, exchange resources and information, give and receive feedback, challenge and encourage each other, and reflect on progress and process (Chitanana, 2012). However, it was noted the importance to establish clear guidelines from the beginning. One instructor uses contracts to ensure all groups abide by their own established expectations, such as individual contribution, meeting times, and deadlines. Therefore, this is where the instructor provides the parameters and requirements of activities, while students interact to complete the assigned tasks (Hosal-Akman & Simga-Mugan, 2010).

An objective of collaborative learning is for each student to contribute equally to the task at hand. However, a challenge of collaborative learning is social loafing. This is

when one or more students do not work as hard or contribute as much as the rest of the members. When all students do not equally participate, it affects the overall moral of the team and the task at hand. Some students have to take on additional work or opt to leave the class all-together, as one instructor experienced. When a student does not participate or contribute towards the group's discussion or task, there is a decline in positive attitudes towards online collaborative learning (Chou, 2012). Some instructors stated that they stay involved in the groups to monitor participation and contribution. One instructor prefers for the group to work on their own, resolve issues within themselves, unless the group cannot arrive at a solution. However, social loafing can stem from the lack of understanding the material. Instructors should reinforce the course material, which encourages the level of engagement in the learning process (Jacobs, 2013).

RQ3. What were the perceptions of finance instructors related to high-quality learning in developing competencies in online undergraduate level finance courses?

Research Question 3. This research question focused on the teaching methods applied in delivering a high-quality learning environment in developing competencies. In assessing the teaching practices to deliver a high-quality learning environment, there were common experiences in the types of learning activities, real-world applications, critical thinking and analytical skills, student feedback, challenges, and preferred methods of teaching.

The types of learning activities are deemed critical in online finance courses. The subject of finance is highly related to personal and business real-life decision making. Although it is a challenging subject due to its quantitative nature, students want to learn information that it is readily useful to them. The teaching practices found to be effective

are when students are guided by the instructor, engaged in different types of activities and assess their learning with course objectives. The key is to identify the areas of the learning design that will improve on the engagement of activities for the students to have a high-quality learning experience (Mattick & Knight, 2007). One instructor experience an significant increase in the outcome of homework assignments because students can repeat the questions until they are correct. Another instructor prefers online games or quizzes to engage in fun activities while engaging learning. Some instructors provide visual aids, media or videos provide an association with the real-world. Another instructor uses case studies where students can assess a problem, apply measures and analysis to solve the problem. These types of learning activities are examples of how students apply what the concepts learned. However, learning activities must be assessed in order to provide students with a measured progress based on learning objectives. Assessing the students has an impact on what is learned and how, to promote high-quality learning and position it constructively between teaching and assessment (Mattick & Knight, 2007). Most instructors preferred the use of rubrics as it provided clear measurements of assignment expectations. Students are able to gauge where they are for continuous improvement.

An important objective is to provide activities that students can translate concept into application, while linking their knowledge to real-world events. The subject of finance cannot be fundamentally learned without an association to the real world. Instructors like to incorporate real-world events or practical transactions into the instructional delivery. For example, one instructor provides examples of how finance is used in daily transactions, such as banking, purchasing a car, saving for the future, or

investing in the stock market. One instructor incorporates material in the lessons to demonstrate the change overtime of paper-based to electronic-based transactions. Correlating the many subjects of finance provide the students a more realistic perspective of the material learned that is available to be used immediately in their lives. Connecting concept-based topics to real-world situations prepare the student for their working environment as well. Employers expect future candidates to smoothly ease in the working environment and be familiar with the overall global economy. Potential employees must persuade future employers that they will add value to the company, have a sound knowledge of the field and understand what total business value consists of (Hodge & Lear, 2011).

Learning activities and real-world situation provide the foundation for students to develop critical thinking and analytical skills. The importance is placed in the variety of activities to solve problems and the assessments of learned skills that will help develop competencies as expected by future employers. However, instructors perceived that students do not have enough understanding of what critical thinking and problem solving skills are. The reason is that most learners do not acquire critical thinking skills in business classes as the usual emphasis is directed towards development of knowledge (Weisel, 2012). By integrating real-life application to concept, students are forced to think beyond guidelines. Examples of instructors' teaching methods to develop critical thinking and analytical skills involve problem solving, videos to help solve problems, case studies, homework managers, and exams. Homework managers are a preferred method of students developing critical thinking and analytical skills. Online homework management systems have shown to provide learners an opportunity to practice working

out problems assigned while getting immediate feedback (Morgan, 2013). Homework managers provide extensive supplemental material to match the style of learning of the student. They provide interactive videos, practice exercises; practice quizzes, power points, multimedia, and links to financial news in order to skills associated with the real-world. The variety of learning tools in homework managers provide variety of learning activities accompanied by immediate assessment while developing the skills to meet course objectives and future employer expectations. Although it is important for students to be aware of the qualities employers are seeking, it is essential for faculty to know their students' thoughts on the significance of work place qualities to enhance their understanding and focus on the most important characteristics in their courses (English et al., 2012).

Student feedback is significant to student learning and achievement of course objectives. Instructors related the different types of feedback used in the classroom that have been effective in their students' successful outcomes. Students are receptive to informal feedback in a way that the student can understand the message. As one instructor stated, it is like having a conversation with the student. Others used methods, such as formative feedback or the sandwich approach to convey the outcome in a manner that is receptive to the student for their learning development. It is important for faculty to provide constant feedback while students are actively working on their tasks in order to motivate and improve their higher-level thinking abilities (Brannagan, 2012). Feedback is how students learn their achievement in a task and their progress through the course. Students who received direct, consistent feedback are more satisfied and have a better academic performance than students who receive feedback as a group (Fish &

Wickersham, 2010).

The challenges found in high-quality learning were based on the instructor motivation and engagement in the course. It was noted that if the instructors did not set high expectations for themselves, they are most likely not setting up high expectations for students. This is primarily due to how motivated the instructor is to give priority to the students and engage in their quality learning. It is critical that communication, interaction, participation, engagement or other motivational factors are not ignored (Mashaw, 2012). The lack of instructor engagement has an impact on student overall commitment to their success the course, interaction in the discussions, how well the material is learned, and the effective use of application. Most importantly, the student is not likely to reach out to the instructor as a connection has not been established. The student is basically learning materials on their own with limited guidance.

In assessing the overall scope of high-quality learning, instructors do have preferred teaching methods that they would like to implement in their courses if the opportunity is extended. This promotes enthusiasm as instructors can personalize their courses. They can also implement the assignments that they consider to be of quality in order to support overall learning objectives. However, the number of assignments must be reasonable as numerous assignments can be an overload the student (Jacobs, 2013). Instructors would also like to use more technology in their courses, such as live and interactive sessions with their students, conference calls, online video conferencing, or alternative resources in which they can engage in conversation with their students. The challenge that might exist is that some faculty is not familiar or comfortable with developing online courses due to the knowledge of technology that it requires (Schmidt et

al., 2013). One instructor stated that interacting with the students through these means is an extension of learning as it effective in the learning delivery.

Other instructors would like to implement more problems solving through problem simulation through homework management systems. They can provide a variation of homework problems, simulation, and testing with immediate feedback. These systems provide student the opportunity to understand the course material better (Bland & Cutshall, 2011; Morgan, 2013). Another instructor stressed the importance of rubrics for all assignments because it makes it easier for the instructor to set expectations for students to meet expectations. Grading rubrics, helpful hints, and succinct instructions also help guide and assist learners in their learning (Brannagan, 2012). However, the feedback does not have to be confined within the rubric. The instructor can provide additional feedback that is not covered within the rubrics targeted towards the development of critical thinking. Even though the different methods of assessment do not measure how the students arrived at their answers, instructors and students ultimately benefit from the measurement of critical thinking levels (Saade et al., 2012).

Theoretical Implications

This study extends existing research in teaching methods in developing competencies in online finance undergraduate courses. Valuable learning results from effective teaching practices, learning activities, and evaluation tools incorporated in an online course (Janor, Rahim, Rahman Auzairy, Hashim, & Yusof, 2013). As discussed in Chapter 1, the structure used to teach finance in online undergraduate level courses had not been particularly identified in developing competencies that are instrumental in the working environment. Therefore, it is of significance to integrate real-life and problem-

solving situations with current text-based learning (Hui & Koplin, 2011).

The primary role of the teacher in the constructive theoretical framework is to guide students through activities and experiences to yield significant learning (Andrew, 2007; Banger, 2005). An important factor is the engagement that teachers demonstrate in an online finance course. Students are more motivated to be active and perform well in their assignments, when the instructor provides individual attention and engage quality communication. Students feel more comfortable in discussing or asking questions, solving problems, and assessing what they know to expand their knowledge. Teachers who implement constructive-based teaching have greater confidence in their abilities and encourage positive student learning (Temiz & Topcu, 2013). Teachers with a higher level of motivation are more effective in students' learning, which improves academic achievement (Bangert, 2008; Temiz & Topcu, 2013). As a result, students who were more self-efficient, were more confident and performed better in the course.

The effectiveness on how teachers present material for student learning was also significant. The intent was to be interactive to give the learner various tools to help with the understanding and application of concepts (Karaduman & Gultekin, 2007). The instructor's motivation increased the engagement with other students, helped develop critical thinking skills, and students were able to relate it to their own environment. It also developed students' creativity to originate ideas and prepared them to implement in real-life situations (Shieh & Chang, 2014). In collaborative learning, students developed creativity via social interaction, which supported independence, competence, and participation in a task (Shieh & Chang, 2014). Instructors should be encouraging learners to participate in thoughtful learning activities, which lead to personal growth,

professional growth and significant change, which are the basis of Constructivist Theory (Nor et al., 2011).

Recommendations

The overall objective of online education is to provide efficient and effective platform for students to learn and develop competencies useful in both personal and the work settings. Online education provides accessibility for learners while they continue to work, support family responsibilities, and obtain a college education (Sena, 2010). The recommendations provided are based on the results of this study. Recommendations for practice and recommendations for future research are presented, followed by the conclusion.

Recommendations for Practice

Educational programs must address the issues and concerns in providing the platforms for students to learn the subjects of finance and develop competencies effectively. An increasing number of students will continue to enroll in online programs to earn degrees needed to gain employment or advance in their careers. Curriculum developers and instructors should examine the findings of the study to improve the design and delivery of online courses, and implement effective teaching methods that will aid in student learning. Students seek programs that will provide the concept-and application-based knowledge that will prepare them and increase their qualifications in the job market.

As the online finance student population continues to grow, the need for faculty to effectively teach online finance students will be needed. This study provides a variety of methods believed to be successful in teaching finance in an online environment. Both

faculty and curriculum developers should assess courses to implement the methods that will improve the quality of their program, enhance student learning, and ultimately, increase enrollment and retention. The need for competent faculty is increasing that will exceed the standards placed by educational institutions and specific program expectations. Instructors must take the initiative to develop the skills that will improve their own competencies and performance to be add value student learning and contribute to the quality of their program in the long-run.

Recommendations for Future Research

A recommendation for future research is to conduct another qualitative case study to examine effective teaching methods that develop competencies from students' perspective. A modification of the same interview questions can be used tailored to students' thoughts and opinions of their learning experiences. Either approaches, from faculty perspectives or students perspectives, can also be applied to graduate level programs. Another recommendation for future research is to explore the difference in the quality of learning and the development of competencies from 8-week courses to 10- or 12-week courses. Future research can also be applied of the effects of specific teaching methods to specific student learning, such as outcome course activities from a student-centered, collaborative learning, or high-quality learning approach.

Conclusions

The purpose of the qualitative single case study was to examine the perceptions of online finance faculty on the teaching methods (i.e. student-centered learning, collaborative learning, and high-quality learning) in developing competencies that were instrumental in the working environment (Chang et al., 2012; Stake, 2010; Wansi & Liu,

2012; Yin, 2014). The perceptions of the teaching methods in each of the learning platforms provided a significant contribution to online faculty who want to improve the level of their teaching methods and the quality of their students' learning. The three different learning approaches of student-centered, collaborative, and high-quality can provide successful outcomes are dependent on the instructors teaching practices.

In student-centered learning, the level of engagement of the instructor creates a student motivated to learn and set the expectation of their involvement in their success. It also has an impact on developing a positive student-teacher relationship in establishing a connection. This will create an opportunity for the instructor to discover the diverse learning needs of the students in order to tailor teaching methods. This can compensate for the lack of innovation and creativity in the course. The challenges faced in student-centered learning can be overcome by the instructor engagement. Students can become more involved and take initiative in their own learning to have a successful outcome in the course and learning objectives.

The learning in a collaborative learning environment has advantages and disadvantages. The engagement in group work begins with the instructors to stimulate student involvement. Engaged students can benefit from developing ideas, working through projects, and communicating with peers to develop critical thinking. However, the challenge lies with social loafing, in which a student does not interact with teammates and leaves others to take on most of the work. This creates a negative environment, in which student's moral changes or can opt to withdraw from the course. Some social loafing can stem from lack of understanding the material. Therefore, the success of

collaborative learning depends on the active engagement of the instructor during the course of the project.

In high-quality learning, there is a variety of methods that can provide a superior environment. The types of learning activities and assessments are the first step in providing the means to develop competencies. Activities such as homework assignments, case studies, online games, problem simulation, and the use of homework management systems support the development of critical thinking and analytical skills. Linking these activities and the dialogue in the discussions to real-world situations enables the student to associate their learning with practice. The feedback provided throughout these activities help the student measure the learning in order to improve in future assignments. However, the level of high expectations placed on students' success begins is led by the instructors' set of their own motivation and level of expectation. For the most part, instructors look for opportunities to implement their preferred methods of teaching that will ultimately benefit students in developing critical thinking and analytical skills.

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Appendixes

Appendix A: Interview Questions

Please answer the questions as they pertain to your teaching methods with undergraduate students ONLY.

- Yes
- No

Do you currently teach or have you taught a finance course?

- Yes
- No

Do you currently teach or have you taught a finance course online?

- Yes
- No

Part 1: Demographic Questions

What is your gender?

- Female
- Male

What is your race?

- White
- African American
- Hispanic
- Asian
- Other

What is your age?

- 20-30
- 31-39
- 40-49
- 50-59
- 60-69
- 70-79
- 80 or more

Are you a full-time or a part-time online faculty?

- Full-time
- Part-time
- Both

What finance undergraduate level courses do your normally teach online? (Select all that apply.)

- 100

- 200
- 300
- 400
- Other

What is your highest degree and major?

- Masters of Science (MS) in Finance
- Masters in Business Administration (MBA)
- Doctor of Philosophy (PhD) in Finance
- Doctor of Philosophy (PhD) in Business Administration
- Doctor of Business Administration (DBA)
- Other

Select all the professional licenses you have:
(Select all that apply.)

- None
- CFA
- CFP
- CIA
- CMA
- CFE
- CPA
- Other

How many years have you taught online?

- 0 - 3
- 3 - 6
- 7 - 10
- 11 - 14
- 15 - 18
- 19 - 21
- 21+

How many years have you taught finance?

- 0 - 3
- 3 - 6
- 7 - 10
- 11 - 14
- 15 - 18
- 19 - 21
- 21+

How many years have you taught finance online?

- 0 - 03
- 3 - 6
- 7 - 10

- 11 - 14
- 15 - 18
- 19 - 21
- 22+

Part 2: Interview Questions

1. What are your teaching practices to actively engage students in learning in online finance courses? Why are these practices important to you?

2. What are your teaching practices to build a stronger student-teacher relationship? Why are these practices effective for you?

3. What are your teaching practices to encourage student innovation and creativity? Why are these practices important to you?

4. What are your teaching practices to support diverse learning needs in both knowledge and skills? Why are these practices significant to you?

5. What do you feel are the challenges that faculty face in delivering a student-centered environment in online finance courses? Please explain.

6. What are your teaching practices to encourage students to work together in an online finance course? Why are these practices important to you?

7. What are your teaching practices to prevent social loafing when working in a group setting? Why are these practices effective for you?

8. What do you feel are the challenges that faculty face in delivering a collaborative learning environment in developing competencies in online finance courses? Please explain.

9. What are your teaching practices to assess for learning activities that apply real-context in developing competencies? Why are these practices significant to you?

10. What are your teaching practices in providing learning activities to challenge the learner in developing competencies? Why are these practices important to you?

11. What are your teaching practices to demonstrate problem solving techniques in developing critical and analytical skills? Why are these practices effective for you?

12. A study stated that there is uncertainty whether student can develop and perfect critical thinking skills in their business program. These concerns stem from the lack of problem solving and strategic planning skills in which students are not exhibiting critical thinking skills as demanded by the global economy. How do you feel about this? Please explain.

13. What are your teaching practices in providing feedback in online finance courses? Why are these practices significant to you?

14. What do you feel are the challenges that faculty face in delivering a high-quality learning environment in developing competencies? Please explain.

15. What other teaching practices would you use if you had the opportunity to implement? Please explain.

Appendix B: Informed Consent Form

Faculty Perspectives on Teaching Methods to Online Undergraduate Finance Students

What is the study about? You are invited to participate in a research study being conducted for a dissertation at Northcentral University in Prescott Valley, Arizona. The purpose of the study is to examine the perception of online finance faculty of the teaching methods used in developing competencies that are instrumental in the working environment.

What will be asked of me*?* You will be asked to answer some questions about your thoughts of teaching practices. You will be asked to set up a time to meet for a Skype chat. I will ask a series of questions about your thoughts. It will take approximately 45-60 minutes. A transcript will be sent to you to check for accuracy. Please provide acknowledgement of accuracy or clarifications within 48 hours of receipt.

Who is involved? The following people are involved in this research project and may be contacted at any time:

Karin Ford-Torres
K.Torres4756@email.ncu.edu
321-438-6078

Dr. Jerome Fore
cfore@ncu.edu
(888) 327-2877 ex 8026

Are there any risks*?* There are minimal risks in this study. The questions pertain to your thoughts, knowledge, and experience in teaching online finance courses to undergraduate level students. You might feel sensitive about certain questions. Please be assured that you are allowed to skip interview questions or discontinue the interview at any time.

What are some benefits*?* There are no direct benefits for participating in this research. No incentives are offered. The results may eventually influence the teaching methods and practices in online finance undergraduate level courses in developing competencies that are expected in a working environment.

Is the study confidential/ will I be anonymous*?* The data collected in this study is confidential. Your name or personal information is not linked to the data. No names will be used in the written summary. Any document containing names will be kept locked away and then destroyed when the study is over. Only the researchers in this study will see the data.

Can I stop participating the study? You have the right to withdraw from the study at any time without penalty. You can skip any questions if you do not want to answer.

Additional Consent for Audio-Taping and Transcription This study will involve audio-taping during the Skype chat interviews. No names or identifying information will be associated with the transcription of the audio-tapes. Only the researcher will listen to the audio and transcribe its content. The transcript will be sent to you via email to be checked for accuracy. Any document containing names will be kept locked away and then destroyed after 7 years. Portions of the transcripts may be reproduced in presentation or report form for the purpose of this study. The researcher will provide an executive summary of findings upon request.

What if I have questions about my rights as a research participant or complaints?
If you have questions about your rights, any complaints, or any problems as a research participant in the research study, please contact the researchers identified on the consent form. If you prefer to talk to someone outside the study team, you can contact Northcentral University's Institutional Review Board at irb@ncu.edu or 1-888-327-2877 ex 8014.

Thank you for participating in this study! We would be happy to answer any question that may arise about the study. Please direct your questions or comments to Karin Ford-Torres at K.Torres4756@email.ncu.edu or Dr. Jerome Fore at cfore@ncu.edu.

Signatures
I have read the above description for the "Faculty Perspectives on Teaching Methods to Online Undergraduate Finance Students" study. I understand what the study is about and what is being asked of me. My signature indicates that I agree to participate in the study.

Participant's Name: _____

Participant's Signature: _____

Researcher's Name: Karin Ford-Torres

Researcher's Signature: _____

Date: _____

Appendix C: Permission to Conduct Study

2549 B Eastbluff Drive, Suite 500
Newport Beach, CA 92660

April 4, 2015

To: Debra Touhey, Administrator
The Babb Group
Make a Living Teaching Online Forum

From: Karin Ford-Torres
NCU Doctoral Student

Re: Request to Complete Dissertation Study

I am writing to request permission to do research for my doctoral study titled, *Faculty Perspectives on Teaching Methods to Online Undergraduate Finance Students.*

The purpose of this qualitative single case study is to examine the perceptions of online finance faculty on teaching methods in developing competencies that are instrumental in the working environment. I wish to interview 10-15 educators who teach finance to online undergraduate students. The participants will be asked to share their teaching practices used in online finance courses that are effective in developing critical thinking and analytical skills in undergraduate level students as expected in the workplace. The information gathered will be presented in a descriptive and narrative format. There is no risk to the participants involved in the study.

All faculty who has taught or is currently teaching at least one finance course to undergraduate students in an online environment will be invited to participate in the study. A message would be posted on Making a Living Teaching Online's Facebook page with an invitation to participate, the purpose of the study and the time frame commitment. The interviews will be conducted online via Skype at a convenient time for the participant.

All participants will complete the appropriate consent forms and will be assured anonymity with regard to the information learned from their participation in the study.

Thank you for your support.

I, Debra Touhey, of Making a Living Teaching Online, moderated by The Babb Group, give Karin Ford-Torres permission to complete her study titled *Faculty Perspectives on Teaching Methods to Online Undergraduate Finance Students.*

Signature _____ Date 4/4/15

Appendix D: IRB Approval

Date: 5/4/2015

From: The Institutional Review Board (IRB)

Student Name: Karin Ford-Torres

Chair Name: Dr. C. Jerome Fore

Study Title: *Faculty Perspectives on Teaching Methods to Online Undergraduate Finance Students*

Review Level: Expedited

Approval Date: 5/4/2015
Continuing Review Due Date: 11/4/2015
Expiration Date: 5/4/2016

Dear Karin Ford-Torres:

Congratulations, on behalf of Northcentral's Institutional Review Board (IRB); we are writing you to inform you that your study has been approved. Please be aware that you must be enrolled in an active dissertation course with NCU in order to collect data.

As an investigator of human subjects, your responsibilities include the following:

1. Report promptly proposed changes in previously approved IRB to your study such as changes to the recruitment, sampling procedures, research procedures, consent/assent forms and any other study documents, regardless of how minor the proposed changes might be. This will result in a modification of your IRB application and you will be responsible for a resubmission of the IRB application via your chair.
2. This project requires continuing review every **6 months.**
3. Continuing review is required as long as you are in data collection or analysis of your data. Failure to receive approval for a continuing review application before the expiration date means that all work with research participants and/or their data must end on the expiration date of this approval. There is no grace period. You are responsible for submission of this information via your chair.