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Blame Me for Your Bad Grade: Autonomy in the Basic
Digital Photography Classroom as a Means to
Combat Poor Student Performance

Erin Collette Johnson

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

Master of Arts

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ABSTRACT

Blame Me for Your Bad Grade: Autonomy in the Basic Digital Photography Classroom as a Means to Combat Poor Student Performance

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This thesis explores current research on autonomy. Autonomy is defined in three categories: freedom to pose questions and encouraging student choice, trust in students to solve problems posed by those questions, and allowing student reflection on progress. Autonomy is one solution to promote intrinsic motivation in students. Autonomy supportive classrooms feature mainly language learning atmospheres in research. However, it is also pertinent to contemporary art education as it promotes an environment for student creativity. Student performance and the modes of measurement for this research project are based on common formative and summative assessment measures. Will autonomy in the classroom combat issues of poor performance? While there is significant research occurring in the field of language learning regarding student autonomy in the classroom, very little is found in the Basic Digital Photography area. This study employed an action research project in order to determine if student autonomy is an effective tool in the basic digital photography classroom. Data collected include survey results, student journals, homework completion rates, and test scores to compare the results of student performance from a teacher directed unit to a more autonomous one. A new plan of action for incorporating findings into another unit is proposed as the autonomous unit as it currently stands revealed that autonomy is not an effective tool in the manner it was utilized in this Basic Digital Photography classroom.

Keywords: digital photography, apathy, autonomy, curriculum instruction, action research, student choice

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Chapter 1: Introduction

Students Promote Teacher Curricular Changes

Why? "Mrs. Johnson, why is my student failing your class? My student is a good student." This is a typical response from a few at parent teacher conferences every year. As a teacher, I am tired of explaining why that student is failing because it is always the same answer. Their particular student does not perform well in my specific class. For example, when I taught art history I created what I felt was a fantastic lesson plan that my students could be excited about. The lesson was a "trip to Italy" as a unit on Italian Renaissance art. I began talking about the unit a few weeks before hand to try and excite them and the students were given 'passports'. The room was decorated to look like a view from Venice, Italian music played as the students entered the room and I even bought pizza. The rest of the room was set to look like a gallery showcasing the artwork that the students were asked to research a few weeks ahead of time. The students were asked to set up a short 5-7 minute presentation on their chosen artwork, including an interesting story about each piece (for example, the Mona Lisa was stolen a few years ago...). The day of the trip to Italy came, and only one student had prepared. The students had a syllabus, in class reminders, due dates written on the board and a website to remind them of the assignment deadline. They also had a few days in the computer lab to research information and a textbook checked out to them. Yet only one in twelve students had prepared. Imagine my disappointment. I had spent hours of my own time and they could not even spend a few minutes to get a presentation together. It was time for a heart to heart as a class. I will never forget what one of my students said, "Mrs. Johnson, it doesn't matter how much effort you put into the lesson. If we aren't motivated to do something we just aren't going to do it." This situation is what motivated me to look at autonomy as a possible answer in this

study.

Performance. What is student performance? Why is it important and what is it based on? At Westlake High School in Saratoga Springs, Utah I utilize both formative and summative assessments, such as on task checks, rubrics, quizzes, and in-class critiques. However, a few students fail each term. My question is *why*? Students have never had so much information at their fingertips as they do today. Computers, the Internet, and smart phones offer answers that once only knowledgeable teachers could offer. Students are bombarded by constant reminders, syllabi, and due date emails. In my Basic Digital Photography classroom students still turn in assignments late and do not meet mastery requirements despite these resources. The problem is not lack of resources or reminders; rather it seems to be a lack of motivation. My hypothesis to this problem was that greater autonomy would motivate these students to work harder and perform better. This study examines the idea of student autonomy in my Basic Digital Photography classroom to determine if student choice and freedom in this course will enhance performance on homework completion percentage rates, test scores, and perceived learning by the teacher. This study also examines the benefits and limitations of fostering a more autonomous classroom.

Methodology. My methodology, action research, promotes constant improvement in my pedagogy. This study includes an experiment using two different approaches in order to compare the results to see if autonomy afforded enhanced performance. I chose to focus on action research rather than comparative analysis as a methodology due to the cyclical nature of action research. This allowed for me to make changes as I continued my experiment. The teacher directed Photoshop unit (Unit 3: Photoshop), which was similar to units I had taught

previously, was followed by a unit that afforded my students more autonomy (Unit 4: Autonomy). Student responses to Unit 4: Autonomy was gathered in personal journals, where they described what they accomplished each day and what they felt. Students also answered survey questions three separate times throughout the semester in order to determine what students felt that they had learned and to measure student performance. This allowed me to modify my lessons, as necessary in an action research project, based on student responses. The autonomy unit was created after the first survey responses were complete.

Chapter Two reviews literature on the subject of autonomy and student performance in the classroom. I looked at educational resources as well as art educators' research using autonomy in the photography classroom, but had a limited number of sources as there is little published research on the subject. In Chapter Three, I discuss my theoretical framework as well as the purpose of action research as my chosen methodology. Additionally, Chapter Three includes my method for gathering data during this study. Chapter Four focuses on the presence of autonomy within my Basic Digital Photography classroom, and the effect autonomy had on student performance. In Chapter Five, I discuss where I plan to take what I have learned into future semesters of teaching this course. I will address what went well during the study, and changes I will make in my teaching practices as I go forward.

Chapter 2: Literature Review

This chapter discusses the definition of and the importance of autonomy in the classroom as defined by research. The benefits and limitations of autonomy as a method to enhance student performance are also introduced. Student performance will also be defined through the assessments used in my Basic Digital Photography classroom. Methodologies for implementing curriculum research are also included in this chapter.

Defining Autonomy

To define the meaning of what it is to be autonomous ("autonomous," n.d.), one can look into hermeneutic data. The word autonomy first originated in Greece with *auto* meaning self, and *nomos* meaning law. *Autonomia*, meaning therefore, a freedom to live by one's own laws ("Autonomy," n.d.) & ("Autonomy, 2012). There is a moral responsibility involved when discussing freedom. Therefore, my research also includes moral philosophy regarding autonomy as it is found in the theories of Immanuel Kant and Jean-Jacques Rousseau, as they are two well-known philosophers of the meaning of freedom. According to Rousseau and Kant, there can be no freedom if one is not bound by some law. However, there can be no autonomy if those laws are not, in some sense, created by the person being governed (Johnson, 2008). In order to address these needs, this study includes constraints as defined by the teacher and the state of Utah within an autonomous unit. Existentialist theories also refer to freedom and autonomy. While the existentialists did not perfectly align with Kant and Rousseau, their theories regarding freedom agree with Kant and Rousseau in that one can make decisions and choose how to live life. These actions assist in the individual need to overcome constraints within the law (Matthews, 2008). Autonomy is pertinent to one's moral and life success.

History of Autonomy. Learner autonomy has a broad history in language education.

Beginning in Europe in the late 1970s with Ivan Illich, Paulo Freire, and Jerome Bruner, learner autonomy later became relevant to the psychological theories of Lev Vygotsky (Lewis, & Vialleton, 2011). According to Dam & Legenhausen (2011), in educational theory, autonomy can be addressed in three modes: asking questions and encouraging student choice, solving problems, and evaluating progress. Teaching students to pose questions and formulize their own educational theory will promote emotional and personal involvement in their own learning. Students must decide not only *what* they will learn but *how* they will learn it. Autonomy in reference to education then, is an action. It is a skill that can be acquired, not just a philosophy with which to occupy one's self (Kuchah & Smith, 2011). Foucault, a well-respected philosopher, addressed the theories of the existentialists. However, he emphasized the need to *reach* for the individual freedom. Thus, the individual must still take action “within the confines of a restrictive society” (Matthews, 2008). Encouraging the action of students posing their own questions, assisting them in solving those problems, and evaluating their progress are the key factors to utilizing the theories of autonomy in the classroom.

Asking Questions and Encouraging Student Choice. According to a study conducted by Raya (2011), the first step to an autonomous classroom is to encourage students to question how they learn and what they expect to gain from the course. The teacher must encourage the responsibility of the students to learn. Thus, the learning process is less coercion and more derived from a real desire to gain knowledge. Students in an autonomous classroom are able to become part of the decision making process by making choices.

It is not only the student's role to question, it is also the teacher's in an autonomous classroom. It is Vygotsky's (1978) ideology that through questioning, both the teacher and the learner come to understand what is essential in education, while encouraging

independent thought on the part of the student.

Matthews (2008) agrees that posing questions is a key factor to defining an autonomous classroom. He mentions that one must ask questions in order to find out what is pertinent to each student, not only in regards to their life, but their education. Hazelroth and Moore (1998) combine the ideas of the previously mentioned scholars by recognizing key factors to a successful education, "Education is not about providing information only; it is about raising questions and fostering thinking about how one lives and behaves. Education is active rather than passive" (p. 24). Providing the opportunity for student choice as well as encouraging students to reflect on the importance of education allows for opportunities for growth in student motivation (Stefanou, 2004). When a teacher coerces or forces an assignment on a student, the assignment becomes an external motivation. If students want to please the teacher, or earn good grades, the grade becomes the motivating factor.

Autonomy provides for a way of creating an environment where that motivation can become intrinsic instead of extrinsic (Steadman, 2011). While giving students choice and encouraging questioning is a key factor to defining what is autonomy, it is important to point out that an autonomous classroom promotes *relevant* choices. Allowing students to choose when to sharpen their pencil will not have much of an effect on their learning. Choices should allow for complex thought, relate to goals that the student has set, and mesh with local environmental and social values (Patall, Cooper, & Wynn 2010). Utilizing a student's ability for cognitive thinking and reasoning is one determinant to encouraging an autonomous environment in a classroom.

Solving Problems. Another point in defining autonomy is allowing for students and teachers to solve problems. Learning is not authentic if students are not using problem-

solving skills, Arnold (1996). Autonomy can only be obtained when students acknowledge limitations and commit to overcome them by posing solutions to their questions (Matthews, 2008). One must also recognize that autonomy is not a method, it is an enhancement to current educational practices. It promotes direction and goals, not necessarily individualism in education (Kuchah & Smith 2011). According to Lewis and Vialleton (2011), learners who initiate autonomy are capable of strategizing the best methods for their own education.

In order for students to solve problems and question for their own learning, the hierarchy in the classroom must be replaced by the sharing of the process of learning. The teacher must also become a student (Hazelroth & Moore, 1998). Meaning, the teacher no longer lectures at the front of the classroom, but rather allows students to propose their own projects or assignments depending on individual interest relating to the subject. If the teacher does not know all of the information, this is an optimal time for them to model how students can find information. The teacher and the student work together to solve the puzzle. However, autonomy must not be confused with self-directed learning. The teacher is still a vital facilitator and mentor in an autonomous classroom according to Holec (1981). It is the difference in an ability, versus an attitude. One has the ability to promote change in one's education and thereby is autonomous (Candas, 2011). An autonomous student has the ability to define questions, and search for solutions.

Evaluating Progress. The third point in an autonomous classroom is that students can evaluate their progress. It is another procedure for accepting responsibility in one's learning and to determine the outcome (Lüftenegger, Schober, Van de Schoot, Wagner, Finsterwald, & Spiel, 2011). Autonomy is about reflecting on one's education and solving problems that arise with external factors. It is also about controlling what one can and being motivated to promote

change (Lewis & Vialleton, 2011). Students are encouraged, with the assistance from their teacher mentor, to reflect and revise their educational plan or their proposal on what they will learn, how they will learn it and what they will accept responsibility for.

Students sometimes set goals that cannot be achieved with the limitations of one school year. However, if they can reflect on the *why* it can help them to later achieve the *what* (Candas, 2011). An autonomous student will have the ability to act on one's own education, realize there are external factors involved, pose questions, search for answers and reflect on what was successful or unsuccessful in their learning goals or progress and therefore set new goals to be achieved or newly realized later.

The Benefits of Autonomy for Students

What are the benefits for students in an autonomous environment? Candas (2011) sees autonomy as not only a privilege but also a necessity for the mental well-being of a student. In addition, he proposes that worthwhile learning cannot be achieved without an autonomous environment. An autonomous classroom will provide students with the environment in which they can have the freedom to beneficially express themselves (Arnold, 1996). Students must have autonomy in order to feel satisfied with their education. It will not be fulfilling without it (Hazelroth & Moore, 1998). Students will not only be fulfilled, but they will learn to embrace new opportunities for learning. They will be empowered creatively as hierarchy in the classroom shifts (Jaquith, 2011).

Helping students achieve higher order thinking and progression towards achieving goals is another benefit of an autonomous classroom (Lüftenegger et al., 2011). Achieving goals set by oneself has positive effects on one's self esteem and self-respect (Matthews, 2008). Students will not only be psychologically healthy, but they will be motivated to continue and will be

validated as an individual (Patall et al., 2010). It may seem difficult for the teacher to give up control of every step of the artistic process in the classroom, however the teacher is assisting the *student* to have control over a creative action that should be recognized individually (Rufo, 2011).

The Benefits of Autonomy for Teachers

Autonomy does not just benefit the student. While the teacher has relinquished control, the teacher has also provided an opportunity for more communication in the teacher-student relationship. The lessons in an autonomous classroom are relevant to the student and therefore authentic learning becomes the focus of the classroom instead of participation (Shernoff, D. J., Csikszentmihalyi, Schneider, & Shernoff, E. S., 2003). The teacher is not just a deliverer of ideas and creative thought, but a mentor, a counselor, and a co-learner. The student is in charge of creative thought and higher order thinking skills instead of the teacher.

What an autonomous classroom affords a teacher then, is a more responsible and engaged student environment in which the teacher can focus on teaching (Candas 2011). To me, 'teaching' means helping students realize their own potential for learning and helping them realize their own goals. Classroom autonomy benefits the teacher with an environment in which they can also continue to learn as students retain interest, move towards completion of their own set goals, and gain happiness through the process (Lüftenegger et al., 2011). No longer will the struggle for motivation be a factor in student learning (Stefanou, 2004). How can students motivate themselves to learn? According to Dam & Legenhausen (2011), autonomy helps students become responsible for gained knowledge. The teacher merely raises awareness and encourages reflection while the student produces knowledge. The teacher becomes the facilitator of knowledge, not the giver of it, thus influencing student motivation.

In such an environment, students become more self-regulated, allowing the teacher more time to help them on an individual basis rather than appeasing the crowd (Patall et al., 2010). The teacher's role does change. It can be difficult to let go of control of the lesson. As teachers, we are so used to directing the lessons. Some teachers even have discussion questions typed out (Brooks, 2012). It is not necessarily poor teaching practice to plan possible discussion topics. However, would it be more interesting for the students to come up with their own questions about an artwork or an artist? According to Shernoff et al. (2003) in an autonomous classroom, students will become less teacher dependent in the role of their learning as their sense of competency increases. Students are more capable of learning on their own, not just in the subject they are in for the autonomous classroom experience, but they will be able to take lessons of how to acquire knowledge into life-long learning. A society that is subject to taking higher order thinking skills into their daily lives benefits everyone, not just the teacher (Kuchah & Smith 2011). If the teacher gives the students the questions and the answers, the students may learn the information for the test. But if the teacher encourages student driven learning and teaches the students a method of *how to learn*, those students will continue to gain knowledge for the rest of their lives.

Limitations of Privileging Autonomy

Autonomy is an ideology not without constraints, limitations and questions. According to Dam & Legenhausen (2011), students must be trusted to honestly assess their own performance. Students must also be cognitively, and emotionally competent in order to control their own education (Dam & Legenhausen, 2011). The teacher cannot just relent and allow the students total control over everything they want to learn. There are limitations, restrictions and external factors that the student and teacher must take into account. These restrictions are not

always even the teacher's control. Bell schedules, campus guidelines, time constraints and grading policies are often controlled by administration and school boards. Students must learn to work within these constraints. The teacher must remind them to be practical within these limitations. For example, a student may propose to go take pictures of a Hindu color festival that takes place in March. However, the course takes place during fall semester. This would not be a practical assignment for the student to endeavor to complete within the allotted course time. The most difficult task for a teacher in an autonomous classroom is balance. There must be some control on the part of the teacher, not just total control by the students in order to support creativity in the art classroom (Jaquith, 2011).

The research also discusses flow theory as a description for a positively affected autonomous classroom. Flow theory necessitates that student skills must be utilized effectively. They cannot be above or below what is required. This can also apply to the amount of control the teacher can help to balance. The tasks must be age appropriate, as well as appropriate for the student's level of knowledge and cognitive reasoning abilities. Most students are aware of their abilities and resources. However, if students propose an art project that is well above their level, the teacher as the facilitator will need to provide the building blocks to help the students achieve that goal. Too much opportunity for choice and the students may become discouraged, not knowing where to begin (Shernoff et al., 2003). An autonomous classroom is a balancing act that may cause more initial work on the part of the teacher as the students are directed in the process in which one can acquire knowledge.

History of Fostering Student Autonomy and Why it Has Been Done

Why is autonomy an effective strategy in the classroom? According to Hazelroth and Moore (1998), autonomy can allow for recognition and the sharing of talents between disciplines.

Sharing of talents occurs not only between disciplines, but in student/teacher learning opportunities as well. The teacher can become a better photographer and artist as the ideas of the students earn respect when they become the teachers. Hazelroth and Moore's (1998) work focuses on art museum education and the school system in the John and Mable Ringling Museum of Art in Sarasota, Florida. They utilized the theories behind fostering autonomy to break down the hierarchal models found in education in order to promote all-inclusive interaction between the two. This collaborative effort occurred through interaction within a project that both museums and schools could participate. Hierarchal models not only include museum education, but teacher/student interactions. The students no longer see the teacher as "the boss" of the classroom, as an unapproachable figure, when they have questions. Hazelroth and Moore's (1998), idea of autonomy is that it can be inclusive, and that the hierarchal model of education is exclusive. This view of an autonomous classroom assists in the hypothesis found in this study as directed towards students' interests relating to photography.

Another example is Dam and Legenhausen's (2011) study on learner autonomy in the language classroom. This study regarded autonomy as a tool to raise awareness on evaluations by involving learners in the process. In order to use the information from this study, data was collected from student journals and student generated assessment to reveal the importance of student involvement in the learning process. Feedback from students will determine if they really felt whether or not unit 4 was an autonomous unit, or if it was just another teacher directed one.

Candas's (2011) study involved the development of learner autonomy and self-directed learning in order to foster language learning at Louis Pasteur University in Strasbourg. The project acknowledged that little is known about the development of learner

autonomy and attempts to define the process in which it occurs. Candas (2011) chose to collect data using observations and interviews in a qualitative manner. The study focuses on the control of the process of self-directed learning. This study reveals the importance of student voice in an autonomous environment. Daily journals is one method employed to initiate student voice into my own qualitative study.

Another qualitative study occurred in Cameroon that addressed similar issues that I have in my own classroom. The author taught in a school with a lack of resources, very large classrooms, and with the constant struggle for success in language learning. Autonomy was used as a tool to overcome these external factors through classroom discussions and group oriented projects to promote student engagement with the material (Kuchah & Smith, 2011).

As previously discussed, autonomy can foster life-long learning skills that benefit not only the teacher, but society as well. This was the discussion presented by Lüftenegger, Schober, Van de Schoot, Wagner, Finsterwald, & Spiel's (2011) study. This quantitative research project generated data on fifth, sixth and seventh graders' performance levels and motivation. I also am using autonomy as a means to combat poor performance levels. Performance, and what it means to me will be defined in the next section. Reflection as an autonomic process provides assessment of learning. The results of the Lüftenegger et al. (2011) study are in favor of providing autonomy within the appropriate framework.

The ability to promote autonomy within the classroom begins with teachers. In my classroom it is the same. The learning of the autonomous process began with me as a teacher. Raya (2011) focuses on enhancing pedagogy to foster autonomy for teachers. Teachers are able to glean ideas on promoting autonomy through their own reflections and regulation. Raya's (2011) methodology is in a case study format in order to focus on differing aspects of

fostering student autonomy within the classroom. The first of these aspects begins with teacher development, the second on the formal education system. The final case study is directed at linking teacher autonomy with technology in the classroom. As is evidenced in these studies, teachers play an integral part in an autonomous classroom.

Other studies are directed at student apathy and on autonomy as a solution to lack of student motivation. One such study conducted by D. J. Shernoff, Csikszentmihalyi, Schneider, and E. S. Shernoff (2003), recognizes the perils found in the current educational system. Low achievement, attendance issues and even boredom are addressed. Flow theory or the mental state of engagement is used to study how and when students become engaged and what phenomenological factors occur with the process of flow. This study encouraged my further attention to the process of developing an autonomous classroom and why it may be a solution to issues of low performance as defined in the next section.

Stefanou's (2004) study proposes three different types of autonomy: *organizational*, *procedural*, and *cognitive*. By addressing three types of support in an autonomy supportive classroom, students can receive a well-rounded and authentic education according to his research. Teachers address specific types of autonomy in order to promote specific goals. The research suggests that teachers who support *organizational* autonomy allow students to make choices in classroom management. I used *organizational* autonomy in unit four, as students were able to manage their own daily schedules. The result of *organizational* autonomy support was found to be a sense of comfort with classroom procedures, whereas the result of *procedural* support was initial motivation. *Cognitive* autonomy support, or the ability for students to evaluate work, allots for student growth and development of higher order thinking skills. The difficult task for me is balancing the three within the scope of two

units. I used *procedural* and *cognitive* support as students promoted their own topic for research as well as had some say in their final grade and what they should be graded on for the unit.

Autonomy in Art Education and the Outcomes

While fostering autonomy support in the language-learning department has been a main focus in education, it has also been studied in art education. One creative arts school in South Carolina is such an example. At the Ashley River Creative Arts School students receive a more individualized education that focuses on the creativity of each student, thus fostering autonomy support (Arnold, 1996). Additionally, Matthews' (2008) study focuses on the importance of student voice through assessment. Matthews' (2008) theories on autonomy are based off of the philosophies of Jean-Paul Sartre and Michel Foucault's views on freedom (Matthews, 2008).

In an autonomy supportive arts classroom, student freedom to voice project ideas fosters creativity. Matthews (2008) created workshops with artist Thurle Wright in order to exemplify students' right to freedom of expression. Through action research and focus groups, Matthews (2008) consulted with students' insights on freedom in an autonomous group setting. Action research and qualitative study are common practices when researching autonomy in the classroom.

Steadman's (2011) study focuses on a high school jewelry class and autonomy support in order to promote intrinsic motivation and a sense of community. While it was discovered that autonomy support through allowing student choice on project and assessment could be successful, it may not incite motivation in each student. Some constraints and teacher hierarchy could be appropriate with the various student learning styles often occurring within a high

school classroom.

Another study in art education is quite unique. Room 13 has received support from the community and is a fine example of student autonomy and the breakdown of teacher-student hierarchy. Room 13 is a contemporary art studio that is run completely by autonomous students. These students are autonomous in that they, rather than the teacher, research grant monies, have invited professional visiting artists and decide what art to make on their own. It is a collaborative effort and a design for an example of a method to remodel art education. Students are no longer bored in a classroom, but they are learning through real world experiences as artists. The teacher and experts act as mentors, the final decision is left to the students. Student artwork themes and visiting artists are chosen via the interests of the students. The teacher, counselor, mentor, expert is not above the student on the hierarchal scale, rather they are equal partners in the artist studio (Roberts, 2008).

Rufo's (2011) work found that students became more interested and often portrayed evocative reflections on the creative process. Autonomy works very well in an art classroom as portrayed by Rufo's (2011) study. The very nature of the process of creativity is supported by it as students generate themes for their own artwork; they act as professional artists may in a studio.

Performance through Assessment

It is necessary for teachers to gauge student performance in order to determine if learning goals are met and if autonomy is a successful tool in the classroom. Though measuring of learning goal achievement can be directed in many differing ways and relate to various theories on education, I am using common practices that are found in many classrooms. This section of chapter two focuses on how student performance can be measured and evaluated

as well as the achievements and limitations of such methods. Both formative and summative assessments are addressed.

Formative Assessment. One method in which teachers can measure student performance is through formative assessment. Formative assessment occurs throughout the learning process and is often associated with teacher feedback (Marzano, 2007, p. 12-13). Examples of formative assessment can be but are not limited to: checking for understanding, peer critiques, attendance, and participation.

It is imperative that teachers check for understanding in their students, especially when issuing a lecture, demo, or instructions. Such comments as "Any questions?" or "Does that make sense?" can help the teacher gauge whether a re-demonstration or new explanation of the material is necessary (Fisher & Frey, 2007, p. 1-2).

However, students are not always sure on what information they do understand. They make think they "get it" when in actuality they misunderstood the information or the information is not yet lucid (Chappuis, 2009). Multiple forms of formative assessment must take place within teaching in order to better assess each student. What works for one student may not necessarily work with another. The work of Coffey, Hammer, Levin and Grant (2011) explains the need for multiple forms of formative assessment:

Formative assessment, then, becomes about engaging with and responding to the substance of those ideas and reasoning, assessing with discipline-relevant criteria, and, from ideas, recognizing possibilities along the disciplinary horizon. Framed as such, assessment demands attending to substance, in research, professional development, as well as in classrooms (p. 1131).

Teachers seeking an autonomous classroom environment use the principles of autonomy when assessing student performance. There can be multiple approaches, however there is no one *right* answer regarding assessment of student performance. In order to incorporate checking for understanding I read, corrected and gave feedback on daily student journals to reach each student as an individual.

Peer critiques can be an excellent method for formative assessment, however it depends on the attitude of the teacher. Students need to be encouraged to improve as well as congratulated for their successes. Peer critiques should be a formative method of assessment, as suggestions for improvement will foster growth in that setting. When used as a tool of summative assessment very little re-working of the material is accomplished. The teacher must remember that this is not a tool to show the student what errors they made, but to point out corrections that can be addressed (Dossin, M., 2003).

Why are peer critiques then an effective tool if the attitude of the teacher can so directly influence the outcome? Malone (2011) points out a few key points: students have a different perspective than teachers on learning outcomes, enhancement of student motivation and engagement, and that it will help prepare them for the workforce (p. 305). As long as peer critiquing is in the correct environment, it is an effective tool for formative assessment. As part of the action research process evolved in this study, I would have implemented peer critiques at the beginning phase of unit four in order to promote accountability within groups of students.

Measuring student participation is perhaps the most difficult task for a teacher. Research has defined participation as a complex behavior, incorporating various tasks and actions (Eyssen, Steultjens, Dekker, Terwee, 2011). Students who participate in classroom

activities are more likely to realize learning goals (Guillaume & Khachikian, 2011).

However, there are many factors as to why students may or may not be participating. Each student is motivated by differing factors, goal orientation, and learning how to solve the problem of "I don't get it" in their daily education. However, in order to be an effective teacher, one must encourage students to become motivated in the learning task intended to increase their knowledge (Brophy, Evertson, Worsham, 2004, p. 132). Guillaume and Khachikian's (2011) study of six engineering courses found the following regarding student participation:

The data indicate that students believe that more time-on-task will result in a higher grade. Faculty, academic advisors and counselors often emphasize the importance of time-on-task during introductory engineering courses and 'success at college' workshops. Clearly, this attitude does manifest itself in how the students behave, though the actual correlations between performance and time-on-task are much weaker than expected (p. 256).

It can be proposed then that measuring participation in an art or photography classroom may gain similar results. Students may participate or go through the process of making art, however that does not necessarily correlate with their performance levels. Jaquith (2011) proposes an explanation for this behavior:

What may seem like time-on-task may actually be a student resorting to a simpler solution to appease perceived pressure from a teacher. The same student might be far more creative if he or she felt autonomy to pursue a problem in his or her own way, not under the constraints of a tight assignment (p.14).

Another caution on measuring participation may be related to autonomy. According to D. J. Shernoff, Csikszentmihalyi, Schneider, and E.S. Shernoff (2003), cases in which autonomy is experimental, investigating participation may not result in accurate findings as students are excited about the change from obligatory to autonomy-centered teaching. Measuring participation may indicate that students are engaged in the learning activity, yet due to the limitations it is not an accurate measure of engagement if it is the sole source of assessment. In order to measure participation, I decided to use the rates at which students turn in assignments on time versus late as some students prefer to work from home or on a shooting location other than at the high school.

Summative Assessment. Summative assessment takes place at the end of a unit, or semester. It is a finished project, final test, or a student portfolio. Summative assessment sums up student learning (Marzano, 2007, p. 12-13). Learning that is assessed as a compilation includes but is not limited to: testing, rubrics, and portfolios.

Teacher generated, state, and national tests are ways in which student performance is evaluated in American schools. Career and Technical Education courses (CTE-vocational courses) are required to provide adequate state generated *Skills Tests* in order to present data on student achievement. Historically, this ideology generates from *competency-based* education. Data is collected on actual job duties to be implemented into the curriculum for CTE courses and "as a result, teachers have a much more central role in judging student performance than in standardized academic testing" (United States Office of Technology Assessment, 1994, p. 7).

Yet these tests themselves have become standardized as an elite group are invited to generate the tests that will be required state-wide. Testing is a part of assessment that has value. It is an inexpensive method of receiving timely feedback on specific criteria (Pienta,

2011). However, Goodlad et al. (1998) cautioned against regarding test scores as the sole method of assessing students:

Getting higher test scores is virtually an end in and of itself. Such scores do not predict or correspond to success in such things as personal relationships, good work, play, or sound mental and physical health. For the most part, they become meaningless as soon as a student leaves the classroom. Can we really justify investing enormous amounts of time, energy, money and resources just to produce a nation of top-notch test takers (p. 58)?

Testing is an effective tool only when utilized as such. Students working towards concepts they are tested on may be limited in that tests do not cover every aspect of a course. Therefore, testing is only one aspect of data collection for this study.

Rubrics are another method often utilized in education as summative assessment. Rubrics are beneficial as students can view expected outcomes on assignments and projects and target their learning to those requirements before they turn it in to the teacher (Moss & Brookhart, 2011, p. 24). They help students understand where they are going to end up by determining specific key points that the teacher is evaluating (Chappuis, 2009, p. 29).

Limitations of rubrics, as in all limitations of summative assessment, are that they do not allow for student remediation. Also, rubrics do not always guide students towards improving. An example of a working rubric would include room for student input and time to work on suggestions for improvement (Chappuis, 2009, p. 38). Rubrics are helpful to students when used with formative principles. In order to promote autonomous learning as previously specified I used student-generated rubrics in this study. The students wrote down five key points they felt would be important at the beginning of the unit. Then, at the end of the unit, they graded

themselves based on those five aspects.

Another method of summative assessment is to generate student portfolios. They are helpful when assessing student progress long term. Portfolio assessment also lead to reflective learning as students can view their improvement (Davis, 2009, p. 96). Portfolios present a range of knowledge acquired in a course instead of key concepts learned in one project (Melograno, 1994, p. 51). In Baeten, Dochy, and Struyven's (2008) study, portfolio use was found to be successful. They state:

The students themselves were responsible for putting together their portfolio, namely: formulating learning goals and action plans, doing assignments prior to each lesson, reflecting on these assignments, discussing a number of articles and completing extra assignments. As indicated here, numerous assignments and reflections took place during the course, so multiple measures were used. The level of knowledge and skills assessed in the portfolio assessment exceeded the knowledge reproduction level. Moreover, the focus was on multiple dimensions of intelligence. As such, metacognition and reflection were an essential part of the portfolio assessment along with the cognitive dimension. The assignments collected in the portfolio assessment were mainly authentic and contextualized (p.366).

When students take ownership of their portfolios and when it is used throughout the learning process, portfolios can be an effective strategy for determining student learning authenticity. The student portfolio plays a part in this study as the final product for unit 4, generated and graded by the student.

Conclusion

While autonomy supportive classrooms are primarily sought after by language learning capacities, autonomy support is also pertinent when discussing motivation and creativity in the arts classroom. There are limitations to utilizing autonomy, especially when combined with current common assessment practices to determine student performance. There are many benefits to formative assessment and summative assessment; however, effective teachers utilize both as tools for evaluating student performance in order to promote authentic learning, especially when implementing a new practice such as autonomy. Assessment strategies vary by assignment and by the desired learning targets. Multiple approaches are appropriate within the same course as students' approaches to learning differ in each class.

Chapter 3 Methodology

Qualitative inquiry is relevant to educational practice as it allows the teacher to examine the dynamics within a single classroom in order to improve one's own pedagogy, and is appropriate for the scope and character of my study. Action research is my primary methodology in this thesis.

Qualitative research regarding curriculum

Why Action Research. Action research is a means for exploring the issue of student motivation and performance in digital photography courses at Westlake High School in Saratoga Springs, Utah. It is an appropriate methodology because of its cyclical nature, allowing me to adjust my curriculum based on feedback from students, rather than discuss results of previous studies. Possible implications of this work may include improved performance in school, lifelong learning for students and improved teaching practices.

Action Research, a history and a methodology for change. Social psychologist Kurt Lewin played an important role in the founding of action research as a methodology. In the 1940s and 1950s, Stephen Corey of Columbia University utilized Lewin's work and introduced action research into the field of education (Schmuck, 2008). Highly influenced by Lewin's work, Corey delved further into defining action research by outlining several necessary processes involved in this new methodology. The first step is for teachers to look into their own classrooms, communities, school districts, etc. and define a problem. The second step is made after the specific problem has been selected. The teacher must then define a method for solving the problem, with the assumption that it can be solved. The educator must also have a plan in place for implementing their hypothesis (Corey 1953). Part of the process is to record data. Teachers may choose to journal about their own actions or the actions of their students

throughout the research period. Data must be gathered according to the specific goal that was originally set up by the teacher. Through the data gathering process, new solutions and new problems may arise. The fourth step is to analyze the data. Has the issue been addressed in the action that was taken? What improvements could be made? By looking at the data, generalized information regarding the solution to the problem should appear (Corey 1953). The final step is not in actuality a final step. Action research is a continual learning process for both the researcher and the participants. One problem is solved in one way, but new sections to the problem can arise. Therefore, Corey's final step is continual retesting of varying hypotheses. These steps are logical to me and practical for improving my classroom pedagogy.

Relevance of Action Research in Education. Action research has solved many of the following dilemmas of the scientific method in research. It allows for the opportunity of endless possibilities due to its cyclical nature. The scientific method is not as cyclical, nor can it allow for immediate response to a problem. Action research also allows for the teacher voice to count as legitimate data as it includes qualitative collection methods rather than relying solely on collected statistical data. It is a more pedagogically driven approach to curriculum development than a scientific approach and it allows for teacher voice when the scientific method does not include teacher voice (Schmuck, 2008). It is through reflecting on our daily practice that we can discover our own insights into our curriculum for student improvement and teacher education. The practical knowledge of teachers utilized in educational action research is a valid and pertinent form of research data collection that is both recognized and valued (Zeichner, 1994).

Action research allows for unique data to be collected. Each classroom is different, just as each student is different. While quantitative data is relevant to educational research in order to

provide less subjective data, qualitative methods as practice inquiry are more appropriate in this study as it relates to a specific classroom setting. Action research is a tool of qualitative study as it allows for teacher reflection as a data collection method, as well as addresses the need for continual, cyclical evaluation of teaching practices.

Action research addresses concerns of teacher improvement and classroom life-long learners, students who will continue to implement learning strategies throughout their lives. Action research may not deliver closure, however it does allow for new research to develop (McNiff, Lomax & Whitehead, 2003). This was the key factor in my decision to use action research as my chosen methodology. Teaching one way may work well at one time, yet with the exact same students in the exact same course the same pedagogical approach may not mesh well with the mood of the classroom shortly thereafter. A classroom is composed of thirty individuals, all with various issues and worries they bring along with them. I needed a methodology that was as flexible as the attitudes in my classroom. I also needed a methodology that enables my own reflections to be incorporated as data. With action research I am able to discuss my own learning as I develop curriculum, and am able to explain how I work in a particular setting (McNiff, Lomax & Whitehead, 2003). I am trying to improve an issue that I have noticed in my own, individual classroom. According to Dewey (1938), "The 'aim' of education is to enable mental, physical and spiritual growth." If the students are not motivated to learn or do not have a personal connection with an assignment, how can they be expected to grow as Dewey asserted in his theory of education?

Finally, action research promotes further study into my own practice as I evolve as a teacher researcher. Reflection on curriculum generated for this study while allowing my students to become more active learners in the classroom through autonomy is pertinent to the

process. Action research benefits both the researcher and society. The researcher gains new knowledge allowing for an improved situation in society (McNiff, Lomax & Whitehead, 2003). Through my action research project, I have improved my own learning in devising meaningful and relevant curriculum for my students. As I improve my situation as a teacher, my hope is that students will become more motivated to remain on task and engaged. Action research relates to various methodologies while allowing for continual improvement in practice, and it is practical in educational research.

Reflection on process. Collaboration among students can greatly affect the process of action research. One such study, *Riding the wave: Student researcher reflection on the action research process* examines action research, the process in which student collaboration can alter the direction of a classroom. Burrown, Rhomas, Woods, Suess and Dole (2012) propose in this study, that while action research is cyclical it is because of individual student reactions as well as student reaction as a whole shape and define new roles for themselves. They call this phenomenon the *wave process*. Students in this study are engaged in an activity, or disengaged and that mentality occurs in waves, rolling in and out of engagement or disengagement. Collaboration was implemented in this study as students were able to work in groups if researching similar ideas, however each student came up with an individual project. Most students chose to model for each other, and go out on photo shoots together during class time.

Reflective practice in a middle level educator. Another successful action research study results from the work of Hagevik, Aydeniz, and Rowell (2012). Their focus is on critical reflective thinking among teachers as practitioners. This study found that teachers who are able to critically reflect on their teaching and who are engaged in action research within their classrooms and their own curriculum development gain insights into student learning and

improve as educators. In order to come to this conclusion, data collection included *collaborative discussions, final written documents, presentations, and follow-up surveys*. This is happening within the scope of my thesis as a whole. My thesis is an action research project.

Photo-voice. Teachers at a middle school in the mid-west collaborated on an action research study and focused on students who were failing all of their classes while not qualifying for special education (Schmuck, 2008, p. 47). The teachers chose for the study to take place during the school day, as well as meeting as a team outside of regular school hours once a month. Rather than assuming that students just did not care, they decided to change what they had control over, themselves (Schmuck, 2008, p. 48). The project became a personal narrative and photo-voice in an effort to motivate student performance. Photo-voice is a project where students can design their own narrative through the use of photography as the medium for personal voice. It takes place in three steps: *selecting, contextualizing and codifying* (Schmuck, 2008, p. 49). Students choose what they want to say from photographs they have already taken. Then they tell a story about one or many of the photos. Finally they "create shared meaning for the images" (Schmuck, 2008, p. 49). The following steps occurred within the study:

- 1- Investigation of teacher value system
- 2- Connection with students
- 3- Student project: Photo-voice
- 4- Listening to student responses
- 5- Curriculum change

By listening to students, the participating teachers re-connected with themselves as students and found it easier to generate curriculum that was more relevant. My next plan of action in the action research process is to look at the autonomy projects and develop

Unit 5 based on student feedback and interests. This will not take place within the scope of this thesis due to time constraints.

The Implementation of Action Research in the Digital Photography Classroom. A teacher researcher must be *informed*, *committed* and proceed with *intentional* action in an action research project. By following these three guidelines, a teacher can turn research questions into everyday pedagogy (McNiff, Lomax & Whitehead, 2003). In order to become informed, I researched student autonomy in the classroom and its importance as a pedagogical approach. I am already committed to improved learning in my classroom, and it is my goal to help the students become equally committed. I anticipate that my project will promote intentional change in the attitudes and performance of my students.

I began the semester with a student expectations survey. I used a normal curriculum unit based on information gathered from the survey. Throughout Unit 3: Photoshop, I had my students keep a research journal regarding on task behaviors, comments made, and their thoughts on the assignments. I then conducted an exit survey and test for Unit 3: Photoshop. The following Unit 4: Autonomy Lesson is based on policies of student autonomy; allowing students to choose for themselves what material learned, how they learned the material, what they did when they did not understand the material, and what they did when they wanted to explore an idea further. Students were in charge of their own learning, and I acted to facilitate and help discover new resources. Students continually journaled in the same manner as previously stated for Unit 4: Autonomy Unit. An exit survey and test of the unit followed, the test being the project the students proposed to complete. Data is compared between the two units in order to determine the percentage of student performance in the next chapter of the study.

For my cyclical approach towards this research, I will conjecture a new hypothesis based on the results from the data and write on an intended follow up lesson that will not occur within the scope of this thesis.

Conclusion

Qualitative methodologies are pertinent to educational research as change can occur quickly and within my own teaching practices. Each classroom is unique and is comprised of individuals. By recognizing the need for change, defining trends, understanding students, and evaluating data within the scope of a classroom, educational practice can improve. Action research is the methodology for this study as it includes aspects from other pertinent methodology practices while allowing the process to remain cyclical and adaptable to the needs of my classroom.

Chapter 4 Data Analysis

Triangulation of data is imperative to research collection and analysis. In order to triangulate, the data in this study is collected through student journals and surveys to determine the existence of autonomy in the classroom. Then through comparative analysis it will be determined if autonomy is an effective tool to increase student performance as defined in the previous pages. Unit 3: Photoshop is compared to Unit 4: Autonomy is examined in all three aspects: journals, surveys and rates of assignment completion.

The Presence of Autonomy

In order to determine if my classroom is autonomous within the scope of specific units, I conducted surveys, gathered student journals and utilized word frequency. I compared results from Unit 3: Photoshop to "Unit 4: The Autonomy Lesson" to determine if my students felt they had autonomy. Finally, I determined if autonomy is an effective tool in enhancing student performance within my Basic Digital Photography classroom.

In order to determine if autonomy is an effective tool in my classroom, I am comparing the percentage rates in which homework and assignments have been turned in from unit 3 to unit 4, as well as the scores from the end of unit projects and tests. As in other action research studies, I will propose alternate solutions to new questions that may arise in this study in the concluding chapter of this study.

Hermeneutics Data. It is necessary in autonomy research to include the thoughts of the participants as the word autonomy means a freedom to live by one's own laws (Autonomy, n.d.) & (Autonomy, 2012). Student views in this study assist in determining the presence of autonomy. In Matthews's (2008) study, participant feedback played an important role in revealing how students used autonomy to interpret freedom as a theme through photography.

Autonomy and synonyms are not frequently portrayed by this wordle diagram, which is expected, as this is the teacher directed unit; although *like* and *fun* described the unit by many students.

My first randomly pulled student chose to discuss remediation and the culture of the school as that day must have been a remediation day.

I personally love remediation! It gives us students a chance to catch up on our grade, see what we are missing, talk to teachers etc. Of course we can always check our grades at home and do homework, but you can't talk to a teacher when you're at home to get extra help, you can't take a test for a class while you're at home. And it's too hard to find time during school. Plus kids ride the bus so they can't always come in after school, but remediation gives us that time to double check our grades and see how we are doing. Today in class we did some photo shop editing. It was really fun getting to learn all of the tools, see what you can do to improve the pictures. There are sooooo many things you can do to a picture to improve the quality. That's what I have been learning so far in this class. Plus Mrs. Johnson is awesome and super funny. I like that she is strict so that the students don't think they can learn anything in this class by being lazy. It's weird but I like the deadlines, and the rules and the note taking. It's teaching me discipline and that the teacher is teaching us the answers but they aren't going to give them to us. We need to pay attention and consume the knowledge (Student A).

This quote assists in my initial assumptions that the students did not feel they had freedom during the class period. It was interesting to see a student perspective on my strict classroom policies. I also learned that at least one student enjoyed learning in my classroom. My next two students also discussed what they learned that day without evidence of how they *felt* about

the lesson. No evidence of freedom or autonomy was given.

Today I learned about Photoshop and how to use it. Baby steps though. I learned how to use the hot keys. I learned about the different ways to edit a photo from brightness and contrast to sharpening it. I learned that hue is actual color editing and saturation is existing color edition. To zoom and zoom out is the command key with the brackets next to the P. The move tools moves multiple layers. H is the hand tool. Hot key is the V key. Time was spent well and today was fun (Student B).

We learned how to use photoshop and play with different tools. I worked on lighting and exposure. We learned how to use the dodge tool also, which i really love to play around with that tool (Student C).

Another possible reason for lack of autonomous vocabulary in the wordle diagram is that some students did not take the journaling assignment seriously.

i like bananas and i think that i now have a boyfriend (Student D).

While interesting to know that this particular student likes bananas should I ever need to bring in a treat and I am happy for them that they think they have a boyfriend, it is not pertinent to what we were discussing in class that day. It is difficult to gather data when the student does not complete the survey, test or journal response correctly.

In the autonomy unit I expected to find more words than just autonomy to describe how students felt about the unit. I was looking for 'freedom' or 'choice', however this was not evidenced in the word diagram.

took. I like the freedom of learning what I want to learn (Student E).

This student seemed to enjoy the unit assignment. This type of response is what I was looking for as a teacher, autonomy as a means to increase student motivation. Another student also responded positively to the unit.

Today I am going to try to finish up my research for my project. For my project I am going to be working with shutter speed. I am going to try to caper a image that can hold a image forever that you would normally only see for a split second. I am super excited about this project. I like learning this way, because we can teach ourselves what we want to learn (Student F).

However, not all students responded so positively. Student G felt that they did not have enough initial photographic information to complete the necessary project.

We didnt do much so I was bored. I don't like choosing our own subject. In this photo 1 class we don't know anything so we don't know all of the different things we can talk on or do research on.

This was disappointing to me as I felt that I had given them enough introductory information to photography for them to be able to find an interesting topic to focus on. Student H's response was candid, and posed further insight into why some students were not performing, those students may still lack motivation.

Today I didn't do anything because I didn't want to. Also because it is Friday and I am feeling really lazy today. today we are still working on our projects.

From the negative responses, autonomy was not effective in promoting student motivation in all cases. Measuring student learning is the real goal of measuring student performance in this study and therefore, autonomy is evidenced to be a successful tool by this method of data

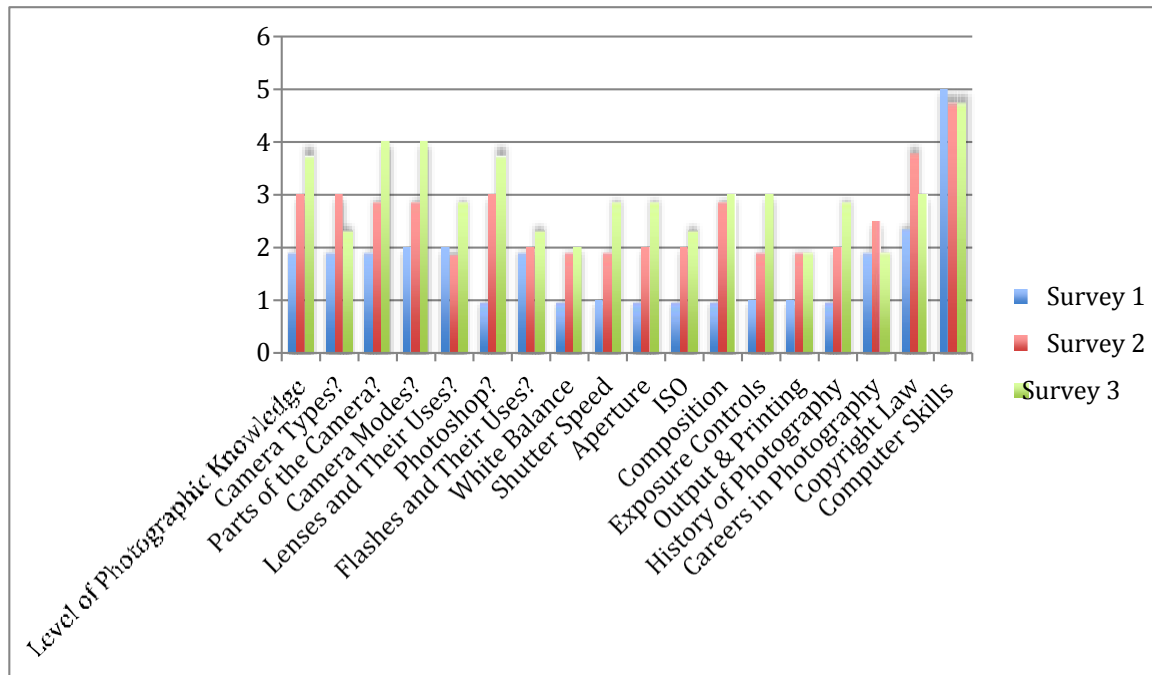
analysis in some cases as perceived by the students.

Surveys. Student responses to surveys will also factor in determining if my students are more autonomous in Unit 3 compared to Unit 4. At the beginning of the course, students were surveyed relating to grade point average (GPA), experiences of autonomy in their schooling, and the importance of choice in assignments (Patall, Cooper, & Wynn 2010). Students were given the same survey at the end of Unit 4. Results are determined through comparative analysis, using the survey responses.

At the end of the four units, I included the following questions in the final exit survey.

1. What was your favorite unit this year?
2. Why?
3. During which unit do you feel you learned the most?
4. Why?

The autonomy surveys were given at the beginning of the course, the end of Unit 3: Photoshop, and the end of Unit 4: Autonomy. The surveys are used to compare the results of the importance of autonomy to the students, and to gauge how much the students felt they had learned. [See Appendix C](#) for an example of the surveys. In the case of a tie, the scores were averaged.

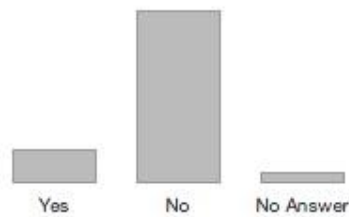


By comparing the three surveys, the results show that the majority of students felt that they were learning during the course. Some results, such as the sixth question in the survey, jumped several points where others reveal a gradual increase. By the end of the autonomy unit, students had felt that their photographic knowledge in these areas had increased. However, it is difficult to tell simply from these results if that was due to the autonomy unit or the teacher directed unit. Therefore, students were also asked if they felt they were given a choice on assignments and projects, if they felt they would be more successful. See chart below:

Question

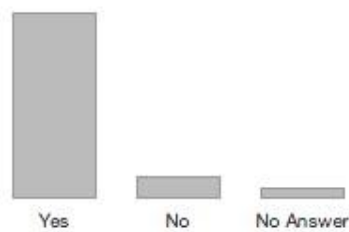
54 attempts

Do you feel that you are given a choice on what assignments you do for your other classes at school?

**Question**

54 attempts

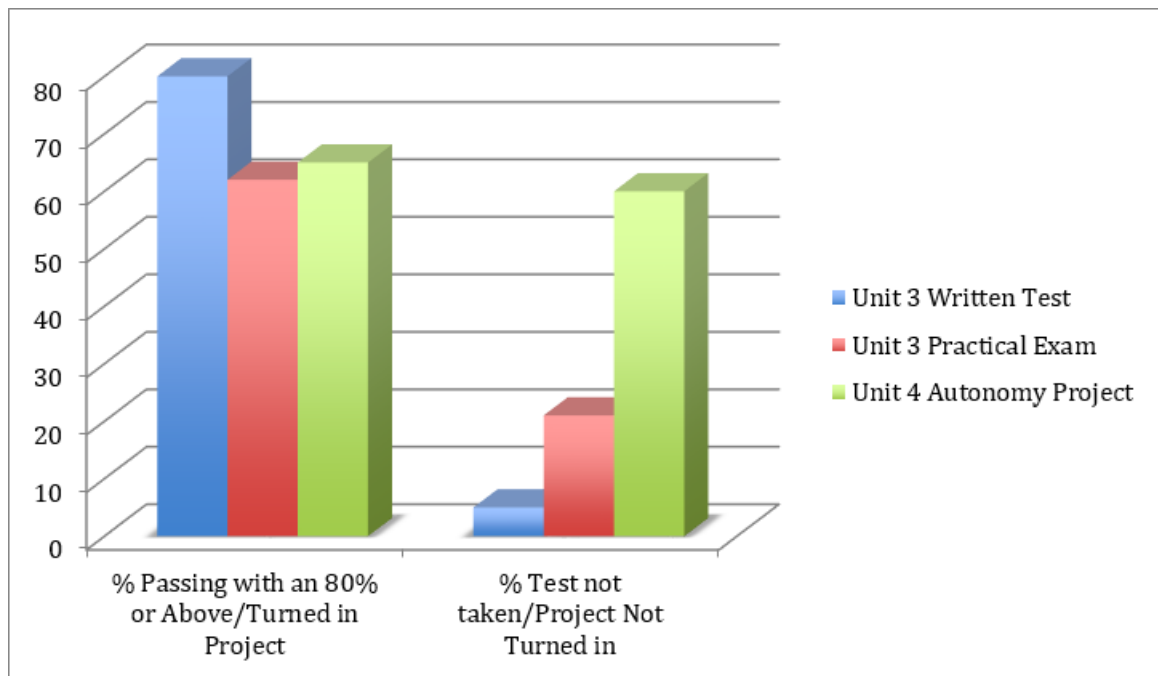
Do you feel that if given the chance you would do better in school if you had a say in what you learned and how you learned it?



This question reveals that autonomous learning is important to students, even if it did not result in astounding student performance results in this study.

Autonomy to Enhance Student Performance

As in Patall et. al's study (2010), unit test scores can be an effective tool in determining student academic performance. As year-end testing is determinate in yearly performance reviews of Basic Digital Photography as a Skills Career and Technical Education program, reviewing unit scores are relevant to student performance as data. These tests are the same unit tests, regardless of student participation in the study. The results are limited to the number of students who were able to take the test on the test day, or find time during the term to come in after school for test make-up. Some students chose not to make up their exams. This percentile is listed in the following graph.



For Unit 3: Written Photoshop Test, 80% of the students who took the test, passed with an 80% score or higher. At Westlake High School, proficiency is 80%. Five percent of students chose not to make up the test.

The practical portion of the exam was given the following day. For Unit 3: Practical Photoshop Exam, students were asked to complete a Photoshop merging activity within the allotted class period, similar to the assignments preceding the test. Students were expected to follow normal testing procedures: no talking, no websites, no notes, no books, no cheating, etc. Of the students who completed the test during the allotted time, or came in on their own time to make up the exam, 62% of students passed with proficiency. 21% of students chose not to make up the exam.

For Unit 4: Autonomy, students created their own "test" through a portfolio/project submission. Students chose what to work on, how they should be graded, and how to use class time. Based on the rubrics individually generated by each student, 65% of students

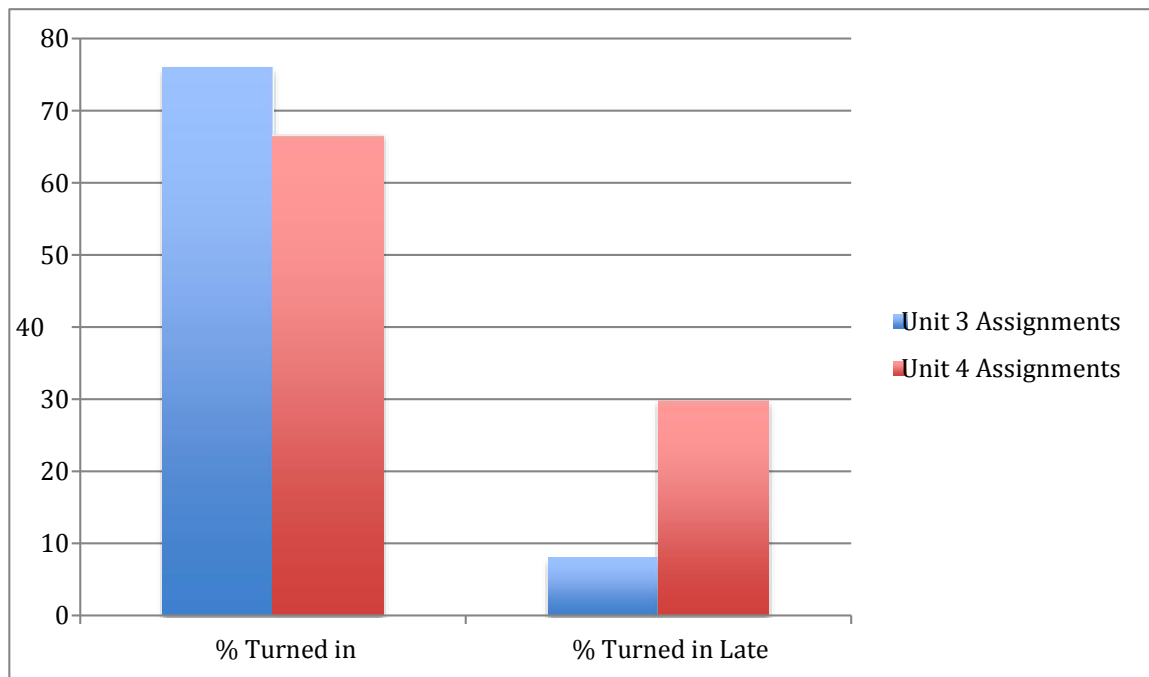
passed the unit exam with proficiency. 60% of students chose not to complete the project by the assigned deadline. As late work is not due until the end of the term, late assignments cannot be included within the course of this study. Students were able to turn in the assignment online at home at any time during the course of the unit until the assigned deadline. Students received text message reminders, email reminders, and daily reminders by the teacher over the course of the unit regarding the deadline of the project.

When comparing the results of the unit tests, students appeared to show more proficiency in the teacher directed unit written test, over the autonomous unit. However, in regards to the practical exam, students showed more proficiency in the autonomous unit. Still, when combining the results of the unit 3 written exam and the practical exam and comparing those results with the results from the unit 4 exam, students revealed more proficiency in the teacher directed unit. This may be summed up by the following student journal response from Student I,

Today we just worked on our project. I did research for mine. I don't really like having an open assignment, because I procrastinate and it stresses me out when I finally do it. The largest difference between the autonomous unit and the teacher directed unit is the rate at which students made up their exams. Procrastination appears to be a key factor in Unit 4. Unit 3 revealed that fewer than 30% of students made up their exams; whereas during Unit 4, 60% of students were missing their exam work. This data reveals that in my Basic Digital Photography class, autonomy was not an effective tool in enhancing student proficiency or performance on tests. However, testing is not the only method for data collection in this study. Next, the results from homework completion are discussed.

Homework. Patall et al's study (2010) also incorporated a "homework completion

variable" in order to determine student performance. In my class, while students may have been absent on the day assignments were due they were given until the unit test to turn in missing work for full credit. Student absences should have a minimal impact on student performance as tests were given a few weeks apart and students had a window of opportunity to complete the tests if they were absent. Students were also able to turn in the assignments at home online if they could not complete them in class. Students received text messages and email reminders about deadlines as well as in class reminders from the teacher. The results of student assignment completion percentages for Unit 3: Photoshop, and for Unit 4: Autonomy are as follows:



From the data, 76% of the given assignments were completed and turned in by the students during Unit 3: Photoshop. Of those assignments handed in, only 8% were late. For Unit 4: Autonomy 67% of the assignments that were given within the unit, were turned in by the students. An average of 30% of the assignments turned in, were turned after the deadline

and were considered late. From these results, it appears that autonomy in the mode completed by the study, was not an effective tool to enhance student performance within my Basic Digital Photography classroom.

Survey Statistics

Question

45 attempts
What was
your favorite
unit this year?

1: Canvas Intro 4: Autonomy 2: Camera Types & Parts 3: Photoshop

64% of 45 attempts selected this answer

Question

45 attempts
During which
unit do you
feel you
learned the
most?

4: Autonomy 3: Photoshop 1: Canvas Intro 2: Camera Types & Parts

The autonomy survey viewed above also assists in determining perceived student learning. Students preferred Unit 3: Photoshop, the teacher-directed unit and they feel that they learned the most in that unit according to this survey.

Conclusion

In order to determine effective measurements of data collection regarding student autonomy in the classroom, multiple methods of data collection have been incorporated into this study. Student responses in regards to hermeneutic data, unit test scores, homework completion percentages and student surveys complete the process of data collection. Autonomy is present in unit 4 and it appears to be important to students. However too much freedom, as was evidenced in this study, can be detrimental to their performance on assignments and tests as well as in learning as perceived by the students.

Chapter 5 Conclusion

Discussion. Language learning educators often utilize autonomy as a means to enhance student performance. Autonomy is also pertinent to the discussion in the arts arena as it supports creativity and can enhance student motivation. However, it is important to remember that autonomy is not without limitations. When combined with common assessment practices both formative and summative, too much autonomy can be detrimental to a student's performance on tests, turning in homework, and perceived learning. Both formative and summative assessments are beneficial in promoting student performance when used together in the classroom, especially when evaluating a practice new to me such as autonomy. Methods of qualitative study, give rapid if not immediate feedback to the teacher on improving pedagogy. When teachers recognize the need for change, define trends within a classroom, begin to understand their students, and are able to evaluate data relevant to their own classrooms, their practice will improve. Action research is a logical choice for a practicing teacher as we evaluate our progress constantly. It is a process most educators already perform on a daily basis, even when not collecting specific data for a research study. This pertinence to my daily practice is why I chose to use action research as my methodology. As the process is cyclical, it is also adaptable to my specific classroom for immediate action. In order to validate my data, I collected data in multiple ways through utilizing student surveys and journaling to determine the presence and importance of autonomy; as well as testing data, homework completion percentages, and specific questions within the surveys to reveal student learning and performance. Autonomy appears to be a presence in my Unit 4, however student performance rates were lower than initially expected.

Conclusion and Recommendations for Further Steps

As a teacher, it is discouraging to see students not live up to their potential. I believe that every student is capable of "A work" if he or she will put forth the effort necessary for that level of performance. It was disappointing to see how few students actually completed a finished project for this unit. I was also disappointed in those students who felt that they deserved an "A" grade when their entire project consisted of 20 minutes of work, at most (see student #'s 5-6, [Appendix B](#)). One of my only requirements was that they were to spend the full two weeks on the project. Deadlines are a common practice in the business world, the art world, and the workforce so I felt that this was an acceptable constraint. I feel that a way to prevent these same results next time is to show more examples. I only showed two examples as I did not want students to do a copy-cat assignment for this project, rather I wanted them to come up with something they could take ownership of.

It also may have been easier to have an additional unit in between Unit 3 and Unit 4 that gave the students some choice on which teacher directed lesson they wanted to focus on. For example: "For this unit on lenses, do you want to learn about A, B, C or D? Do you want to complete 1, 2, or 3 for your project to show me what you have learned? I feel that I may have jumped into the autonomous part of the lesson too quickly without enough instruction. However, I am pleased that some students chose to use the two weeks they had to work on the project and learn about a new topic (see student #'s 1-4, [Appendix B](#)). These projects are good examples of an autonomous unit as they are completely the idea of the student, and the student chose to work on the project. If these students completed their projects early, they spent further time delving deeper into their chosen topic and enhancing their projects.

This particular implementation of autonomy in my classroom is varied and will require future study. Due to the cyclical nature of action research, my next attempts in my classroom

will review the following ideas. Students at my school are continually able to remediate work. Delving further into an ethnographical approach may prove effective. This school culture may alter student attitude towards completing homework and projects, versus taking a test in class, from the approaches I reviewed in the literature. It may promote laziness, or a general apathetic approach to schooling in general. A participatory action research project involving students, the community, and other teachers can be a "next step" in furthering my study.

Another hypothesis I have for lack of student performance improvement through the use of autonomy is that the students at my specific school needed more scaffolding. A mini autonomy unit in-between unit 3 and unit 4 may have helped student achievement as they became more confident in their own research of photography.

Finally, I must also admit that perhaps I was not the correct teacher to implement an autonomous unit. I may have not explained the idea behind an autonomous lesson in an attempt to allot for too much student freedom. My own bias or even attitude towards educational practices may have had an effect on the experimental curriculum. While autonomy proved to be a challenging addition to my curriculum in the scope of this particular study, and while it may not have produced the desired result of enhanced student performance through this method, I will try incorporating more student choice in my curriculum through action research. As I continually research and find new methods to implement in my teaching, I hope to become a more effective teacher.

Appendix A

Outline

Unit 3: Photoshop		
Basic Editing	Feb 9	100 pts
Dodge	Feb 9	100 pts
File Types	Feb 9	25 pts
Journal Entry #5	Feb 5	10 pts
Journal Entry #6	Feb 11	10 pts
2/13 Journal	Feb 13	10 pts
2/15 Journal	Feb 15	10 pts
Clone Stamp	Feb 16	100 pts
Optical Illusions	Feb 16	100 pts
Output	Feb 16	100 pts
2/20 Journal	Feb 20	10 pts
2/22 Journal	Feb 22	10 pts
Colorization	Feb 23	100 pts
2/26 Journal	Feb 26	10 pts
2/28 Journal	Feb 28	10 pts
Superhero	Mar 2	100 pts
3/4 Journal	Mar 4	10 pts
3/6 Journal	Mar 6	10 pts
3/8 Journal	Mar 8	10 pts
Photographer Critiques Checkoff #1	Mar 8	100 pts
Autonomy Survey #2	Mar 8	25 pts
Photoshop Review Game	Mar 4	25 pts
Unit 3: Test on Photoshop		
Unit 3: Photoshop Test	Mar 6	100.4 pts
Photoshop Practical Exam	Mar 8	100 pts

Sample Lesson

<p>CONCEPT MAP OF UNIT</p> <p>Students should already be familiar with Photoshop and the basic editing tools. The focus for this lesson is how to use layer masks to combine several images in order to create a superhero. This lesson was planned for one 45 minute class period, plus two 80 minute class periods.</p>	Topic	Layer Masks
	Teacher	Erin Johnson
	Grade	9-12
Key Learning(s)	Unit Essential Questions	Instructional Tools
Layer Masking in Photoshop	Students will be able to	Handout,

recognize the icon, hotkey, and canvas.instructure.com, MAC purpose of the basic Photoshop lab, Photoshop Cs4, rubric tools.

Students will be able to utilize learned Photoshop tools in order to create interesting photographs and graphic images.

Concept	Concept	Concept	Concept
Superheroes	Photoshop Brush Tool	Layers	Layer Masks
Lesson essential questions	Lesson essential questions	Lesson essential questions	Lesson essential questions
What is superhero? Who is a superhero to you? Do superheroes' powers ever reveal something about them? What powers would you give someone you know?	How do you use the brush tool? What are some things that can go wrong when using the brush tool? How do you change the size? Opacity? Color?	How do you activate a layer? How do you unlock a layer? How do you put a layer on top of another layer? How do the layers work?	How to add a layer mask? What color should your brush be? If you make a mistake, how do you fix it? Why do we use layer masks instead of the erase tool?
Vocabulary	Vocabulary	Vocabulary	Vocabulary
Superhero	Brush tool, Opacity, Brush size	Layer, Activate	Layer Mask, Foreground/ Background

Additional Information



HANDOUT

To create a superhero I want you to use layer masks. You will find that it looks better and is more "mistake friendly" than the selection tools combined with an eraser. You will need one picture from your mode dial practice that is of a person, and one from the mode dial practice that is of a background setting. Follow these steps...

1. Introductory level Photoshop users may opt to use the Eraser tool to carefully erase the girl's face from the top layer, but for the Intermediate to Advanced user, a Layer Mask is a much better solution because it is non-destructive. To use the Layer Mask, select the top layer, and choose **Layer > Layer Mask > Reveal All**.
2. Press the letter **D** on the keyboard to reset your color chips to Black and White.



3. Use the **Brush** tool with a soft brush to paint away to the underlying layer, exposing the image underneath.
4. If you remove too much of the top layer, just press the letter **X** on the keyboard to switch your colors so that White is on top, and paint back in pixels from the top layer.
5. When everything is perfect, flatten the layers and you have created a fabulous portrait out of two mediocre ones.



If you need help let me know. You are combining the two images into one to make it look like a superhero. You may also want to use images of costumes you find online, just make sure you are searching for a LARGE image, and CITE your source in the comments section below (aka, copy and paste the url).

When you are done, go to LAYER>Flatten Image in order to be able to save it as a JPG

Rubric

Additional Information

Digital Photo Rubric			
Criteria	Ratings		Pts
Creativity view longer description	Full Marks 20 pts	No Marks 0 pts	20 pts
Focus view longer description	Full Marks 20 pts	No Marks 0 pts	20 pts
Exposure view longer description	Full Marks 20 pts	No Marks 0 pts	20 pts
Editing view longer description	Full Marks 20 pts	No Marks 0 pts	20 pts
Composition view longer description	Full Marks 20 pts	No Marks 0 pts	20 pts
			Total Points: 100

Daily Activities

Day 1: Introduce students to the concept of Superheroes. Watch 5 minutes of *Smallville*, *Superman*, *The Avengers* or similar show as an intro motivator activity. Ask students the essential questions for Superheroes. Hold class discussion and write answers on the board. Have students research and collect source images from the internet during class and save them to a flash drive. Homework: Have students take 5 photographs of a person who is a hero to them. Explain that they will use this person in creating their superhero.

Day 2: Introduce layer masks and demonstrate how to create a superhero by combining multiple images. Allow students to begin.

Day 3: Students will finish their superhero and turn it in. Assess using the provided rubric.

Extension: Have students hold an art show with their superheroes. In their artist statement, have them discuss why this person is a superhero to him or her.

Adaptations: Have students create superheroes in a group, divide up tasks according to student ability.

Sample Test Questions

Question

22 attempts

When would you want to reduce the size of an image? Choose the BEST answer.

Question

26 attempts

What is the default format used by almost all digital cameras?

Question

19 attempts

What are 2 different ways to organize your photos?

Question

22 attempts

If I wanted to print something large, what is the minimum resolution I should use?

Practical Test

Animal Morph

If you thought photo manipulation couldn't get any weirder, you were wrong! With the powers of Photoshop and other photo-editing applications, it is possible to merge many things together.



Test Task:

- Create 1 realistic looking Animal Morph
- Find images of animals (highest pixels possible) and blend them with other objects and/or animals.
- Document Size:
 - 8.5 x 11 or 11 x 8.5
 - Color Mode: RGB
 - Use PhotoShop
- The key is to seamlessly blend images together. It should not look as if you just cut and pasted images together. It should be hard to tell where one animal ends and another begins.
- Tools/Skills to Use:
 - Layer Masking
 - Clone Stamp
 - Magic Wand
 - Transform (Distort, Perspective, Skew, Warp, etc.)

Links to Great Examples: (These links were provided online to each student)

<http://www.theinspirationblog.net/showcases/25-clever-bizarre-animal-photo-manipulations-part-1/>

<http://naldzgraphics.net/inspirations/33-funny-animal-photo-manipulations/>

<http://smokingdesigners.com/humorous-silly-animal-photo-manipulation/>

<http://acrisdesign.com/2010/04/inspiration-amazing-animal-photomanipulation/>

<http://www.photochopz.com/forum/member-photoshop-tutorials/30288-human-animal->

hybrid.html

http://csscreme.com/tutorials/photoshop-tutorials/animal_photo_manipulation_tutorial

<http://www.fstutorials.com/tutorial/photoshop/how-to-create-a-hybrid-animal/12100/>

Examples:



You must create your own! It is very easy to search for an image to see if you cheated.

Appendix B

Outline of Unit

Unit 4: Autonomy		Feb 24 at 12am	
Assignment Proposal	Mar 12	100 pts	
Assignment Research	Mar 14	100 pts	
3/12 Journal	Mar 12	10 pts	
3/14 Journal	Mar 14	10 pts	
3/18 Journal	Mar 18	10 pts	
3/20 Journal	Mar 20	10 pts	◀ ▶ ✎ ⌂
3/22 Journal	Mar 22	10 pts	
3/26 Journal	Mar 26	10 pts	
3/28 Journal	Mar 28	10 pts	
Unit 4: Test on Autonomy Lesson			
Autonomy Project	Mar 29	500 pts	

Student Proposal Questions

Answer the following in the text box provided

- 1- What do you want to learn about (relating to photography) and WHY
- 2- Where will you get information from?
- 3- What will be the project you will complete to show me that you have learned the subject (from #1)
- 4- Where will you go for information if you don't get it?
- 5- List 5 things you should be graded on related to your project and WHY you think those are good points to show understanding of a topic
- 6- What photographers or people in the professional world work on your types of project?
(Include links to websites and digital images if applicable).

For Example

- 1- (What) I want to learn about the parts of the camera (Why) so that I can use my camera better
- 2- I will look in my camera manual, and go to the camera store where I purchased my camera.
- 3- I am going to create a demonstration video on how to use my specific type of camera and

show it to the class.

4- If I still don't understand how to use my camera I will also go to the manufacturer's website and I found three youtube videos.

Here are the links http....

http....

http....

And finally I will ask my grandma since she gave me the camera.

5-

A- Creativity, I feel that creativity is important to making a good video so it's not boring and people will watch it

B- Ten parts, do I include ten parts of the camera, their placement and their functions

C- Clarity how easy is it for someone to understand my project. I will test this by getting a survey back from the class when I present

D- On time, as a photographer it is important to be on time so that I can get paid

E- Effort. It is not fair for me to get a lower grade than someone who does not work in class everyday on this project, so I feel that effort should be included.

6- I was inspired by STROBIST and PCMAg. I want to work for them someday as a person who gets to review all of their camera equipment.

Research Questions

Include all research you have completed regarding your chosen topic.

What have you learned?

List the photographers you are interested in (at least three).

Paste examples of their work.

What excited you about each photograph?

How do you think they took the picture?

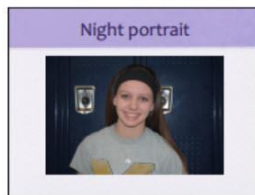
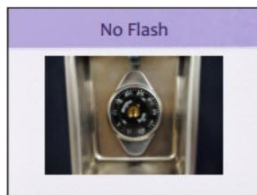
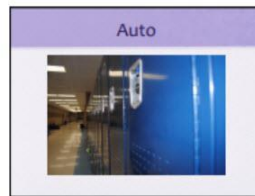
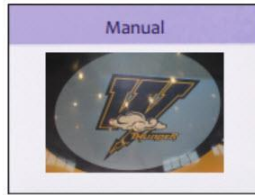
Did they use any special equipment?

What photography techniques do you think they used?

List the websites/books/magazines you used.

Sample Projects

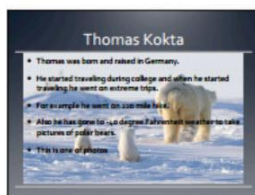
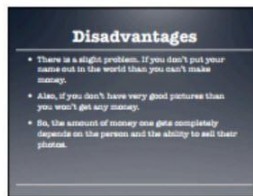
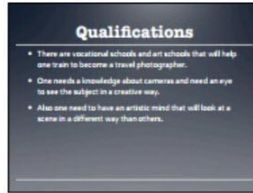
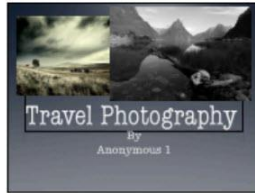
Student #1. This student spent time working with the modes of the camera. This project is considered somewhat successful, as some of the modes are not in relation to what was shot.



Student #2. This project was considered successful as it directly met this student's desire to create individual images for each letter of the alphabet. Ample time was used shooting the images in various locations.



Student #3. This student chose to research a profession in photography and a few professional photographers. As "Careers in Photography" is one of the requirements of the class dictated by the state, this was a successful project.



Student #4. This student researched additional Photoshop tools that had not been previously discussed in the classroom. They then generated this digital artwork based on the tools they learned.



Student#5. This student's project was highly unsuccessful. They took a candid snapshot out in the hall. No evidence of research, effort, thought or time is given.

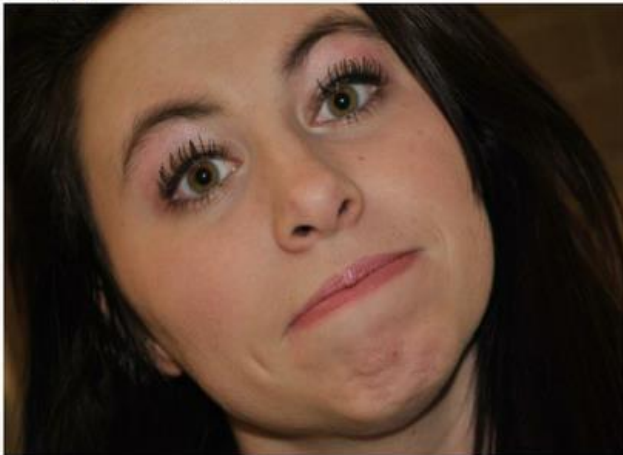
W Comment

6 3 of 4 'V



Student #6. This student's project used tools that were previously taught in the classroom to recreate an assignment already given by the teacher. Little creativity is evidenced in the creation of the project, however the student used the Photoshop tools successfully to edit an image.

Here is my uploaded project:



Before



Appendix C

Survey sample questions

1- On a scale of 1-5 (1 being no knowledge at all, 5 being expert) how would you rate your level of photographic knowledge as a whole? _____

On the following?

_Camera Types

_Parts of the Camera

_Camera Modes

_Lenses and their uses

_Photoshop

_Flashes and their uses

_White Balance

_Shutter Speed

_Aperture

_ISO

_Composition

_Exposure controls

_Output & Printing

_History of Photography

_Careers in Photography

_Copyright Law

2- On a scale of 1-5 (1 being no computer knowledge, 5 being very comfortable)

how comfortable are you with a computer?

3- Why did you sign up for Basic Digital Photography

A- My counselor signed me up

B- My parent/guardian wanted me to

C- I want to learn to be a professional photographer

D- I thought it sounded like fun

E- I think it will be an easy A F-

Other (please describe)

4- Please list the five most important things you want to learn from this class

1. _____

2. _____

3. _____

4. _____

5. _____

5. Do you feel that you are given a choice on what assignments you do for your other classes at school? Yes or No

6. Do you feel that if given the chance you would do better in school if you had a say in what you learned and how you learned it? Yes or No

7. What is your grade point average? _____

8. What is your desired grade in this class? _____

The following questions are from page 253 of Guillaume, D. W., & Khachikian, C. (2011).

The effect of time-on-task on student grades and grade expectations. *Assessment & Evaluation*

In Higher Education, 36(3), 251-261. doi:10.1080/02602930903311708

9. How much time have you been spending on preparing for each lecture in this class?

Hours/Week

10. How much time have you been spending on working on assigned work in this class? Hours/Week

11. What grade do you expect to earn in this class now?

12. Is your grade higher or lower than what you had originally thought? 13. State three reasons why you will receive the grade you indicated above. If your anticipated grade has changed, state reasons on why 1, 2, 3.

14. Why will your actual grade differ from those stated above?

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