Minnesota State University, Mankato

Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato

All Theses, Dissertations, and Other Capstone Projects

Theses, Dissertations, and Other Capstone Projects

2020

Alignment or Detachment: College Educators' Perceptions of Experiential Learning Pedagogy

Wayne D. Finseth
Minnesota State University, Mankato

Follow this and additional works at: https://cornerstone.lib.mnsu.edu/etds

Part of the Educational Assessment, Evaluation, and Research Commons, Educational Methods Commons, and the Higher Education Commons

Alignment or Detachment: College Educators' Perceptions

of Experiential Learning

Pedagogy

By

Wayne D. Finseth

This Dissertation is Submitted for Partial Fulfillment

Of the Requirements for

The Educational Doctoral Degree

In Educational Leadership

Minnesota State University, Mankato

January 2020

Date: January 24, 2020

This dissertation has been examined and approved.

Examining Committee:

Dr. Scott D. Wurdinger, Advisor

Dr. Julie A. Carlson, Committee Member

Dr. Promeet Jaswant-Singh, Committee Member

Dr. Jamie Mahlberg, Committee Member

Acknowledgements

First, I would like to thank my wife, children, and family for permitting me the opportunity to pursue this dream. Without support, encouragement, and sacrifice from you all, I would not have completed this journey. Second, I would like to thank my advisor, Dr. Scott D. Wurdinger for inspiring, encouraging, and guiding me through this journey. You were there from the start to the end and vital to the completion of this project. Third, I would like to thank Dr. Julie Carlson, for your passion for experiential learning, and for your attention to detail. You were also vital to the completion of this project, as you also saw this project from start to finish. Forth, I would like to thank Dr. Promeet Jaswant-Singh for agreeing to join my committee when I needed another member. Over the course of this journey, you always supported, encouraged, and believed in me. Thank you. Fifth, I would like to thank committee member, Dr. Jamie Mahlberg for letting me know about the Educational Leadership Doctoral program at Minnesota State University Mankato. Had you not encouraged me to pursue this degree in the first place, I may not have ever started, let alone finished. Your feedback, and encouragement was much appreciated my friend. Lastly, I would like to thank my fellow students. Each one of you brought in an area of proficiency that sculpted, inspired and transformed my learning experience. I really enjoyed getting to know each of you and I could not have done it without your help. I wish you all well!

Table of Contents

List of Tables

List of Figures

Abstract

The main purpose of this study was to investigate how college educators' perceptions of experiential learning influence the design, implementation, and assessment of their courses. A second purpose of this study was to examine the way's college educators use experiential learning in their classes. A final purpose of this study was to evaluate the relationship between a college educators' prior experience with experiential learning and how they utilize that prior experiences to design, instruct, and assess their courses. A descriptive research design was used in this study. A randomized and anonymous survey containing 29 items was emailed out through Qualtrics to 3000 college educators across the world. The results of the study indicate that college educators develop aptitude in experiential learning in a wide variety of ways. The results of this study also show that college educators believe their prior experience/exposure to experiential learning has been influential to their educational practice. In addition, this study found that college educators believe students should have input in designing, modifying, or evaluating their learning experience. Finally, the results of this study found that college educators typically teach the way they were taught, and that they use a wide variety of assessment and instructional methods in their classrooms.

Chapter I

Introduction

Background of the Problem

Wurdinger and Allison (2017) suggest that before the invention of books and formal schooling, humans learned through direct experience or trial and error. Burke and Carton (2013) claim the concept of experiential learning, as it applies to career placement dates to the Middle Ages, when master tradesmen mentored and trained apprentices. Lewis and Williams (1994) suggest the United States educational system was founded on abstract, non-interactive, lecture, and textbook based education. They also mention that passive traditional learning dominated the United States school system until the mid-nineteenth century, when a more experience-based approach was proposed by educators like John Dewey. Seaman, Brown, and Quay (2017) wrote, experiential learning as a named phenomenon and concept began in 1946, as a form of social practices influenced by Kurt Lewin's action research agenda, applied to problems of intergroup conflict. Although, progress in the field of experiential learning was made, wide scale educational reform and alternative learning methods were still a long way from reality, until world events initiated another theoretic change.

Manna (2011) proposes the United States tried to maintain its status as a world power by showing a renewed interest in educational reform and experiential learning after Russia launched a satellite called Sputnik, in the mid 1950's. Butler (2014) states however, much of the momentum towards experiential education was lost again in 2001, with the passing of the federal No Child Left Behind Act. Manna (2011) explains the

purpose of this bill was to improve education by placing priority on standardization, test scores, quality teaching, accountability, parent choice, and evidence-based education, but the bill had many unintended consequences on rural education and instructional freedom. Sobel (2013) suggested mandated curriculum and high stakes testing diminishes opportunities for individualized learning. Kiefer and Kemple (1998) conclude regardless of evidence indicating the need for alternative forms of education, and despite educational reform movements which sweep the country every ten to fifteen years, the fact remains that the United States educational system has remained relatively unchanged for the past 100 years.

Early proponents of experiential learning include William James, John Dewey, Kurt Lewin, and Paulo Freire (Kolb & Kolb, 2017). These founders proposed change, identified concepts, and demonstrated key elements of this type of learning. Although most of these researchers agree that experiential learning is beneficial, there are differences related to how many steps are involved in the learning process, the sequential order of the learning steps, and the terminology used. Regardless of these differences, experiential learning is growing and being used in a number of high schools and colleges across the world to enhance student growth (Jones, Segar, & Gasiorski, 2008). Johnson (2013) speculates one reason for this increase in the number of schools using this pedagogy might be attributed to findings that student attention in lecture-based classes drops drastically between 10 and 30 minutes after the start of the class. This drop-in attention consequently results in lower retention rates. Wurdinger and Carlson (2010) suggest lower retention rates in traditional lecture-based classes might be due to students

disengaging from the learning experience because they are not allowed to participate or engage in conversation.

A number of authors have identified specific advantages and benefits of experiential learning. Whatley, Popa, and Kliewer (2012) found experiential learning develops community. Mackenzie, Son, and Hollenhorst (2014) suggest experiential learning advances communication and leadership skills. Patrick, Howel, and Wischusen (2016) establish that active learning is enjoyable and improves long term retention of information, exam scores, overall learning, and motivation to learn. Apedoe, Walker, and Reeves (2006) write, "inquiry-based learning has been shown to be crucial in developing critical-thinking skills, honing scientific problem-solving ability and developing scientific content knowledge (p. 414)". Kimbro and Schachter (2011) believe outdoor experiences and unstructured play contribute to healthy youth development. Mackenzie, Son, and Hollenhorst (2014) describe literature from other researchers claiming outdoor experiential programs can be effective in chemical dependency healing, self-concept formation, and the reduction of behavioral and emotional symptoms.

Although experiential learning has been shown to be beneficial to students, schools, and communities, some research has identified negative aspects. Han and Foskett (2007) identified obstacles to teachers that include a lack of funding, increased administrative workloads, time constraints, logistics, preparations issues, student abilities, and class size. Burke and Carton (2013) add administrators give instructors who teach experiential based classes' lower perceived priority and pay. Finally, Meaney, Housman,

Cavazos, and Wilcox (2012) found students who engage in service-learning experience negative affective responses such as nervousness, fear, anxiety, insecurity, and worry.

As summarized above, the concept of learning from experience predates contemporary education. Moreover, the founders of this field come from a wide variety of scholastic backgrounds such as sociology, psychology, education, and philosophy (Smith & Knapp, 2011). Additionally, there are abundant, and varied categories of experiential opportunities. Likewise, experiential learning principles have been applied successfully to a wide variety of social, psychological, and educational phenomenon related to student, program, and university outcomes.

Problem Statement and Purpose of the Research

Although significant research has been conducted on the development and application of experiential learning to a wide variety of social, psychological, and educational phenomena related to student, program, and university outcomes, there is little research on how college educators' perceptions of experiential learning actually influence their course design, instruction, and assessment practice. Therefore, the purpose of this study is to investigate how college educators' perceptions of experiential learning influence the design, implementation, and assessment of their experiential learning courses.

Research Questions

How do college educators' perceptions of experiential learning influence the design, implementation, and assessment of their courses?

- **Sub question 1:** In what ways have college educators had prior experience using experiential learning in their courses?

- **Sub question 2:** What is the relationship between college educators' prior experiences with experiential learning and how they utilize that prior experience to design, instruct, and or assess their courses?

Significance of this Research

This study added to the limited research on how faculty educator's knowledge of experiential learning influences the design, instruction, and assessment practices of their classes. Moreover, the findings of this research study can be used in conjunction with other experiential learning research, by faculty educators, program leaders, and administrators to appraise how their current experiential classes compare to their peers. As indicated the main significance of this research, is to start to shape best practices in experiential pedagogy, by linking current experiential learning theory with its practice.

Delimitations and Limitations

College faculty from associate, bachelor, master, and doctoral level programs will be included in the study. All levels of the college experience were chosen for inclusion because it provides the researcher with comparative capabilities, a larger sample size, more in-depth awareness of student needs at each college level, and it allows the researcher to gather data on faculty from many academic disciplines. Specifically, since the data collection tool was a survey and the results are not cause and effect in nature, the real intention of the study was to gather perceptions. Additionally, the researcher utilized several survey questions from a previous study conducted by Wurdinger and Allison

(2017). All other questions in the survey were created by the researcher and reviewed by committee members. All these factors should strengthen the reliability and validity of the results. However, there still may be some internal, external, and construct validity concerns in this research. Additionally, response rates, sample size, sample population, and misinterpretation of constructs or concepts in the survey may all limit the generality of the study. Thus, this research should be used in conjunction with other research and not as a standalone generality predictor.

Definition of Terms

For the purpose of this study *experiential learning* and *experiential education* are synonymous and defined as academic student learning which occurs through direct experience, resulting in reflection and transformational learning. The previous definition is similar to the definition(s) provided by many leading and influential theorists in this field like John Dewey (Dewey, 1938) and David Kolb (Kolb & Kolb, 2017). Furthermore, the definition above allows for flexibility in the learning space supported by Clark and White's (2010) idea that experiential learning can take place anywhere, such as on-campus, off-campus, or in class. Several types or examples of experiential learning include collaborative learning, problem-inquiry, project, service, and place-based learning (Wurdinger & Carlson, 2010).

In this paper, the following terms and experiential learning types will be examined and defined as follows:

Project based learning. Project based learning can be defined as a teaching method, where the teacher guides students through problem solving process that includes

identifying a problem, developing a plan, testing the plan against reality, and reflecting on the plan, while in the process of designing and completing a project (Wurdinger, Haar, Hugg, & Bezon, 2007. p.151).

Problem based learning. Problem based learning is a collaborative and active learning strategy that forces students down a messy, iterative, and complex path of real-world inquiry (Amador, Miles, & Peters, 2006). Therefore, problem-based learning can be defined as academic learning that occurs by having students analyze and solve representative problems (Dochy, Segers, Van den Bossche, & Gijbels, 2003).

Placed based, community, outdoor, and adventure-based learning. Place based, community, outdoor, and adventure-based learning will all be used synonymously. All of these constructs can be defined generally as experiential learning that occurs in a given place, where the goal is to enhance or supports that environment while enhancing student learning (Wurdinger & Carlson, 2010).

Clinical fieldwork, internships, and practicums. Stagnitti, Schoo, and Welch (2010) define clinical field work as hands on experiences where clinicians provide supervision and education in line with work integrated learning standards negotiated between the university and the agency. This is similar to the National Association of Colleges and Employers (2011) definition of an internship, which is a form of experiential learning that integrates knowledge and theory learned in the classroom with practical application and skills development in a professional setting. Furthermore, Cress, Collier, Reitenauer, and Associates (2013) define practicum as offsite discipline-based student work experiences. Therefore, for the purpose of this paper, practicum,

clinical field work, and internships are going to be used interchangeably as they share more commonalities than differences. A shared all-encompassing definition can be a collaborative experiential agreement between colleges and organizations, where students go to a workplace in an area of interest and through supervision attempt to cultivate employment skills by applying content specific theory learned in class.

   Work based and service learning. Although work-based learning typically involves a partnership between a college and an employer like many of the other terms listed above, the primary difference is in work-based learning the individual learning plans and outcomes are derived from the needs of the workplace rather than created by the university (Boud and Solomon, 2001). Service learning can be distinguished from work based, fieldwork, practicums, and internships by its emphasis on striking a balance between student learning and the needs of the community (Jacoby, 2015).

   College educator. College educator can be defined as any college employee who is responsible for designing, teaching, and or assessing experiential learning courses at their institution.

   In conclusion, this research projects evaluates the theory and practice of experiential philosophies college educators use to design, teach, and assess experiential learning. Now that you have a brief background on the research project and the background of the problem, the writer will describe the literature in more detail. Specifically, the first part of this next chapter will briefly discuss the differences between traditional and progressive education, as well as the early philosophers and key contributors of experiential learning. The second part will discuss theoretical constructs

and the design of experiential learning. The third part will focus on instructional methods

and assessment of experiential learning.

Chapter II

Review of Literature

This chapter will begin by discussing differences in traditional and progressive education. This will be followed by a review of early philosophers and key contributors who transformed experiential learning from a philosophy of learning into a standalone theory of education. This chapter will conclude by discussing a variety of classroom methods used by teachers to promote student learning and the practical application of designing and evaluating experiential learning classes.

Traditional Education vs. Progressive Education

Wurdinger and Allison (2017) suggest that before the invention of books and formal schooling, humans learned through direct experience or trial and error. Burke and Carton (2013) claim the concept of experiential learning, as it applies to career placement dates to the Middle Ages, when master tradesmen mentored and trained apprentices. Lewis and Williams (1994) suggest the United States, educational system was founded on abstract, non-interactive, lecture, and textbook based education. They also mention that passive traditional learning lasted until the mid-nineteenth century, when a more experience-based approach was proposed by educators. One such early educator who laid the groundwork and led the charge against traditional education was John Dewey. Dewey (1938) believed traditional scholastic theory was marked by opposing internal and external pressures, which hindered the real purpose of education. He argued the real purpose of education should be skill development and transformative experiences, rather than knowledge acquisition. Dewey asserted perhaps the greatest of all pedagogical

fallacies was the notion that a person learns only the specific thing they are studying at that particular time. He also believed traditional schools tend to ignore the importance of personal impulse and desire as motivations for learning. Despite the progressive and transformative ideas proposed by Dewey in the early 1900's, the United States educational system was not ready to change yet.

Seaman, Brown, and Quay (2017) explain, experiential learning as a named phenomenon and concept began in 1946, as a form of social practices influenced by Kurt Lewin's action research agenda, applied to problems of intergroup conflict. They argue, from there, other educators and researchers transformed experiential learning into a standalone theory, with cognitive and emotional processes, action-reflection cycles, and ideals of personal transformation that could be applied to other contexts. Although, progress in the field of experiential learning was being made, wide scale educational reform and alternative learning methods were still a long way from reality, until world events initiated another theoretical change.

Manna (2011) proposed the United States tried to maintain its status as a world power by showing a renewed interest in educational reform and experiential learning after Russia launched a satellite called Sputnik in the mid 1950's. Butler (2014) states however, much of the momentum towards experiential education was lost again in 2001, with the passing of the federal No Child Left Behind Act. Manna (2011) explains the purpose of this bill was to improve education by placing priority on standardization, test scores, quality teaching, accountability, parent choice, and evidence-based education, but the bill had many unintended consequences on rural education and instructional freedom.

Sobel (2013) suggested mandated curriculum and high stakes testing diminishes opportunities for individualized learning. Washor and Mojkowski (2013) expand these concerns by inferring, traditional education fails to recognize student's talents/interest, restricts schedules / curriculum, and lacks real world application. Christenson, Horn, and Johnson (2008) conclude the concerns on traditional education by highlighting a lack of funding for resources (technology), the use of outdated teaching models, and low involvement by its students and parents.

Much of what has been discussed in the above paragraphs relates to K-12 education, however colleges and universities are not immune from passive methods of learning. Clarke, Threeton, and Ewing (2010) state historically, most four-year universities have been slow to embrace an experiential philosophy. Wurdinger (2016) believes university bureaucracy is part of the problem with learning at the college level. He believes if faculty had more time to pursue their purpose and passion the college experience would be better for everyone. Moreover, he believes, the real focus of education should be training and learning life skills such as self-direction, problem-solving, creativity, communication, collaboration, responsibility, and time management rather than memorizing information for tests. He speculates that the pendulum from passive learning to active learning is starting to move again. Regardless of evidence indicating the need for alternative forms of education, and despite educational reform movements which sweep the country every ten to fifteen years, the fact remains, that in the United States the educational system has remained relatively unchanged for the past 100 years (Kiefer & Kemple, 1998).

Philosophical Roots of Experiential Learning

McKenzie (2013) states the roots of experiential learning have often been traced to Confucius around 450 BC and the famous quote "tell me, and I will forget. Show me, and I may remember. Involve me, and I will understand." Stonehouse, Allison, and Carr (2011) add to the philosophical roots discussion by describing the work of Socrates (469-399 BC), Plato (427 – 347 BC), and Aristotle (384-322 BC). Specifically, Socrates valued truth, high standards, and understanding. This desire to understand someone, helped Socrates create a questioning technique called the elenchus. Teachers who use the Socratic Method can facilitate learning, prompt student self-discovery, and assess where students are with their understanding. Plato also thought knowledge could be discovered through dialectical discussion. Plato believed there were two branches of education, one philosophical (intellectual) and the other physical (ensure harmony between energy and initiative and reason). Aristotle identified shared life and practice as two significant spheres within experience, which foster prognosis (cyclic matter of reflection and experience). Higgins and Nicol (2011) wrote about the influence of Sir Patrick Geddes (1854-1932) who, believed education should engage and change society. Sir Patrick Geddes also emphasized affective (heart), physical (hands), and intellectual (head) development.

Hunt (2011) describes the work of Alfred North Whitehead (1861-1947) who discussed an educational misstep related to the concept of inert ideas. Whitehead states educators often insert an idea into the educational class without considering the students situation or contextual development of that idea. Because of this, some students might

not make the connection. He also believed the best topic to teach in education was life. Swiderski (2011) identified the influence of Maria Montessori (1870-1952) on experiential learning who believed each child was born with a unique potential, which needed to be revealed. Her philosophy focused on teacher as facilitator, subject focused learning environments, student choice in learning, and older children teaching younger ones. Students were not arranged by abilities or ages and they were educated through hands on multisensory learning.

Kolb and Kolb (2017) summarize Carl Jung (1875-1961) influence on the experiential learning field by writing, Jung believed humans fell into two distinct categories of relating to the world. Extroverts were oriented toward the external world and motivated by others, whereas introverts were oriented toward the internal world and were motivated by self. Jung also believed there were four basic functions of human adaptation. The first two are sensation and intuition and deal with alternative ways of perceiving things. The others are thinking and feeling and deal with alternative ways of making judgements about the world. Kolb and Kolb (2017) also summarize Jean Piaget (1896-1980) influence on the experiential field by writing, Piaget observed that children construct their cognitive world through two distinct, but inseparable processes called assimilation and accommodation. Assimilation occurs when a new experience is incorporated into preexisting knowledge *and* accommodation occurs when an individual structurally adjusts to newly acquired information. Bobilya and Daniel, (2011) discuss the influences of Eleanor Duckworth (1935 – present) who believed students and teachers were co-learners working alongside each other and teachers are facilitators of learning

rather than imparters of knowledge. The above theorists are not an exhaustive list of individuals who influenced experiential learning, but rather a brief overview of some early thinkers in the field. The next section will discuss theorists who had a major influence on experiential learning.

<div align="center">**Key Contributors of Experiential Learning**</div>

William James (1841-1910)

James (1890) discusses dual knowledge theory, where humans acquire knowledge through separate but connected modes of knowing. One mode involves subjective sense experience and the other mode encompasses abstract thoughts and concepts. According to James, what we subjectively experience is empty and meaningless unless it is grounded in concepts. Equally, immediate sense experiences serve as a check and balance system of a concept in both fact and value. Moreover, a given concept acquires meaning and value only through connections with our direct subjective experience. Thus, an individual's voluntary attention serves as a spotlight in the field of consciousness and is determined by one's interest. The quote, "my experience is what I agree to attend to (p. 403)" captures James' cycle of interest-attention-selection. Simply put, voluntary attention on an object of attention is determined by one's interest and results in the selection of some experiences over others. This selection, then gets sent back to be integrated or refined within the person. In 1904 and 1912, James suggested radical empiricism as a new relational philosophy of reality, mind, and experience. Kolb and Kolb (2017) credit James as the originator of the experiential learning theory due to his

philosophy of dual knowledge. As indicated, James' philosophy planted seeds of influence which other experiential researchers eventually cultivated.

John Dewey (1859 – 1952)

In Dewey's 1897 manuscript *My Pedagogic Creed*, he outlines the educational foundations of many of his other scholastic writings. For example, in article one of this manuscript, he talks about education having a psychological, sociological, and cultural component. In article two of this manuscript, he talks about schools being a social institution and a transitional phase between home and society. He adds that school is living and not a preparation for future life. In article three, he argues that school curriculum should be focused on social life and subject matter should evolve out of everyday experiences as new attitudes, interests, and goals emerge. In article four, he claims active learning is better than passive learning and as one's interests and motivation increase so does their learning. In article five, he proposes that education not only shapes culture but changes it.

Dewey (1938) "thought all genuine education comes about through experience, but that does not mean that all experiences are genuine or equally educative. Thus, experience and education cannot be equated to each other. An essential component of learning is the quality of the experience and its subsequent immediate and future influence on learning. So, for Dewey, no experience lives and dies by itself. The basic characteristic of habit is that every experience enacted and undergone modifies the one who acts, while this modification affects, whether we agree with it or not, the quality of subsequent experiences. Dewey describes a continuity or continuum of experience. This

means that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after. While the principle of continuity applies in some way in every case, the quality of the present experience influences the way in which the principle applies. It is the job of the educator to see in what direction an experience is heading. Furthermore, the primary responsibility of the educator is to be aware of the general principle of shaping and to find environments which are conducive to the shaping of experience. When education is based upon experience and educative experience is seen as a social process, the teacher loses the position of dictator and takes on a group facilitator role. Observation is not enough, we need to understand the significance of what we see, hear, and touch. It is this significance that will result in action. The formation of purpose involves, observation of surrounding conditions, knowledge of what has happened in similar situations in the past, and judgements which put together what is observed. It is through sound educational principle that students be introduced to scientific subject matter, facts, and laws of acquaintance with everyday social application. No experience is educative that does not tend both to knowledge of more facts, creation of more ideas and to a better, more orderly, arrangement of them (p. 25-82)". Kolb and Kolb (2017) summarized Dewey's contributions to experiential learning by stating, "John Dewey is without a doubt the most influential experiential educational theorist of the twentieth century (p. 12)".

Kurt Lewin (1890 – 1947)

In his 1948 book on R*esolving Social Conflicts*, he encapsulates his action research on conflict in training groups. He also describes his theory on group

interventions and dynamics. Specifically, Lewin's theory suggests that choices made by an individual are due to personal inside forces and circumstances of the environment. Lewin's theory also indicates that group leaders need to sequence or move their groups into activities which are most appropriate for the group stage of development. Lewin's 1951 field theory research states that people and the environment are interdependent. He translated this concept into a mathematical formula, $B=f(p,e)$, where behavior (B) is a function of the person (p) and environment (e). In modest terms, to understand an individual learner's behavior we need to entirely understand the learner. This involves knowing the learners needs, goals, visions, and subjective experiences of their environment. Seaman, Brown, and Quay (2017) credit Lewin for developing experiential learning from a set of ideals to a theory which other researchers could then apply, research, and expand. Support for this comes from David Kolb, who names Lewin as an influential theorist in the development of his theory (Kolb and Kolb, 2017). Smith and Lemming (2011) concur and conclude, Kurt Lewin's action research and theory of group development or dynamics provides a rationale for practicing experiential education or at the very least it helps to clarify some of the processes involved.

Lev Vygotsky (1896 – 1834)

Vygotsky's (1978) attention was directed to the historical, cultural and social context of individuals that builds relationships. He is best known for his theory of development called the zone of proximal development (ZPD). The main idea of ZPD is through adult mediation and tailoring the learning process to the individual needs (developmental level) of the learner, a child learns to self-regulate their behavior (i.e.

master's skill and knowledge). Seaman and Gingo (2011) suggest Vygotsky's work shows how experiential learners benefit from interaction with the physical world. Moreover, these authors suggest, Vygotsky's work shows individual learners can benefit from collaboration with others, that problems are solved better jointly, and social and individual change are related. Finally, they suggest, Vygotskyan theory can be used as a lens through which experiential learning models, practices, and central assumptions can be viewed, challenged, and improved.

Carl Rogers (1902 – 1987)

Rogers (1959, 1961) believed that experience is central to a fully functioning person and is important for learning and change. More specifically, a fully functioning person is open to experience, lives each moment fully, and accepts the fluidity or complexity of experiences. Fully functioning people trust their own judgements and behave appropriately. Unconditional positive regard, respect, genuineness, and psychological safety are essential conditions for education, learning and change. Rogers also believed that self-actualizing people have deep experiences which means they are in touch and trust their feelings, instincts, and desires. Rogers's describes the application of his principle and an experiential learning-centered approach to education in his 1969 book titled *Freedom to Learn*. Some core concepts of this theory are first, learners must be personally involved in their learning. Second, learning that is self-initiated can change behaviors and attitudes. Third, the focus of evaluation resides within the learner because only the learner knows what they need to learn and if that learning goal was met. Smith (2011) summarizes Rogers's views on mankind and instruction helped experiential

educators understand optimal conditions necessary for learning. Drummond (2003) concludes Rogers's books *freedom to learn* and *client centered therapy* paved the way for concepts of student-centered teaching and experiential education.

Paulo Freire (1921 - 1927)

Freire (1970) formed the concept of critical consciousness or the active exploration of the personal, experiential meaning of abstract concepts through dialog among equals. Freire created the banking analogy of education, where ideas are deposited in learners' heads. He used this term to critique traditional education and describe an internalized oppression whereby learners relinquish the value, experience, and knowledge they possess in the name of the expert knowledge of the teacher. Freire believed liberatory or problem-posing education was intentionally oriented to issues of social justice. Freire's problem-posing model of education valued the importance of student experience and a dialogical method of teaching and learning, where the student and the teacher were mutually engaged in the production of knowledge and the process of teaching and learning. Freire believed it is insufficient for students to master content without applying it toward purpose and liberation. Therefore, one of the central purposes of a reflective action-oriented praxis must be directed towards transformation and liberation. Breunig (2011) reaffirms Freire's contributions to experiential learning and progressive education by proclaiming Freire's advocacy efforts challenged traditional education and the teacher as expert and driver of experience. Moreover, many of Freire's key concepts such as praxis (experiential learning cycle), problem posing methods of

education, and conscientization (critical consciousness) can be applied to current experiential learning practice.

David Kolb (1939 – present)

Kolb and Kolb (2017) state their experiential learning theory was derived from the works of John Dewey and Kurt Lewin and has six propositions. First, learning is best conceived as a process that should fit the students learning model. Second, all learning is relearning. Third, learning requires the resolution of conflicts. Fourth, learning is holistic. Fifth, learning results from a synergetic transaction between person and environment and sixth, learning is the process of creating knowledge. They refer to two dialectically related modes of grasping experience. The first is concrete experience (CE - feeling) and the other is abstract conceptualization (AC - thinking). They also explain two dialectically related modes of transforming experience. The first is reflective observation (RO - watching) and the second is active experimentation (AE - doing). This theory stipulates that learning is not linear, but rather occurs through a series of recursive learning cycles or spirals. For Kolb, learning is defined as the process whereby knowledge is created through the transformation of experience. Knowledge, therefore, results from the combination of grasping and transforming experience.

Kolb and Kolb also describe four types of learners. Converging (AC and AE) learners tend to excel at finding pragmatic mythologies, working with ideas / theories, and are good at problem solving and technical tasks. Diverging (CE and RO) learners tend to perform well in situations that call for generalization of ideas or brainstorming. Assimilating (AC and RO) learners excel at understanding and organizing a wide range

of information and do not enjoy working with people. Accommodating (CE and AE) learners tend to excel at hands on learning activities and enjoy new experiences and complex tasks. Kolb's work has had a positive change on current experiential education. As will be presented in a later section of this chapter, his work is central to instructional practice, learning styles, and is used by researchers all around the world on a variety of subjects.

Howard Gardner (1943 - present)

In Gardner's 1999 book titled *Intelligence reframed: multiple intelligences for the 21st century,* he discusses a variety of forms of intelligences which educators should consider when evaluating intelligence and learning. A few of the many forms include linguistic (ability to understand and express ideas through language), logical / mathematical (ability to organize thoughts sequentially and logically), body kinesthetic (gaining of knowledge through physical activity), intrapersonal (ability to access one's own feelings), interpersonal (ability to notice and make discriminations regarding moods, temperaments, motivations, and intentions of others) and naturalistic (ability to understand and be in tune with ones relationship with the natural environment). Additional forms of intelligence include spiritual (interconnectedness with the inner and outer world and the ability to sense the higher self), musical (sensitivity to tone, pitch and rhythm, and the ability to reproduce them), visual / spatial (ability to learn directly through images and to think intuitively without the use of language) moral (ability to act for the wider benefit of society to have good principles and values), and creative or the

ability to create. Gardner's work expanded the concept of intelligence in academics and allows experiential educators to design, instruct, or assess learning in a variety of ways.

The first part of this chapter presented the differences between traditional and progressive education with an emphasis on the early philosophers and key contributors of experiential learning who transformed experiential learning from a philosophy into a standalone theory of education. Building on this, the next part of the chapter focuses on the progression of experiential learning and its evolution into a variety of classroom methods used by teachers to promote student engagement and learning. Some of these methods include practicums/internships, service, work, active, and inquiry, problem, project, and place-based learning. Lastly, practical application about the design and instructional aspects of these experiential learning methods will be offered.

Benefits and Disadvantages of Experiential Learning

A number of authors have identified specific advantages and benefits of experiential learning. Whatley, Popa, and Kliewer (2012) found experiential learning helps develop community. Mackenzie, Son, and Hollenhorst (2014) suggest experiential learning advances communication and leadership skills. Patrick, Howel, and Wischusen (2016) establish both students and faculty agree that active learning is enjoyable and improves long term retention of information, exam scores, overall learning, and motivation to learn. Apedoe, Walker, and Reeves (2006) write, "inquiry-based learning has been shown to be crucial in developing critical-thinking skills, honing scientific problem-solving ability and developing scientific content knowledge (p. 414)." Kimbro & Schachter (2011) found outdoor experiences and unstructured play contribute to

healthy youth development. Mackenzie, Son, and Hollenhorst (2014) described literature from other researchers claiming outdoor experiential programs can be effective in chemical dependency healing, self-concept formation, and the reduction of behavioral and emotional symptoms.

Eyler, Giles, Stenson, and Gray (2001) outline various research which shows the benefits of service learning. Specifically, service learning reduces stereotyping and increases student's self-efficacy, identity development, confidence, moral development, and cultural competence. Meaney, Housman, Cavazos, and Wilcox (2012) add students who engage in service learning can experience positive affective responses such as excitement, purposefulness, comfortableness, and interest. Jacoby (2015) summarizes the benefits to agencies who support service-learning efforts. Specifically, organizations who support community and service learning often discover fresh approaches to problem solving, increased budget savings, and find their mission, vision, and organizational goals met.

Wurdinger and Qureshi (2015) found project-based learning benefits student achievement, creativity, motivation, and teamwork. They also discovered that other life skills like collaboration, time management and work ethic can also be increased. Tretten and Zachariou (1995) found that students who engage in project- based activities had positive attitudes toward learning, good work habits, problem-solving capabilities, and increased self-esteem. Sobel's (2013) research suggests place-based education can improve schools or communities, is well suited for the needs of abled children, and can be tailored to help schools comply with the demands for increased accountability and test

scores. In addition, Sobel claims place-based learning is well suited for classes that develop critical thinking skills or utilize higher level learning outcomes like analysis, synthesis, and evaluation. He also found that students who engage in place-based learning have been shown to have better attendance, behavior, attitudes, learning transfer, and motivation.

Diambra, Cole-Zakrzewski, & Booher (2004) found that many students who engage in internships usually find it enjoyable, however, they often balance internship responsibilities, with classes, and even employment. Divine, Linrud, Miller, and Wilson (2007) claim students who engage in internships strengthen their resume, understand the work world better, observe the application of concepts applied in practice, are better prepared for jobs upon graduation, and have a clearer focus of career goals. Benefits for departments that have internships include strengthened business connections, useful stakeholder feedback, and increased competitive advantages realized by students. Benefits for employers include qualified low-cost motivated workers, strengthened relationships with the school, and pre-employment screening of potential future staff. Washor and Mojkowski (2013) describe the principle benefits of out of school (leaving to learn) programs which include providing students with voice/choice, helping students discover/develop interest/talents, offering students numerous ways of showing what they can do/know, and engaging/forming strong partnerships with parents, families, and communities that are open to change.

Although experiential learning has been shown to be beneficial to students, schools, and communities, some research has identified negative aspects. Han and

Foskett (2007) identified obstacles to teachers that include a lack of funding, increased

administrative workloads, time constraints, logistics, preparations issues, student abilities,

and class size. Burke and Carton (2013) add administrators give instructors who teach

experiential based classes' lower perceived priority and pay. Meaney, Housman,

Cavazos, and Wilcox (2012) found students who engage in service-learning experience

negative affective responses such as nervousness, fear, anxiety, insecurity, and worry.

Patrick, Howel, and Wischusen's (2016) research indicates faculty and students both

agree the biggest barriers to implementing active learning strategies are concerns about

proper use of class time, being accustomed to lecture, and the belief that instructors do

not have time to develop material. Sobel (2013) summarizes many of the negatives

related to experiential learning when describing resistance to problem-based learning by

faculty, students, and administrators. Specifically, these individuals have concerns about

class size (typically smaller work best), student resistance to group work, fear of losing

control of the class, extra preparation time, lack of applicability to subjects,

content/coverage issues (they feel they do not cover as much material), work load (it's a

lot of work), and negative student evaluations.

Designing Experiential Learning

Program Design

Martinez and McGrath (2014) describe common principles which make schools

successful. Specifically, successful schools establish cohesive, collaborative learning

environments which tap student talents and interest while empowering them to become

self-directive, creative, and active. Moreover, successful school curriculums reach

outside the classroom, are engaging, memorable, meaningful, subject integrated, and relevant to the real world. Finally, successful schools develop strong school communities where students take the lead, have support, trust, high expectations, and a collective responsibility in learning. Washor and Mojkowski (2013) elaborate on this work by describing qualities of good community programs that support experiential learning. First, good programs award student academic credit, are open to all students, address multidimensional learning standards, address student expectations, and integrate/complement in-school and out-of-school learning. Examples of offsite, community and experiential focused programs include, expert in residency (experts work with teachers), road trips, after school programs, community service, internships, apprenticeships, work programs, gap year, and return to school programs.

Cowart (2010) differentiates between novice and integrated experiential learning programs in higher education. Cowart believes most colleges have novice experiential learning programs on their campuses because novice experiential programs do not have formal institutional mechanisms for delivering experiential learning. Moreover, novice experiential learning programs do not have centralized offices, budgets, or members devoted to furthering experiential learning development. Cowart believes the solution for novice programs is to create venues to enhance awareness for students, faculty and administrators. For example, students can run campaigns, have panel discussions, and create testimonial videos. Faculty should be shown research indicating the benefits of such programs and administration should be provided with data to support faculty resources. Integrated programs on the other hand, have visible student and faculty

support, formal initiatives supporting programs, and funding devoted to strengthening these programs.

Pigza and Troppe (2003) describe three additional ways for educational leaders to look at designing service learning, community engagement, and experiential learning experiences. The first model they describe is characterized by a *concentrated* partnership, where goals are limited, activities are isolated to discrete parts of the institution, and community access to campus resources are minimal. The second model is partnership and characterized by *fragmentation*. In this phase, communication, resources, and access is more abundant or free, but partnership efforts are often disorganized. The third model is the *integrated* model, where walls between the university and partnership are permeable, and they understand each other as community partners. This third model has an ongoing, collaborative commitment to each other, with shared mission, vision, values, and goals that are usually sustainable.

Torres' (2000) research on benchmarks for campus and community partnerships provide colleges with suggestions for successful implementation and design of experiential programs. Specifically, in the first stage, stakeholders should design a partnership with a shared vision and clearly articulated values, so they are beneficial to both the campus and community. In stage two, stakeholders should build collaborative relationships that are multidimensional, led by dynamism, and built on trust and mutual respect. In stage three, stakeholders should work on sustaining the partnership by having integrated support or mission systems, sustained communication, shared decisions, and regular evaluation. Washor and Mojkowski (2013) recommend implementation of

programs take place in small stages with the overall rollout taking many years. Clearly, time is needed to create new policies, design curriculum and find new technology or places for student learning to take place. Time is also needed to train teachers and orient students to a new philosophy and culture which may include a flexible school day or longer class time periods. Jacoby (2015) adds it is better to have a few quality service experiences and courses rather than a lot of mediocre ones. Furco and Holland (2009) found institutional commitment to community engagement is impacted by how it reflects institutional identity, resource allocation, faculty reward systems, and overall impact on students, faculty, institutions, and communities. Research on this study concluded colleges and universities tend to adopt various educational policies, programs, and practices that are intended to improve and even transform them for the better.

Teaching Roles and Group Theories

Kolb and Kolb (2017) state the educator's job is to recognize the hopes and fears of learners and to create respectful, supportive, empowering safe spaces where students can overcome fears and master material. A defining characteristic of a teacher, coach, facilitator, and parent is the development of a personal philosophy of education. This occurs when teachers, coaches, facilitators, and parents think about their practice more systematically and broadly. Wurdinger and Carlson (2010) believe that in order for learning to occur, teachers must create a psychologically safe learning place. Martinez and McGrath (2014) add that teachers in successful experiential schools take on roles that are flexible. For example, they go from curriculum designer, advisor, coach, networker, and mentor to administrator, fund raiser, informational expert, and community liaison.

Kolb and Kolb (2017) describe four main teaching styles. The first teaching style is called the *facilitator*. The facilitator's job is to help students get in touch with personal experience and reflect on it by creating a personal, trusting relationship with small group learners. Facilitators adopt a warm affirming style to develop learner's interest, grow intrinsic motivation, and create self-knowledge. Facilitators believe that learners can learn on their own and that their role is to remove obstacles and create conditions where learners can grow. Facilitators do not instruct, provide answers, give advice, or tell people what to learn. Debriefing is a strategy they often use. Effective facilitators, establish a climate of trust and safety, elicit support and meaningful learning, promote inside out learning, make themselves available to the learner, accept their own limitations, and encourage expressions of thoughts, feelings, and emotions. These statements are echoed by Egan (2002) who found facilitators are self-knowledgeable, mature, open minded, tolerant of ambiguity, willing to admit or learn from mistakes, and understand human development. Heron (1999) supplements the discussion by describing six dimensions of facilitation. The six dimensions are planning (how the group will meet it objectives), meaning (what meaning will be given to the group experience), confronting (how will group consciousness be raised), feeling (how will emotional aspects of the group be dealt with), structuring (how structures and methods will be formed), and valuing(how will integrity of the group be nurtured). Interventions used by facilitators include echoing, selective echoing, open/closed questioning, empathetic divining, checking for understanding, paraphrasing, logical marshalling, following, consulting, proposing/leading, bringing in and shutting out (Heron, 1990).

Kolb and Kolb's (2017) second teaching style is called the *subject-expert*. The subject-expert helps learners organize and connect their reflection to the subject matter. They adopt an authoritative, reflective style. They teach by example, modeling, and critical thinking reflection. They use lecture and texts and have extensive knowledge based in one main area. Instructional tips for the subject-expert include practice connecting subject matter to student interests, organizing subject matter around concepts central to the discipline, putting yourself in the students' mind, remembering less is more, treating mistakes as learning opportunities, reiterating main learning points, and studying best practices.

Kolb's third teaching style is called the *standard-setter-evaluator*. The standard-setter-evaluator helps learners master the application of knowledge and skills in order to meet performance requirements. They adopt an objective results-oriented style and create performance activities for learners to evaluate their learning. Tips for the standard-setter evaluator include having authentic outcomes, focusing on improving student learning (getting students to own this), evaluating your own teaching, realizing content specifics of learning, and setting up authentic standards.

A fourth teaching style is that of a *coach*. A coach knows the importance of team spirit and works to build it (Larmer, Mergendoller, & Boss, 2015). Holmes (2003) suggests that success in coaching depends on the task of the coaching, the personal mastery and competency of the coach, the skills, attitudes and knowledge of the person being taught, and the context or ecology of the school. Kolb and Kolb (2017) state coaches help learners apply knowledge to achieve their goals. They adopt a

collaborative, encouraging style, often working one on one with individuals to help them learn from experience. They assist in the creation of personal development plans. Effective coaches adjust to the learner's skill level. Instructional tips for coaches include establishing a trusting learning relationship, creating a learning contract in conversation, defining learning goals, getting to know the learners, helping learners identify and define the problem, being a disciplined observer, and encouraging deliberate practice. Beard and Wilson (2013) recap coaches are advisors, confident, counsellors, friends, guides, motivators, role models, supporters and teachers who are accessible, credible, interested, attentive, knowledgeable, patient, perceptive, supportive, communicators, listeners, and have the ability to detach themselves. Kolb and Kolb (2017) also describe the professor King who can address all four perspectives. Kolb's Educator Role Profile (KERP) is a self-assessment instrument designed to help educators sharpen their awareness of their teaching preferences related to four main domains:

http://survey.learningfromexperience.com/ .

Since experiential education often involves group work, it is essential that experiential educators understand group processes, dynamics, and stages of learning. Collier and Voegele (2013) assert that one of the most important ingredients for developing group cohesion is trust. Trust in groups is increased by being open with others, enduring times of ambiguity, disagreeing but being loyal, being flexible, and having a willingness to take responsibility.

Tuckman's (1965) stages of group development is a common instructional strategy used in experiential education. According to Tuckman, there are four stages of

group development. The first is the *forming* stage. In the forming stage the primary goal

is to get to know other group members and clarify the group's task. At this stage, each

group member is checking out the other group members trying to determine if they can

work with each other. The second stage is the *storming* stage. In this stage conflicts

surface that were not apparent during the first stage. Issues of power arise within the

group as members become more comfortable with each other. Personality clashes occur

as members focus on details of interaction and tasks at hands. The third stage is the

norming stage. In this stage, competition decreases, group emphasis turns toward

reaching a consensus on rules to govern and operate. Attention also turns to group

process. Group members regulate each other, compromise occurs more frequently,

cooperation increases, and guidelines for decisions become established. The fourth stage

is the *performing* stage. In this stage, a set of working guidelines for how the group

operates is in place, and attention turns to accomplishing tasks. This is when production

is high and real work gets done. In 1977, a fifth stage called *adjourning* was created to

indicate learning which occurs after or shortly before the group has disbursed (Tuckman

and Jensen, 1977).

Theodore Mills (1967) developed a stage model regarding the sophistication of a

team's ability to learn from experience. Developmental progression occurs as a group

learns to deal with the increased complexity demands of achieving its purpose. The

stages of progression are Immediate gratification (where members of a group come

together to meet immediate individual needs without sustained efforts), sustained

conditions for gratification (individuals start to develop ways to sustain gratification),

pursuit of a collective goal (group members start to come together as a group, they develop methods of coordination, develop adaption mechanisms, and respond to changing external demands), self-determination (the group changes from adapting to changes in the environment to making self-directed changes directed by its stated desires and develops the freedom to set and pursue its own goals), and growth (the group can follow multiple goals, create high levels of innovation, manage diverse and conflicting types of innovation, and influence a number of different domains).

Harris and Sherblum (1999) created a four-stage problem solving process that they claim helps groups accomplish goals. The first step is to *define the problem*. In this stage groups share relevant information with each other and makes sure everyone is clear about the nature of the task that needs to be completed. It is important to avoid blaming, assigning fault or discussing solutions. The second step is *generating possible solutions.* In this phase, groups should brainstorm solutions, encourage participation, stick to time limits, and generate as many solutions as possible. With this step members do not edit, evaluate, criticize, or spend too much time on any one idea or person. The third step is to *evaluate solutions*. With this step, groups should review the list of potential solutions, eliminate some, anticipate consequences of each solution, and encourage members to combine solutions. Do not get sidetracked by debating pros and cons of a single solution, assigning value too quickly, or quit until they have consensus. The fourth step is to *create an action plan*. In this phase, groups should generate alternative action plans before choosing the best one. Make sure specific tasks are assigned to group members,

and make sure time frames are set up in a measurable format. Do not forget to include follow up time so that tasks get done.

Robert Bales (1950) divided group roles into task roles and maintenance roles. The function of a person assigned to a task role is to get the group's job done. The function of a person assigned to a maintenance role is to promote solidarity and help maintain good working relationship within the group. Alternatively, Collier and Voegele (2013) believe it is also possible to have students take on organizational roles (leaders, note takers, time keepers, progress takers, and process observer). Leaders should make sure everyone is clear about tasks, introduce topics, and summarize decisions. Note takers keep records of what is going (i.e. content) on in the meeting, put together outlines of meeting notes, and distribute them to members. Progress trackers keep people on task for timelines and keep track of different progress or parts of the project. The timekeeper lets group members know how much time was used or is left each meeting. The process observer makes note of interactions and brings them up so they can be changed or maintained.

Although learning through experience can be an individual process, often in education, learning through experience and experiential learning occurs in groups. Many of the experiential learning strategies discussed below involve group or teamwork. Simply put, if experiential educators do not understand the dynamics, stages, or processes of group learning it will be hard for them to design, implement, and assess experiences for students. Earlier this paper discussed the evolution of experiential education from an ideology into a theory, which transcended into a variety of models applied in teacher

classrooms. Below, more about these teaching methods as they relate to current experiential practice will be presented.

Instructional Methods

Active Learning

Berry (2008) explains that active learning is a pedagogical approach that combines lecture with interaction to enhance the learning environment. Duncan, Duncan, Burkhardt and Bennyworth (2015) add that active learning is most often associated with a list of classroom strategies that include games, small group activities, role plays, and debates. Felder and Brent (2009) suggests the goal of active learning is to promote student participation and interaction in the classroom. Kane (2004) concludes, although active learning methods may vary, all of them share the same four basic characteristics. First, they encourage critical thinking. Second the responsibility for learning is placed on the learner. Third, engagement in open-ended activities occurs and fourth, organization of learning activities occurs by the instructor.

Active Learning Core Elements

Furman and Sibthorp (2013) suggest cooperative and collaborative learning are two methods that seem to have evolved out of active learning and use many of the same strategies. These two methods emphasize the importance of learning skills such as communication, responsibility, time management and teamwork. Reflective learning allows students to make connections between theory and practice and allows the principles learned in the classroom to be applied elsewhere. Reflective learning elements may include guided discussions, reflective writing exercises, blog writing, and essay-

based exams. Hamm and Adams (1992) mention that cooperative learning occurs when students learn from each other perspectives and past experience. Johnson, Johnson, and Johnson-Holubec (1994) believe dynamics of successful cooperative learning include positive interdependence, face to face group interactions that encourage participation, intergroup social skills (decision making, trust building, communication, and conflict management), and time to work in small groups.

Active Learning Design

Wurdinger and Carlson (2010) suggest active learning can also include simulations, presentations, case studies, drama, daily presentations, large/small group discussions, teaching episodes, and peer critiques. Daily presentations occur when each student gives a short presentation on the material they read to the class. Large group discussions are free flowing discussion by the whole class and are typically used directly after daily presentations. Small group discussions involve groups of four to six people, who are responsible for discussing a question or series of questions for a predetermined time. Teaching episodes occur when students design lesson plans and teach a portion or the entire class period. Peer critiques involve having students create, produce and present an assignment to other group members who review and critique it. Teachers who use active learning need to be comfortable with letting go of the classroom, allowing students' freedom to express their ideas, and consider both process (discussions between students, instructors, or both) and content (material) related learning.

Problem-Based and Inquiry-Based Learning

Aditomo, Goodyear, Bliuc, and Ellis (2013) state, inquiry-based learning (IBL) is a set of teaching methods that provide students with a learning strategy grounded on research-focused processes. Amador, Miles, and Peters (2006), mention problem-based learning is a collaborative and active learning strategy that forces students down a messy, iterative, and complex path of real-world inquiry. As indicated, both inquiry and problem-based learning involves students as active agents in the learning process.

Problem and Inquiry-Based Learning Core Elements

Haas and Furman (2008) suggest that problem-based learning may use a student's interest in a problem to create an experiment to answer a question or it can be used to develop a course of action that helps in resolving the problem. Amador, Miles, and Peters (2006) adds that problem and inquiry-based learning can be done by individuals or groups. In fact, effective groups are essential to problem-based learning and often group effectiveness is determined at the outset, when the groups are formed. Furthermore, groups can be randomly selected, or student selected. The ideal problem-based learning group size is four, but at times three or five students can be effective.

Boud and Feletti (1997) propose a five-step process of inquiry. First, the instructor presents the students with a problem, so the students can assess the problem and identify what they know in relation to the problem. Second, the students determine the focus of the group by determining what aspect of the problem they do not understand. Third, students rank each learning issues in order of importance. Group members also decide which issues will be considered by the whole group and which issues will be done

by individuals. Fourth, students explore previous learning issues and integrate new knowledge in the context of the problem. Students may also develop new learning issues. Finally, this process is repeated until the group is satisfied, they have developed an acceptable solution to the problem.

An alternative model is proposed by the Exploratorium Institute for Inquiry (2018). This organization describes a three-stage learning cycle for inquiry where learners in stage one explore material, make observations, and raise questions related to content goals. In stage two, learners plan and carry out their investigations based on their questions and in stage three learners share results with each other to further their understanding of the concept. As Minner, Levy, and Century (2010) summarize, inquiry based experiential learning is an active collaborative process where students ask questions, make predictions, plan investigations, collect data, interpret data, and communicate results.

Problem and Inquiry Based Teaching Design

Amador, Miles, and Peters (2006) state design issues in problem-based learning revolve around whether the problem should be placed at the beginning, middle or end of the class (sequencing). Introducing problem-based learning early sets a tone of active inquiry and how the class will proceed. Putting problem-based learning in the middle of the course can introduce a new concept to students. It allows them to work their way into a new unit of study. Placing problem-based learning questions at the end of the class allows students the opportunity to take their previous knowledge to a higher level. Typically delivering all the problems at the beginning lowers student's anxiety levels.

However, the phased delivery of the problem should mimic real life issues. If instructors are looking for ways to create good problems, they should start by talking to colleagues and looking at problem sets, case studies, exam questions, newspapers, or problem-based journal articles and databases. After the instructor has a better understanding of problem-based learning they can review the content they want the students to learn and start writing a problem which is open ended, challenging, interesting, and authentic. Moreover, effective problem-based learning problems are loosely structured, mimic authentic-complex problems and do not have a reasonable or easy solution. Kumar and Natarajan (2007) add, good problem statements serve as an intellectual trigger which evokes cognitive dissonance in the minds of students. Students need to deconstruct the problem scenario into its integral elements and conceptualize a mental model of embedded conceptual issues. Chin and Li-Gek (2008) offer a simple 16-week curriculum design for instructors to follow. Specifically, they allow one week for students to identify the problem, three weeks for students to explore the problem space (organize sub questions), six weeks to carry out the scientific inquiry process, four weeks to put the information together, and two weeks to present and assess the findings.

Amador, Miles, and Peters (2006) recommend that prior to delivering the problem to the students the instructor should review the inquiry process with them and answer any questions they have on the process. A syllabus is the best place to spell this out as it can explain what problem-based learning is, how it works, how it will be assessed, the learning objectives of the course, and a schedule of activities. Torp and Sage (2002) recommend problem-based teachers keep five activities in mind. First, diagnosing

students learning needs, second, helping students build intellectual bridges, third, encourage progress, fourth, question student thinking, and fifth, modeling the inquiry process.

Amador, Miles, and Peters (2006) state that problem-based learning changes the roles teachers play in the classroom by shifting the focus of the class from what they do in class to dealing with real problems students are confronted with in life. Wurdinger and Carlson (2010) add the instructor's job is to pose questions, probe, re-direct, entice, suggest, and encourage self-evaluation. Amador, Miles, and Peters (2006) emphasize teachers need to hold students accountable by making sure the work is divided equally, circulating the room, listening, guiding only when warranted, redirecting when appropriate, making resources available, and wrapping up the class or problem. Students need to be prepared, report their progress, be reminded of the goals, and have space to learn. Chin and Li-Gek (2008) offer instructor suggestions on instructional tools for problem-based classrooms. Specifically, they suggest using tools such as problem logs (brainstorm ideas), mind maps, group problem statements (driving question), need to know worksheets (organize learning agenda), project planner forms (record group roles, document teacher conversations), task allocation forms (helps students plan for next week), learning logs, and evaluation forms.

Project-Based Learning

Wurdinger, Haar, Hugg, and Bezon (2007) define project-based learning as a teaching method where the teacher guides students through a problem-solving process that includes identifying a problem, developing a plan, testing the plan against reality,

and reflecting on the plan, while designing and completing a project. Wurdinger (2016) believes project-based learning fits well with place, service, problem, collaborative, and other experiential learning methods. Thomas (2000) proposes project-based learning takes the educational interest of students and allows them to create a project around those interests. Larmer, Mergendoller, and Boss (2015) conclude that project-based learning is a powerful teaching method which motivates students, prepares them for life, allows teachers to teach in a satisfying way, connects schools with community members, and produces students with in depth knowledge and thinking skills. These authors clarify, that in project-based learning, the project is the unit or a major vehicle for teaching content standards. The task is open ended, involves student choice/voice, and often differs from school to school. Likewise, the project is usually done in collaboration with a team, with teacher guidance, and often in class. Lastly, the project is authentic to the real world or student's life, includes a sustained inquiry process, and involves the creation of a project.

Project-Based Learning Core Elements

Larmer, Mergendoller and Boss (2015) outline seven key practices in project-based learning. The first step is the project design and planning process. This includes coming up with an idea, its goals, driving questions, and how it will be made public. The second step is aligning the project to content standards. The third step is culture building. Project based classrooms promote independence, inquiry, and attention to quality. Teachers encourage a growth mindset, praise and recognize effort, persistence, improvement and success. The fourth step is managing project activities. This means

making sure work gets accomplished and involves organizing tasks, setting deadlines, keeping students focused, and monitoring quality. The fifth step is scaffolding student learning. This may include introducing structured lessons, handing out readings, and processing ideas with students. The sixth step is assessing student learning using both formative (informing learners about progress towards goals) and summative (judgements about what was the end goal) assessments. Furthermore, students should do self-assessment that is based on reflection, progress, and achievements. The overall assessment process might be on an individual or a group of students. These authors also describe different types of projects. Specifically, presentations are any kind of life performances and include speech, debate, oral presentation, live newscast, panel discussions, play/drama, poetry/storytelling, musicals/ dance, and sales pitches. Written products include research reports, letters, brochures, scripts, book reviews, training manuals, blogs, and editorials. Media and technology products include audio recordings, podcast, slideshows, drawings, paintings, scrapbooks, photo essays, video/animations, webpages, computer programs / apps, and digital stories. Constructed products are anything that is built and can include models, consumer products, devices, machines, vehicles, instruments, gardens, and museum exhibits. Planning products require doing something and include proposals, business plans, designs, blueprints, estimates/bids, timelines, and flow charts.

Project-Based Learning Design

Larmer, Mergendoller, & Boss (2015), suggest that prior to starting project-based learning in a school, educators will have to evaluate the school system's readiness for

project-based learning. This evaluation should be at the district, regional and individual level. Earning leadership and stakeholder support, building teacher ownership, sharing and celebrating success, remaining patient, and creating time for ongoing professional development are all strategies to help build momentum for project-based learning in schools. Designing a project for project-based learning is not like planning a lesson, it is more like planning a unit, as projects usually last a week or more, not just a day or two. Projects also have several learning goals and contains multiple lessons, activities, tasks, assignments, and resources. Wurdinger (2016) states many project-based schools tend to use three components to assist the project process. A proposal, a learning artifact, and a presentation or exhibition. A project proposal form should be used prior to completing the assignment. Artifacts can include learning logs, library references, websites, or materials needed to build the project. Rubrics should also be used to assess the project itself and for student presentations. The Buck Institute (2015) outlines gold standard qualities of project-based learning. Essential project design elements include using challenging problems/questions, sustained inquiry, authenticity, student voice/choice, reflection, critique/revision, and public products. If these elements are included, the underlying student result is key knowledge, understanding, and success skills.

Larmer, Mergendoller, & Boss (2015) describe three project design steps. Project design step one is consider the content. In phase one the instructor considers contexts, goals, time frames, group formation, and complexity / length. Complex projects usually include multiple subjects, several teachers, community experts, and community organizations. They can also involve multiple products, occur on or off campus, utilize

several tech tools, and take weeks or months to complete. Step two is generating an idea

for a project. In this phase the instructor can design a project from scratch or modify or

replicate someone else's project. For generating ideas instructors can look at current

events, real world problems, issues in your community or school, analyze content

standards, or pursue student interests. Step three is called building the framework. In

this phase instructors must remember that changes made in one part of the project might

result in changes to another section of the project. Instructors also must set learning goals

based on content standards (key knowledge / understanding) and key success skills.

Instructors need to make sure there is enough content standards in the project to justify

the time spent on the project but avoid the inclusion of too many.

Wurdinger and Carlson (2010) describe Newell's (2007) variations of project-

based learning in the classroom. This theory looks at the variety of control a teacher or

student has over the project. At one level, a student has all the control and direction,

while at the other end the teacher has all the control and direction over the project.

According to this theory, *projects that are completely teacher controlled* have every

student doing the same thing, do not allow student variation on the project, and are

usually done as part of a curricular unit with grades connected to that curricular unit. In

another, less restrictive, teacher-controlled model, the teacher *allows for some student

inquiry.* Again, the project is done as part of a curricular unit and the grades are

connected to that curricular unit. However, students have some choice within the

curriculum such as framing their own questions. In a teacher facilitated model *the

project is set up and orchestrated by a teacher.* When the teacher orchestrated model is

implemented, the project is inquiry based, curriculum based, and examines a big picture. Moreover, the project is interdisciplinary and thematic in nature. Students may be in cooperative groups or teams, and performance and product assessment are used as well as a class grade. Another option has the *project being created with teacher – student interaction*. When this happens the project is interdisciplinary, inquiry based, authentic, and can include place-based or community-service projects. Students may be in cooperative groups or teams, and the time allotted to complete the project within that semester or unit is negotiable. Moreover, rubrics are used to assess performance, critical thinking, and problem solving. In the last option, the project is student driven and authentic. With this last model the project is *student driven and authentic* with teacher facilitation and process. The instructional unit is fairly open although guided somewhat by state standards. These projects are not assigned a summative grade and the time frame to complete the project is negotiable. The completed projects are presented to a real-world audience. The project can be done as an individual, group, or as a combination of the two. Moreover, it can include place-based or community service projects. Rubrics are used to assess products, performance, learning of skills and development.

Wurdinger (2016) suggests after a teacher decides on the level of autonomy a student has on a project they need to determine if the student will work alone, in a group, or as a combination of the two. Once this is completed a teacher will need to create a good learning culture. This means educators need to help students identify challenging yet manageable projects. Movement and noise around the room or building is acceptable. Too much or little control can hinder the learning. Clear expectations are a must.

Students and educators need to work together to determine the length of the project.

Projects that are too big might not be completed in the time allotted. Once the teacher

and student have identified the project, they need to start working on the project by

gathering information. In this phase of learning, educators may want to have students

keep learning logs which entail having students write down specific steps, and tasks they

have completed. Learning logs, interview notes, websites, and other information will

ultimately need to be organized in a way where they can present it to others as proof of

learning.

Larmer, Mergendoller and Boss (2015) describe four phases of project

management. Launching the project is the first phase. This is where the teacher conducts

an entry event, provides a driving question, and lists other questions to be investigated.

Additionally, the major product is discussed, the project calendar is explained, initial

team meetings are held, expectations of groups explained, tasks formed, and research is

started. The entry event could be a field trip, guest speaker, video, or stimulating activity.

There are multiple ways to introduce the driving question, but what is essential is that

students understand it. After the student understands the driving question, the teacher

facilitates a list of student questions regarding the project and its tasks. After students ask

questions about the project, teachers should help them understand what a quality project

looks like with an example rubric. Next, teams are formed. This can be done in a variety

of ways such as random selection, student generated, or teacher selected. The size of the

group can vary, but four members is an optimal size. After teams are selected, team

building exercises may be needed. At the first meeting, team members should focus on tasks and processes used for project completion.

Building knowledge, understanding, and skill is the second phase of project management. In this phase, the teacher's main job is to help students answer their questions by finding and using resources and providing students with scaffolding and monitoring progress. Students should be expected to monitor their own conflict as much as possible. The third phase of project management is developing critiquing and revising products. This phase is at the heart of the project as students are constantly shifting between this phase and the one before it. Formative assessment in this phase helps motivate student improvement. Peer, self, and teacher feedback is necessary. The goal of assessment is to guide improvement and not to assign a grade or score. The fourth phase of project management is presenting products. Allow time in the project calendar for students to plan and practice their presentations. Give them an opportunity to present to others, and practice giving and receiving feedback. After students have presented their projects, allow opportunities for students to evaluate, reflect, and celebrate their project.

Place (Community, Environmental, Outdoor, and Nature) Based Learning

Sobel (2004) describes place-based education as the process of using the local community and environment as a starting point to teach concepts in language arts, mathematics, social studies, science and other subjects across the curriculum. Smith (2002) states aside from its emphasis on the incorporation of community, place-based learning can be difficult to define because of its adaptability within different locales. Wurdinger and Carlson (2010) combine all these constructs and define it generally as

experiential learning that occurs in a given place, where the goal is to enhance or support

that environment while enhancing student learning.

Place-Based Learning Core Elements

Place-based Education Evaluation Collaborative (2008) is a group of

organizations that work together to (1) Improve their programs through individual and

cross-program evaluation, (2) Identify, develop, and disseminate evaluation techniques,

tools, and approaches that can be applied to other place-based education providers, and

(3) Contribute to the research base underlying the field of place-based education and

school change. Smith (2002) identified five thematic patterns of place-based education

that can be adapted to different settings: (a) cultural studies, (b) nature studies, (c) real-

world problem solving, (d) internships and entrepreneurial opportunities, and (e)

induction into community processes. Beard and Wilson (2013) argue that nature offers

many environmental grids for instructors to incorporate into their curriculum. For

example, air (find, rain, show, frost, humidity), land (jungle, moorland, mountains, parks,

desert), man-made (bollards, bridges, lamp post, alleyways), water (lakes, streams,

canals, rivers, ice, puddles, sea, tides), and underground (caves, tunnels, caverns,

basements, cellars) environments offer plenty of sensational opportunities to learn. The

term artificial can refer to many things and can include devises, activities, elements,

locations, structures, and whole environments. Mackenzie, Son, and Hollenhorst (2014)

submit factors such as autonomy, support, challenge, attention, and self-regulation all

influence the success of these natural environments. Beard and Wilson (2013) suggest

with today's technology it is possible to use gaming and simulation to bring the outdoors inside.

Sobel (2013) believes place-based educators should advocate for an integrated curriculum that emphasizes extensive use of community resources, volunteers, teacher collaboration and developmentally appropriate project-based learning. Instructional principles that strengthen a child's relationship with nature include adventure, fantasy, imagination, animal allies, maps/paths, special places, small worlds/mini replicas, and hunting and gathering (Sobel, 2008). Sobel (2013) also suggests core strategies for place-based educators including building connections through community vision to action forms, maximizing ownership through partnerships, engaging students in real world projects, putting environmental educators in every school (science/history expert, outreach, communicator, curriculum coordinator), nurturing continuous improvement through ongoing professional development (in service, summer retreats, grade level meetings), creating teams for guidance/vision, cultivating community exchange (educators membership on town committees, curriculum exhibition events, community arts days), and engaging with a community .

Place-Based Learning Design

Jacoby (2015) recommends the following steps for community-based courses. The first step, includes stating your desired learning outcomes, selecting the best learning outcomes, and envisioning the service experience that will serve as a primary course. The second step includes, selecting course content / pedagogy, seeking potential community partners, and integrating critical reflection throughout the course. The third

step includes developing a plan to assess student and community outcomes and then addressing logistical issues regarding orientation, liability, risk management, safety, and security. Sobel (2013) adds, if teachers and administrators are attentive to place, climate, community, environmental, and parental concerns then unique aspects of curriculum and project-based learning will evolve into what is referred to as a pedagogy of place. Pedagogy of place is a theoretical framework that emphasizes the necessary interpenetration of school, community, and environment whether located in urban, suburban, or rural settings. Improvements made to communities can change activist stances of not in my back yard to please in my back yard.

Marienau and Reed (2008) state designers of community-based learning often juggle more objectives than educators in traditional classes because they must include the interest of a community partner. They also can foster dialogue that enhances the individual's reflection based on observing and interacting with others. Other core design elements for instructors to consider are matching adults' skillsets with community needs, finding community-based experiences that are flexible by accommodating adult's busy lives, or consider giving students choice and voice over their experience upfront. Furman and Sibthorp (2013) stipulate learning objectives need to be aligned with both the community and the educational facility.

Reitenauer, Spring, Kecskes, Kerrigan, Cress, and Collier (2013) describe two types of community-based learning environments direct and indirect. Direct-service learning experience happen when students work directly with the people served by partnering with and working in a community organization. Marienau and Reed (2008)

explain good community-based learning programs utilize direct experience, genuine problems, reflection of experience, and social relationships. Furthermore, good direct learning experiences spark student inquiry, differ dramatically from previous experiences, evoke strong emotions, and offer students several events that prompt them to test their ideas, based on their experiences, against the realities of people's lives and interpretations of others. Reitenauer, Spring, Kecskes, Kerrigan, Cress, and Collier (2013) believe if it is not possible to create direct experiences, then educators can find indirect or project-based community projects. Indirect or project-based learning experiences occur when students focus on an end product and develop the necessary process to lead them to the achievement of a goal. Writing a grant proposal to secure funding for the community is an example of indirect project-based service. Regardless of whether an experience is direct or indirect, the school and community should have a contact or point person who can help guide students. Another option educators can consider is having students conduct community-based research. Community based research can be either direct or indirect depending on how far the student takes the project. Reynolds (2009) describes the steps of community-based research. First, students identify a need or choose a problem. Second, students identify resources and solutions (individuals, money, skills time). Third, students develop a plan based off potential strengths, weaknesses, opportunities and threats. Fourth, students implement the plan and fifth students evaluate the plan.

Stuhr and Sutherland (2013) write that reflection, processing, and debriefing are used in the adventure-based learning field to describe the reflective part of the lesson

where participants have the opportunity to think about and make connections regarding

their experience. These researchers also describe a metaphoric framework for educators

in adventure-based learning (ABL) called the Sunday afternoon drive debriefing model.

This model has six key features. The first feature is the choice of the vehicle and

represents the size of the discussion group (individual, pair, triad, whole group). The

second concept is steering the car and represents the first strategy to spark discussions in

the debriefing process. Following the road is the third concept and represents the

facilitator's need to be aware of which statements / words hold the most potential for

further discussion or explanation. If the group's discussion goes off track or slows down,

the facilitator can use the fourth concept which is initiating GPS recalculation to steer the

conversation back in a positive path. The fifth concept in this model is *nearing the* final

destination and represents the facilitator's need to help the students make sense of their

experience and gain new knowledge. The sixth and final step in this process is *reaching*

the final destination and involves helping participants understand how to best incorporate

what they learned into their own personal lives. Another way to look at this model is to

state it like this, the facilitator begins the drive with a final destination in mind, but

without a set route to arrive at an end location. During the course of the drive, the

facilitator occasionally checks a roadmap or communicates, recalculates or provides input

if necessary, but for the most part the facilitator enjoys the journey or ride until it ends.

Work-Based Learning

Winter and Maisch (1996) believe work-based learning arose out of higher

education's inability to sufficiently equip student to meet the everyday demands of work.

Clarke and Copeland (2003) state work-place learning is a general term for the learning which is normally provided by the employing organization to ensure staff have the minimum competencies or knowledge to carry out their roles. Examples of work-place learning include human resource policy and general safety training. Gibbs and Garnett (2007) add on the contrary, work-based learning is a learning process that focuses higher level critical thinking upon work to facilitate the recognition, acquisition, and application of individual and collective knowledge, while developing skills and abilities to achieve specific outcomes of significance to the learner, their work and the higher education institute. Henderson and Trede (2017) add work-based learning refers to student learning supported by learning and teaching strategies that occur in real world contexts under organized supervision and counts towards academic credit as part of a compulsory component of a degree course.

Work-Based Learning Core Elements

Adams (2001) differentiates between fixed and flexible work learning opportunities. In fixed learning, opportunities are often predefined by the institution and have students work through the required courses in a regular fashion. Fixed learning also offers little customization or student choice. Flexible learning, however, occurs when students define their own learning outcomes and customize their own learning. Moreover, flexible learning involves collaboration between student, employer, institution, and faculty. Mills and Wittaker (2001) suggest work-based learning programs at the college level tend to fall into five main antecedents that include economic competitiveness, skills or competency development, lifelong learning, education or

funding initiatives, and accessibility or flexibility provisions. Henderson and Trede (2017) emphasize students in work-based learning programs need to be able to appraise their work, articulate learning outcomes, problem-solve, adapt, work in teams, seek feedback, assess progress, and plan for continued learning.

Work Based Learning Design

Clarke and Copeland (2003) cite a 2000 publication by Glasgow Caledonian University which highlights important elements of work-based pedagogy. Specifically, the work role is the focus of learning and there are formal partnerships between higher education providers and individual organizations. This partnership allows for a structured approach to planning learning outcomes and must result in evidence of learning by students. This partnership should also support an individual's quest to learn new skills at work, apply theory/practice in an appropriate context, and meet educational learning objectives of specific classes or programs. Therefore, students who engage in work-based learning should receive college credit or be granted degrees for this type of learning. Work-based learning programs should integrate different forms of learning and different approaches to knowledge (Siebert, Mills, & Tuff, 2009).

Sagawa and Segal (2000) describe the COMMON acronym for creating good partnerships. The philosophy of this acronym is as follows. Early and effective *communication*, *openness* to opportunities, and *mutuality* or respect for each other contributions. Additionally, the partnerships should exist on *multiple* levels, be *open* to continuation, and bring *new* value through assessment. Work-based learning programs can have two points of learning. One where the students work with a faculty liaison and

work liaison or another where they can add a third component such as a focus group at the college level. Work-based programs can also be pre-structured or individually flexible. Siebert, Mills, and Tuff (2009) state the main benefits to individualized work-based learning programs are the ability to develop assessment tools and a unique curriculum plan of study relevant to the needs of the student and work organization.

Rowley (2003) suggests work-based educator instructional roles would be like that of educators in service, community, and place-based learning. One of many instructional methods in work-based learning is action-research. Action-research is a methodology derived from Kurt Lewin, which encourages students to acquire research skills by planning or introducing change within the organization. This research is then used to monitor and evaluate the effect of that change, thus learning from the process. Coghlan and Brannick (2001) identify five steps of action research. Stage one is the pre-stage and involves examining the context and purpose of the project. Stage two is diagnosing the issues. Stage three is planning action and interventions. Stage four is taking action or implementing interventions, and stage five is evaluating the action or research. Henderson and Trede (2017) add effective guidance by university and industry supervisors is instrumental in assisting students with successful work-based learning. Clarke and Copeland (2003) indicate the importance of reflection and collaborative work plans that align with workplace, university, and student mission, visions, and values. Lastly, staff at workplaces need to be sufficiently prepared to mentor, support and facilitate work-based learning experiences.

Service Learning

Jacoby (2015) states service learning can be distinguished from work based, fieldwork, practicums, and internships by its emphasis on striking a balance between student learning and the needs of the community. Bringle and Hatcher (1996) mention service-learning is a credit-bearing educational experience in which students participate in organized service activities that meet identified community needs and allow the student the opportunity to reflect on the service activity to gain further understanding of the course content, discipline, and an enhanced sense of responsibility.

Service-Learning Core Elements

Furco (1996) describes differences amongst service-learning programs. Volunteerism is a form of charity and has no link to reflection or learning. Volunteerism can be ongoing, one time or sporadic. The primary benefactor of volunteerism is the recipient and the focus of volunteerism is on service. Another model is community service. Community service programs engage individuals in activities designed to meet human and community needs. Community service programs are most commonly associated with court-imposed programs and they usually do not include reflection or result in academic credit. In short, although not as drastic as volunteerism, most community service programs have service as its primary focus and the community recipient is the primary benefactor. Another model is service learning where the focus of the service work is equally divided on learning and providing service. Therefore, in service learning the beneficiary of the service is equal for the recipient and the provider and the focus of the work is equal on service and learning.

Sigmon (1994) proposes four variations of service learning. *Service-LEARNING* implies that academic learning goals are primary and service learning outcomes are secondary. *SERVICE-learning* implies the service learning agenda is primary and the academic learning goals are secondary. *Service learning* with the absence of the hyphen implies the two notions are essentially separate from each other. SERVICE-LEARNING implies service and learning goals are of equal weight and each enhances the other. Beatty (2010) proposes the professional, civic engagement, and social change models of service learning. The professional model of service-learning fits a vocational and occupational model of education. This model helps students get real world practice by applying their disciplinary skills and their understanding of professional standards and values in their field. Students solve problems using critical thinking and communication while learning team skills, leadership, and conflict resolution. The civic engagement model emphasizes participation and democracy. In this model students learn the symbolic meaning of service-learning for themselves, by making sense of who they are with respect to local and global community (Butin, 2003). Beatty (2010) adds that students also learn tolerance for others, the ability to work with culturally diverse individuals, awareness of social issues, empathy, and moral awareness or sensitivity. The social change model is intended to promote social justice by having students advocate for social and political changes while empowering non-dominant groups of society (Morton, 1995).

Reitenauer, Spring, Kecskes, Kerrigan, Cress, and Collier (2013) explain the difference between direct and indirect service-learning experiences. These authors say

direct service-learning experiences are ones where students work directly with the people

served by the partnering community organization and indirect or project-based learning

experiences are ones where students focus on an end product and develop the necessary

processes to lead them to the achievement of a goal. Lemieux and Allen (2007) explain

that direct experiences contain face to face contact with service recipients at an

organization and indirect experiences include program evaluation, lobbying for

legislation change, and conducting needs assessments. Delve, Mintz, and Steward (1990)

add a third option called non-direct experiences that occurs when learners at a community

site, do not come into contact with the population they are helping. Examples of non-

direct experiences include sorting food bank items and creating a library for nursing

home clients.

Papamarcos (2002) offers guidelines for planning a service-learning project such

as find a project that encompasses the course's knowledge and learning objectives, define

learning objectives, weave in challenge, provide social responsibility, and create meaning

to the organization and student. Eyler and Giles (1999) expand on this by stating all

service-learning ventures should have high-quality community placement, create close

and continuous links between academic subjects, incorporate written / oral reflection,

enhance diversity, and facilitate the communities' voice. Nandan (2010) recommends

educators develop community partnerships with agencies they have not historically

worked with before. Jacoby (2015) mentions service-learning must be accessible to and

appropriate for all races, ethnicities, social classes, ability levels, ages, sexual

orientations, life situations, political views and learning styles.

Service-learning Design

Wurdinger and Carlson (2010) identify four phases of service-learning. Phase one is deciding on a project by reading materials, going on field trips, having guest speakers, and conducting interviews. Phase two involves action where the students are taking part in the service-learning experience. Phase three involves having students reflect on their service-learning. Reflection can be done individually or in groups. If a group format is used, everyone has the right to participate or pass and all students should listen respectfully without interrupting. The fourth phase is evaluation. Jacoby (2015) describes steps for developing service-learning partnerships. First, instructors should learn all they can about potential partners (online, media, and personal sources) before initiating contact. Second, instructors should consider the nature of the commitment they are willing to make to each other. Third, instructors need to take time to cultivate the relationship and to get to know the community partner. Fourth, instructors should determine whether there is compatibility by looking at the organization's mission, vision, goals, needs, complexity, as well as the tasks, skills, and roles of students. Fifth, instructors should stay in touch and communicate frequently. Lastly, instructors should determine how success will be measured and celebrated. As indicated, service-learning partnerships are complex, fluid, dynamic, fragile, and evolve and develop over time.

Cress, Stokamer, Van Cleave, and Edwin (2013) provide an overview of the process and logistics of global or immersive programs. Specifically, prior to going global for immersive service-learning trips, most programs and classes have pre-departure orientation meetings. A few of the many things discussed in these meetings include the

logistics of the travel (travel plans, duration, etc…), whether academic credit is given,

what essential documents are needed to depart /return (visa, passport, insurance,

immunization, vaccinations), who is responsible for making arrangements (school,

student), and amenities provided (eating, sleeping, and technology). Furthermore, the

instructor or program coordinator will probably provide students with readings, websites,

and other tools to help them understand the history, religion, politics and culture of the

people and places they are going to see. This might include emotional and psychological

preparation. Upon arrival, activities and sites may or may not be prearranged by the

instructor. What has been prearranged prior to leaving may change in route or after

arrival. While students are doing the service-learning, they will be asked to reflect and

may begin to notice changes in themselves, their classmates, clients and professor. If

data is collected and interpreted, program participants will want to assess the impact they

had on the community through the cultural lens of which they served. Upon returning

home from the study abroad trip, instructors should facilitate a post-trip reflection session

within two weeks of returning. This should be in groups and everyone should be given

an opportunity to discuss their experience.

Collier (2013) suggests the roles of the faculty instructor, field supervisor, and

trainers in service learning is like that of those in practicums, internships and clinical

field experiences. These roles may include advocating, serving as a content expert,

consulting, tutoring, coaching, modeling, or assisting others with challenges. Mentoring

occurs when a senior person provides information, advice, or emotional support to a

junior person. Peer mentoring occurs in a relationship where a more experienced student

helps a less experienced student. Nandan (2010) recommends service-learning educators

teach students how to find literature, collect and interpret data, examine service-learning

issues from a multidimensional perspective, and help students refine presentation skills.

Morin (2009) found that students who are involved in service-learning group work may

find their schedules impede their ability to meet with peers, clients, and faculty. This

results in student's occasional failure to satisfy their part of the workload. Karakas and

Kavas (2009) suggest instructors should reflect on their service-learning pedagogies by

asking themselves questions such as, how service-learning inspires me, how can I design

cross-disciplinary solutions to systematic problems, how can I have a positive impact on

my students, and what is the deeper meaning of this experience on my students and the

community.

<div align="center">**Practicums, Clinical Fieldwork, and Internships**</div>

A shared all-encompassing definition of these constructs can be a collaborative

experiential agreement between colleges and organizations, where students go to a

workplace in areas of interest and through supervision attempt to cultivate employment

skills by applying content specific theory learned in class.

Practicum, Clinical Fieldwork, and Internship Core Elements

Burke and Carton (2013) believe useful internships should monitor students and

provide them with concrete experiences that are tied closely to class learning objectives.

They also recommend allowing students the opportunity to apply theory learned in school

with real work experience, having students reflect on the experience they are having, and

assessing students regularly therefore allowing them the guidance and support necessary

to succeed. Conn, Roberts, and Powel (2009) suggest extensive mentoring and supervision for students through both field supervisors and faculty members is a central feature of high-quality internships, as the teaching role of these experienced and knowledgeable professionals is key to facilitating student integration and application of knowledge. This means the faculty service coordinator communicates frequently with both the student and the student's site supervisor. Supportive collaboration with the student and site can be facilitated via email, phone, or in person. Furthermore, the service coordinator should have regularly scheduled individual and group meeting times with the students so they can learn new skills and share their experiences or concerns.

Inkster and Ross (1998) created a six-stage internship model. The stages are arranging and securing the internship, orienting and establishing an identity, reconciling expectations with reality, productivity and independence, closure, and reentry and practical application. In stage one the student seeks out and secures placement of an internship. In stage two the student arrives at the internship, learns new information, and establishes a workplace identity. In stage three the student realizes the initial expectation does not match workplace reality, is structured differently than class, and has real consequences for people. In stage four students contribute to the workplace and supervisors recognize the student's competence by awarding more independence. In stage five, clarifying relationships discontinuing relationships, and celebrating accomplishments are the focus. In stage six students readjust to the class or enter the workforce following graduation.

Sweitzer and King (1999) outline a five-stage model of an internship. The stages are anticipation, disillusionment, confrontation, competence and culmination. The anticipation stage is marked with mild moral positive anticipation and anxiety due to unknown factors. During the disillusionment stage, student morale, task accomplishment, and excitement dwindles. In the confrontation phase students address earlier disappointments and resolve reasons of underlying frustrations. In the competence phase, high morale, purpose, accomplishment, high self-esteem, and clearer capabilities develop. In the culmination stage students provide closure with clients, coworkers, and supervisors.

Pamela Kiser (2016) describes four-phases of an internship. Phase one, is the preplacement stage. This phase occurs before students arrive for their first day of work, and typically involves the student and faculty member, and organizational representatives discussing the appropriateness of the field placements based off a match between the organization's expectations and the student's strengths, weaknesses, and past experiences. In phase one, students should also clear their schedule, feel tensions, worry, concerns, or doubt, and make plans with family members for reduced involvement in their life. Phase two is the initiation stage. This stage occurs right after the internship starts and involves being oriented to the new experience. In this phase, the student's site supervisor will try to fully assess the student's strengths/weaknesses so appropriate use of the student's skill can be utilized. Stage three is called the working stage. In this phase, students devote less energy to building relationships and negotiating multiple expectations and spend most of their time and energy accomplishing tasks and

conducting organizational work. Stage four is called the termination stage. In this stage the student, supervisor, other staff members, and clients prepare for the end of a student's internship. This might include completing projects or tasks and redistributing work back to other staff members. A student should also reflect on their experience and contemplate future possibilities.

Practicum, Clinical Fieldwork, and Internship Design

Havard, Morgan, and Patrick (2010) outline eight components to good principal internships. The eight components include: collaboration between university and school, explicit school-based assignments, and a developmental continuum of practice from observing to participating to leading. Additional recommendations outlined include the opportunity to work with diverse populations, having clear expectations for roles (faculty, supervisor, intern, coaches) and intern/site schedules, ongoing supervision, mentors that model professional behavior, and rigorous evaluation for interns. Divine, Linrud, Miller, and Wilson (2007) emphasize optimal internships typically involve minimal commitments from college/university departments. In general, this involves students finding their own internship opportunity while the role of the university is mainly related to making sure that the internship merits college credit. Internships that are required by programs involve a more intense commitment by colleges. This involves a greater allocation of resources, providing adequate academic support for all interns, and may involve helping students find placements. Havard, Morgan, and Patrick (2010) encourage educational programs to embed experiential learning internships throughout the coursework rather than have it at the end (i.e. capstone).

Moore (2013) describes factors to consider in fieldwork such as timing, location, duration of internship, convenience, and student choice of the internship. Seminar courses linked with internships are also common and are highly beneficial in facilitating this mentoring and application of theory to practice. Divine, Linrud, Miller, and Wilson (2007) mention factors that should be addressed prior to implementing a required internship program at your college include finding and hiring an effective internship director, securing sufficient internship opportunities, and ensuring adequate institutional oversight. Havard, Morgan and Patrick (2010) suggest academic programs should have quality mentors at their sites who are trained, and program stakeholders should have a dedicated person whose role is to develop or mentor interns. Campbell (2006) describes qualities of effective supervisors that include being consistent, considerate, open, available, accessible, trustworthy, ethical, tolerant, flexible, and knowledgeable.

Ajayi and Lee (2005) stress that before the student's field experience is to begin, the coordinator should review the expectations of the experience with the student. Hawkins, Koreger, Mustin-Rao, Barnett, and Ward (2008) suggest the role of the academic field coordinator is to be supportive, instructional, evaluative, and consultative. This means faculty coordinators should meet with field supervisors, oversee trainees, and consult with other field faculty. They also review case notes, assessments, observe interventions, and graph student learning. In many fields, regular weekly individual or group supervision by faculty occurs. Divine, Linrud, Miller, and Wilson (2007) add that faculty managers need to be able to recruit, mentor, advise, network, manage time, teach, plan and resolve conflict. Taken together, instructional methods for students include

reflective activities, research papers, projects, journaling, goal tracking, presentations, and skill demonstrations. Diambra, Cole-Zakrewski, and Booher (2004) recommend instructors plan for and write into their syllabus extra support. They also encourage peers to meet with each other outside the scheduled academic time to process their experience. Instructors and students should discuss the stages of internships, which internship stage model matches their experience best, while discussing hardships, and coping strategies.

Assessing Experiential Learning and Education

Shrestha (2013) believes there is confusion over what constitutes quality education due to conflicting expectations from students, parents, faculty, employers, and society. For example, graduation rate, employability, resources, campus culture, cost, credibility, and cultivation of skills needed for a given career are all important but ranked differently by stakeholders. Jacoby (2015) describes two forms of assessment. The first is direct assessment and the second is indirect assessment. Direct assessment is related to students' work based on the desired learning outcomes. Indirect measures are self-assessments by students about what they believed they learned or achieved. Collier and Voegele (2013) describe instructional differences between content and process goals. Content goals have to do with completing specific assignments, earning a grade, and developing knowledge about particular course content. Process goals have to do with acquiring higher order skills that can be applied in a range of other contexts beyond the immediate course. Collier and Morgan (2003) found that students typically focus on content goals, while professors believe both process and content goals are important.

Faculty also see the ability to work effectively in groups as an important skill needed beyond the class.

Learning Outcomes

Wurdinger and Qureshi (2015) state that life skills such as critical thinking, problem solving, communication, collaboration, responsibility, creativity, self-direction, time management, perseverance, and work ethic are not easy to assess because these skills require time to develop and individuals continue to improve on them over time. Wurdinger and Allison (2017) add that the development of life skills in experiential learning involve complex cognitive problem solving, learning from mistakes, multiple trial and error attempts and real-world application. Henderson and Trede (2017) indicate good learning objectives in work-based leaning contain ethical behaviors, communication, collaboration, and self-management. Clarke and Copeland (2003) recommend adding critical thinking, synthesis of theory, reflective practice, and time management.

Gelmon, Agre-Kippenhan, and Cress (2013) created an evaluation tool which instructors can use to assess their learning environment. Specific functions of this tool include commitment to others (low to high), student role (passive to active), faculty role (directive to facilitative), learning orientation (individual to collective), and pedagogy (banking to constructivist). Clem, Mennick, and Beasley (2014) describe the Experiential Learning Survey (ELS) which they claim is rooted in experiential learning theory and is designed to measure a student's perception of meaning or value of experienced based on educational instruction. Knowledge of learning styles can enhance the ability of faculty

to build on student experiences and construct new learning opportunities. Feedback from

the ELS can be used to adapt instructional techniques to better meet the needs of social

work (or other) students who are preparing for practice.

In 2002, Furco created a rubric for institutions to use as a step by step guide if

they want to entrench service-learning into their workplace culture. Furco's rubric

examines the philosophy and mission of the institution, faculty support/involvement,

student support / involvement, community participation / partnerships, and institutional

support. Toncar, Reid, Burns, Anderson, and Nguyen (2006) developed a service-

learning benefit scale that measures students' perceptions of service-learning experiences

on four dimensions: practical skills, interpersonal skills, citizenship, and personal

responsibility. Eyler and Giles (1999) describe six categories of student impact for

educators to consider: personal/interpersonal development, understanding / applying

knowledge, engagement, curiosity, reflective practice, critical thinking, perspective

transformation, and citizenship. Jacoby (2015) mentions other areas to consider in

assessment including student learning, enhancement of teaching, effects on scholarship,

effects on career, professional development and support. Gelmon, Agre-Kippenhan, and

Cress (2013) identify challenges to evaluation which may include timelines, resources,

resistance, fear of findings, shelved reports, and lack of experience.

Instructional Assessments

Chan (2011) describes some common assessment tools used in community service

experiential learning. Reflective journals are a means of recording ideas, personal

thoughts, and insights that a student has in a course. Direct observation occurs when the

assessor observes the student performing the community service and judges their ability in relation to the learning objectives. Observational assessments are often not adequate for full assessment and may need to be supplemented with other assessment types. Presentations allow assessors to observe students presenting their knowledge of a topic or learning experience. Peer assessment of presentations are useful in helping students reflect on good presentation skills. Chan outlines a rubric where students are graded on content, knowledge, posture/eye contact, enthusiasm, audience reaction, pace, and timing of the presentation. The rubric rates four skill areas as excellent, proficient, average, and poor. Oral assessment involves asking students questions about learning objectives. Oral assessments are a good way to provide students and assessors with immediate feedback on where they are at in the learning process. Oral assessments should have a clear grading criterion. Other common assessments utilized in hands on learning include portfolios, simulations, and self or peer assessment (Struyven, Dochy, & Janssens, 2008).

Jacoby (2015) states that surveys, checklists, and questionnaires are the most commonly used quantitative methods of assessing service learning. Observations can include checklists, rating scales, or written notes from witnessing an event. Document review like planning documents, meeting minutes, annual reports, and assessment data are useful, but time-consuming. Case studies are used to develop a full description of a program, courses or partnerships, and its effects on faculty, partners, and community members. Achievement assessments include multiple choice and short answer tests. Interviews can be done in a structured, semi-structured, or unstructured format. They are

often recorded and conducted in person or over the phone. Focus groups are interviews conducted in a group format.

Wurdinger (2016) states tracking and assessing student progress is important not only for instructors, but also for students. Rubrics should be used to assess student learning with assessment criteria clearly communicated. Multiple rubrics can be used for a project. For example, one rubric can be used for the project and another for the student's demonstration or presentation of the project. Tools for tracking include project proposal forms, project progress forms, project completion forms, reflection forms, and self-assessments. Project proposal forms should include information such as the title project, the resource needed, a written plan to complete the project, a description of how the project may be applied to real world settings and a discussion of learning outcomes. After the student develops their project, they talk to the instructor about the proposal so the instructor can offer expert guidance and help the student refine the project. Project progress forms are a list of different artifacts that students identify and document as they go through the process of completing the project. Students can fill out a new form each week or they can add to a single form each week. Artifact forms allow students to keep track of references and resources they use while working on their project. Artifacts might include learning logs, library references, websites, a list of material needed to build the project, or a drawing of the project. Educators can encourage students to use one form for each completed artifact or they can have one form which lists all artifacts. Project completion forms are filled out by the student at the end of the project and asks students to check all the artifacts used in their project. It also summarizes total time completed on

a project. Students can also write a personal reflection about their project and what they learned.

In conclusion, Campbell (2006) believes experiential learning should include formative and summative assessment that incorporates self, peer, community, supervisory, and faculty feedback. They add other options for assessments including live observation, audio/video taping, case consultation, activity logs, and reviewing written documents. Amador, Miles, and Peters (2006) suggest assessment or grading involves finding a good balance between frequencies of feedback. They believe it is essential to assess both the group as well as individual students. Moreover, they believe students should receive feedback on their performance from group members, instructors, and anonymous peers. They also recommend giving more points or percentages to the individual component of the project, so the perception is students have more control over their grade.

Reflection

According to You and Rud (2010), Dewey defines reflection as an active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions which it tends. Miettien (2000) enhances the above statement by explaining Dewey's phases of reflective thought in more detail. Miettien mentions, Dewey believed reflective thought starts with studying the conditions, resources, aids, difficulties, and obstacles of action. When this happens, intellectualization and defining of the problem occur. Of relevance here is the statement that the way the problem is conceived can decide what specific suggestions are

entertained and which are dismissed. By studying the conditions of the situation, one

forms a working hypothesis or tentative plan. After a tentative hypothesis is created,

reasoning is initiated, and the likelihood of success is considered. If the likelihood of

success looks good, the individual tests the plan, and if it doesn't work, the individual

reformulates the hypothesis and testing phase. Taken together, Dewey (1933)

recommends the following guidelines for good reflection. First, direct students to apply

the knowledge in a different context. Second, direct the mind of students to the subject

matter and not the teacher. Third, keep the subject developing. Fourth, require a mindful

pause. Lastly, leave students wanting more. Kolb and Kolb (2017) suggest that

instructors need to model reflective thinking by being open and honest about their

learning journey. Moreover, they discourage instructors from organizing the subject

matter chronologically and logically, as it takes away from the inquiry and learning

process. Lastly, they suggest instructors master the art of questioning by asking

thoughtful and meaningful questions which foster a learning mindset in students.

Jacoby (2015) identifies five basic steps in critical reflection. The first step is to

identify learning outcomes in concrete and measurable terms. The second step is to

introduce students to the concept and practice of critical reflection. This involves

providing rationale for reflection, reviewing good and bad examples, and discussing

rubric grading expectations. The third step is to design a reflection strategy to enable

students to meet the learning outcome. Use sequencing activities to guide students

towards incrementally higher levels of complexity such as thinking, analyzing, and

reasoning. Instructors can also use prompts like topic questions, open ended sentence

stems and quotes. The fourth step is to engage the students in reflection. Instructors can

do this by giving them time and encouragement to work through things. Step five is to

assess learning. Presenting students with clearly defined rubrics before reflection is

essential. It is also important to evaluate how authentic and deep the student's reflection

was. Eyler, Giles, and Schmiede (1996) describe the four C's of critical reflection.

Specifically, reflection is *continuous* and must take place before, during and after

completion of the experience to be fully useful. Reflection is *challenging* by pushing

students to think in new ways. Reflection is *connected* and serves as a bridge between

the experience and our discipline based academic knowledge. Reflection is framed in a

manner that is appropriate for the context in which the service experience takes place

(*contextualized*). In summary, reflection should be integrated throughout the academic

course, linked to learning outcomes, and when assessing learning of reflection instructors

need to use rubrics that capture multiple levels of learning in simple language.

Wain (2017) summarizes Graham Gibbs' (1988) six element model of reflection.

The elements are description (learner recalls events by drawing on observational

memory), feelings (reactions to the events), evaluation (learner weighs positives/negative

aspects of experience), analysis (learner marks personal interactions against published

literature), conclusions (learner summarizes responses to events, what was learned and

good future reactions), and the creation of an action plan to formalize the learning. Wain

also summarizes Johns' (2000) model of structured reflection. John's model included

five questions. The first question relates to description (describing the event and

significant factors). The second question relates to reflection (what you are trying to

achieve and what are the consequences). The third question asks students to look at influencing factors which affect the decision making. The fourth question relates to evaluation (what you could have done better), and the fifth question deals with learning changes because of the experience.

Toole and Toole (2001) believe pre-service reflection plays a critical role in the initial steps by allowing a student to identify a project (become aware of important community issues) and plan or prepare for the project (imagining all of the potential problems which might arise in the project as well as brainstorming possible solutions to these issues). They also believe that students should use observation and analysis to reflect during service by connecting course concepts, and academic discipline knowledge to personal insights. Finally, post service reflection is also essential as it helps students further analyze their situation.

Cress, Stokamer, Van Cleave, and Edwin (2013) add to this by encouraging students to write in journals, and record observations and insights from other or alternative perspective such as a community partner, academic discipline or service role. Molee, Henry, Sesa, and Mckinney-Prupis (2010) recommend the DEAL model of reflection in service learning. First, students should *describe* the service-learning experience. Second, students should *examine* this experience considering specified learning objectives. Third, students should *articulate* their *learning* in their reflections.

The first part of this chapter presented the differences between traditional and progressive education with an emphasis on the early philosophers and key contributors of experiential learning who transformed experiential learning from a philosophy into a

standalone theory of education. Building on this, the next part of the chapter focuses on the progression of experiential learning and its evolution into a variety of classroom methods used by teachers to promote student engagement and learning. Some of these methods include practicums/internships, service, work, active, and inquiry, problem, project, and place-based learning. The last part of this chapter focused on the practical application about the designing and evaluating experiential learning. The next chapter will describe the quantitative research methods used to gather data on college educators' perceptions of experiential learning.

Chapter III

Methodology

Although significant research has been conducted on the development and application of experiential learning to a wide variety of social, psychological, and educational phenomena related to student, program, and university outcomes, there has been much less research on how college educators' perceptions of experiential learning influence their course design, instruction, and assessment practice. Therefore, the purpose of this study was to investigate how college educators' perceptions of experiential learning influence the design, implementation, and assessment of their experiential learning courses.

The primary research question in this study was: How do college educators' perceptions of experiential learning influence the design, implementation, and assessment of their experiential learning courses? Sub question one was: In what ways have college educators had prior experience using experiential learning in their courses? Sub question two was: What is the relationship between college educators' prior experiences with experiential learning and how they utilize that prior experience to design, instruct and or assess their courses?

Research Conceptual Model

Rationale for Methodology

One of the purposes of this study was to gather perceptions on college educators class design, instruction, and assessment techniques. Another purpose of the study was to look at how college educators' perceptions of experiential learning influences their class design, instruction, and assessment practice. Therefore, qualitative interviewing,

quantitative surveys (Woodwell, 2014), and a mixed methods approach would have all been an acceptable research modality for this study (Creswell, 2014). Qualitative interviewing was eliminated because of the investigator's preference for quantitative data and statistics. Design complexity and the overall time needed to design, conduct and analyze the results ultimately eliminated the mixed methods option from consideration.

According to Joyner, Rouse, and Glatthorn (2013), the two most likely research options for this study, given its purpose are (a) correlational research, where the researcher examines the relationship between variables or, (b) descriptive research where the researcher describes a phenomenon. Even though a correlational design would have been an acceptable method for this project, it was eliminated because it did not offer the research world as much value as describing the variables or contextual factors influencing college educators' perceptions of experiential learning, which are not yet clearly understood. Therefore, a descriptive research design was used because this research strategy best fits the goals of the research, which was to describe contextual factors, identify variables, explore a little-known phenomenon, and pose questions for future research (Woodwell, 2014). Subsequently, the data gathering tool for this research project was a survey.

Threats to Reliability and Validity

One of the main threats to the overall quality of this research project is related to the concept of reliability or the replicability and consistency of the results (Galvan, 2014). In this research project, reliability threats were minimized by having a clearly described methodology section, so the results can be replicated by other researchers.

Another threat to the overall quality of the research project is related to validity or does the study measure what it proposes (Monette, Sullivan, Dejong, & Hilton, 2014). Validity can be further divided into internal validity or accuracy of conclusions and external validity or generalizability and applicability of results to other areas or populations (Cozby & Bates, 2015). The most likely validity threats in this study were participant (sample selection), content bias (Erford, 2013), testing or demand characteristics (Creswell, 2014), and experimenter-examiner bias (Erford, 2015).

To address participant variable concerns, the results of the study were not generalized to other populations or areas and the sample size was large (Creswell, 2014). There was a possibility that participants with previous exposure to experiential research may score differently than others on this survey due to a bias with the content (Erford, 2013). This phenomenon could result in extreme or inflation of scores (Woodwell, 2014) and may skew the data. To address the issue of content bias related to statistical regression, inflated or extreme scores may be discarded (Erford, 2015). Testing or demand characteristics can occur when participants become aware of the purpose of the study and respond accordingly (Creswell, 2014). In this study, these expectancy issues will be rectified through deception (Erford, 2015) or creative item writing, keeping the survey short and having committee members reviewing each item prior to it being administered (Woodwell, 2014). One final threat to consider was related to the researcher's preconceived outcome of the study and how that expectancy may influence the results. This threat or bias was minimized because this research was a survey rather

than a true experiment (Erford, 2013 & 2015), and committee members reviewed the results.

Related to the threats above are the concepts of criterion, construct, and content validity. Criterion validity is the extent a measure correlates with the outcome or some other measurement (Monette, Sullivan, Dejong, & Hilton, 2014). Criterion validity can be predictive, concurrent, convergent, or divergent in nature (Woodwell, 2014). In this study, the research evaluated concurrent criterion validity, as survey results and concepts input were gathered at the same time (Cozby & Bates, 2015). Construct validity is the degree to which the researchers used adequate definitions and measurement of variables (Creswell, 2014). The three most common ways to measure constructs is to clearly define your variables, have a hypothesis built on theoretical evidence, and logically and empirically test your hypothesis (Erford, 2015). In this study, the researcher lumped project-based, problem-based, place based, community, outdoor, and adventure-based learning under one experiential phenomenon, as their methods are similar (Wurdinger & Carlson, 2010). In this study, the researcher also lumped practicums, clinical field work and internships together under one phenomenon. Moreover, the researcher combined the established definitions from each of these constructs into a new definition which highlights their experiential similarities. In this study construct validity could be impacted by the lumping of concepts and the redefinition of these constructs. However, the researcher believes the new lumped overlapping definition of these constructs is clear and built off familiar concepts already established in experiential learning theory. Overall if construct validity is done correctly the construct is said to have content validity

(Woodwell, 2014). Content validity looks at whether the variables or sample represented in the study are accurately represented (Erford, 2013). As discussed earlier, a few of the ways this study minimized threats related to content validity was not generalizing the results to other populations, using a large sample size, having multiple advisors review the survey / research, and using recognized constructs. With the threats to criterion, construct and content validity in this study minimized the overall appearance of the survey and study will be said to have face value or validity (Erford, 2013).

Two final threats to the overall reliability and validity of this study are related to the concepts of control, omitted, third, or confounding variables. Control variables are demographic or personal variables in research that may influence the design (Creswell, 2014). In this study, the researcher's survey gathered data on demographics for comparison and control reasons. Thus, this threat should be minimal. Omitted, extraneous, and confounding variables are three related concepts that can be defined as unmeasured or unobserved variable's which influence the outcome (Woodwell, 2014). In this study, omitted, third, and confounding threats will be recognized as a reality of this design. Therefore, generalization and data analysis will be approached cautiously.

Sample Selection and Participants

The randomized sample for this study entailed 3000 college professors from around the world who were identified via a purchased email list from Book Your Data, a company that provides customizable and readymade downloadable email lists for researchers to use and own. The researcher chose the college professor descriptor for this study because it did not limit the sample by college educator rank, level or discipline.

A randomized and anonymous survey was deployed via Qualtrics to 3000 college educators across the world. Of the 3000 emails sent out, 92 bounced back due to outdated email accounts. Therefore, the adjusted potential sample size for this research project was 2908 college educators. Overall, 199 participant responses were recorded in the survey for a return rate of 6.84%.

Data Collection Procedures

All 3000 educators from the sample were emailed a recruitment letter that contained a link to the informed consent information and subsequent survey should they be interested in participating. See Appendix A for a copy of the recruitment letter. Recipients were also asked to confirm their consent to participate and that they were at least 18 years of age. Two (2 weeks) after the recruitment letter was emailed to the subjects, a follow up letter was emailed to the participants. See Appendix B for a copy of the follow up letter. Three (3) weeks after the follow up letter the survey closed. The total time the survey was available to participants to partake in the survey was five (5) weeks.

Survey Instrument

A randomized and anonymous survey containing 29 items was emailed out to participants through Qualtrics. See Appendix C for a copy of the survey used in this study. A few of the items used in this research were based on a survey by Wurdinger and Allison (2017), who also looked at college educator perceptions of experiential learning. The items that were altered from Wurdinger and Allison's study and used in this study are explained in the paragraphs below.

The survey consisted of six sections. The first (1st) section of the survey was the informed consent form. This section of the survey explained to participants the purpose of the research, the risks/benefits of participating in the survey, confidentiality safeguards, and the estimated time it will take to complete the survey should they choose to participate. The second (2nd) section of the survey was the demographics. This section of the survey had eleven (11) questions and asked about participants race, gender, highest level of education completed, type of educational institute they work in, and the number of years they have been an educator. This section also asked about what department they teach in, their primary role, their academic rank, level of college student taught, typical class size, and experience with teaching experiential learning. The third (3rd) section of the survey was on professional development or prior exposure with experiential learning. This section had six (6) questions and asked if they had taken experiential learning classes previously, where they learned about experiential learning, and the level of influence this training had on their teaching and assessment practice.

The fourth (4th) section of the survey was on college educators' perceptions of experiential learning as it relates to designing experiential classes. This section had three (3) questions and asked about their ability to design experiential learning classes, the effectiveness of online delivery of experiential learning, and overall input students should have on designing their learning experiences. The fifth (5th) section of the survey is on college educators' perceptions of experiential learning pedagogy as it relates to teaching experiential learning classes. This section had four (4) questions on the effectiveness of experiential learning pedagogy, participant level of expertise teaching experiential

learning classes, the use of instructional method in their classes, and the level of input students should have on modifying their learning experience. Item number 24 in this section, was modified from Wurdinger and Allison's (2017) research. Wurdinger and Allison asked how much college educators used experiential approaches for learning (i.e. percentage). This research asked how frequently college educators used a given instructional method.

The sixth (6th) section of the survey was on college educators' perceptions of experiential learning pedagogy as it relates to assessing experiential classes. This section had four (4) question on their level of expertise evaluating experiential learning, the use of assessment measures in their classes, skills students are learning in their classrooms, and the level of input students should have on evaluating their learning experience. Item number 28 in this section was modified from Wurdinger and Allison's (2017) research. Wurdinger and Allison asked how much time they placed on intentionally trying to teach life skills. This research asked what life skills college educators believe their students are learning in their classes.

Data Analysis

Data was administered, collected, and analyzed through the online confidential statistical tool Qualtrics. After data was collected descriptive statistics such as frequency, central tendency, dispersion/variation, and position were used to describe the data.

Chapter IV

Results

The purpose of this study was to investigate how college educators' perceptions of experiential learning influence design, implementation, and assessment of their experiential learning courses. Sub question one was**:** In what ways have college educators had prior experience using experiential learning in their courses? Sub question two was: What is the relationship between college educators' prior experiences with experiential learning and how they utilize that prior experience to design, instruct and or assess their courses?

Descriptive Statistics

Ninety-six or 60.38% of the respondents identified as male and sixty-two or 38.99% of the respondents identified as female. One respondent identified as other. The number of college educator experience ranged from 58 years to 4 years ($M = 24.38$, $SD = 12.97$). Looking at the four most common modes, we find the following. Eleven or 6.96% of the respondents had twenty years of college education experience. Ten or 6.32% of the respondents had forty years of college education experience. Eight or 5.06% of the respondents had thirty years of college educator experience. Eight or 5.06% of the respondents had twenty-five years of college experience.

See table 1, for a more complete breakdown of the demographics of this study's population.

Table 1: Demographics of Sample.

Construct	Count	Percentage	St. Deviation	Mean
Race:				
White/Caucasian	144	88.89		
Hispanic / Latino	6	3.70		
Black/ African American	3	1.85	1.03	1.31
Native American / Alaska Native	0	0.00		
Asian / Pacific Islander / Native Hawaiian	6	3.70		
Two or more races	3	1.85		
Other	0	0.00		
Highest Education Completed				
High School Diploma	0	0.00		
Associate Degree	2	1.23		
Bachelor's Degree	3	1.85	0.69	4.94
Master's Degree	23	14.20		
Doctoral Degree	109	67.28		
Post-Doctoral Degree	25	15.43		
Type of Educational Facility				
Career/Technical College	3	1.85		
Community College	10	6.17		
University	137	84.57	0.60	3.02
More than one type above	4	2.47		
Other	8	4.94		
Department or Discipline				
Arts	10	6.17		
Humanities	22	13.58		
Social Science	29	17.90	1.52	4.01
Natural Sciences	29	17.90		
Applied Sciences	40	24.69		
Other	32	19.75		
Primary Role				
Leadership	21	12.96		
Teaching	108	66.67		
Research	24	14.81	0.83	2.17
Services to Students or Patients	2	1.23		
Other	7	4.32		
Academic Rank / Title				
Adjunct	10	6.17		
Instructor / Lecturer	2	1.23		
Clinical Professor	3	1.85		
Visiting Professor	1	0.62	1.87	6.85
Research Professor	0	0.00		
Assistant Professor	18	11.11		
Associate Professor	53	32.72		
Full Professor	71	43.83		
Other	4	2.47		
Type of Student they Teach				
NA/ non-teaching role	9	5.63		
Associate degree Level	17	10.63		
Bachelor's degree Level	38	23.75	1.65	4.23
Master's degree Level	20	12.50		
Doctoral / Post-Doctoral degree Level	16	10.00		
Combination of more than one of these Levels	60	37.50		
Typical Class Size				
0-10 students	11	6.83		
11-20 students	51	31.68	0.96	2.83
21-30 students	61	37.89		
31 or more students	31	19.25		
NA/ non-teaching role	7	4.35		

Prior experiences using experiential learning. One hundred-five or 64.81% of the respondents said they had prior experience using experiential learning in their classes. Twenty-nine or 17.90% of the respondents said they were not sure (maybe) if they had prior experience using experiential learning in their classes. Twenty-eight or 17.28% of the respondents said they did not have prior experience using experiential learning in their classes.

Instructional methods experienced as a K-12 student. Ninety-point four percent (90.4%) of the sample took a K-12 class where all or most of the instructional method was distributed through lecture. Forty percent (40.0%) of the sample took a K-12 class where all or most of the instructional method was distributed through project-based learning. Thirty-eight-point four percent (38.4%) of the sample took a K-12 class where all or most of the instructional method was distributed through problem-based learning. Thirty-seven-point six percent (37.6%) of the sample took a K-12 class where all or most of the instructional method was distributed through active learning. Thirty-six-point eight percent (36.8%) of the sample took a K-12 class where all or most of the instructional method was distributed through collaborative / cooperative learning.

See figure 1, for a more complete overview of instructional methods experienced as a K-12 student.
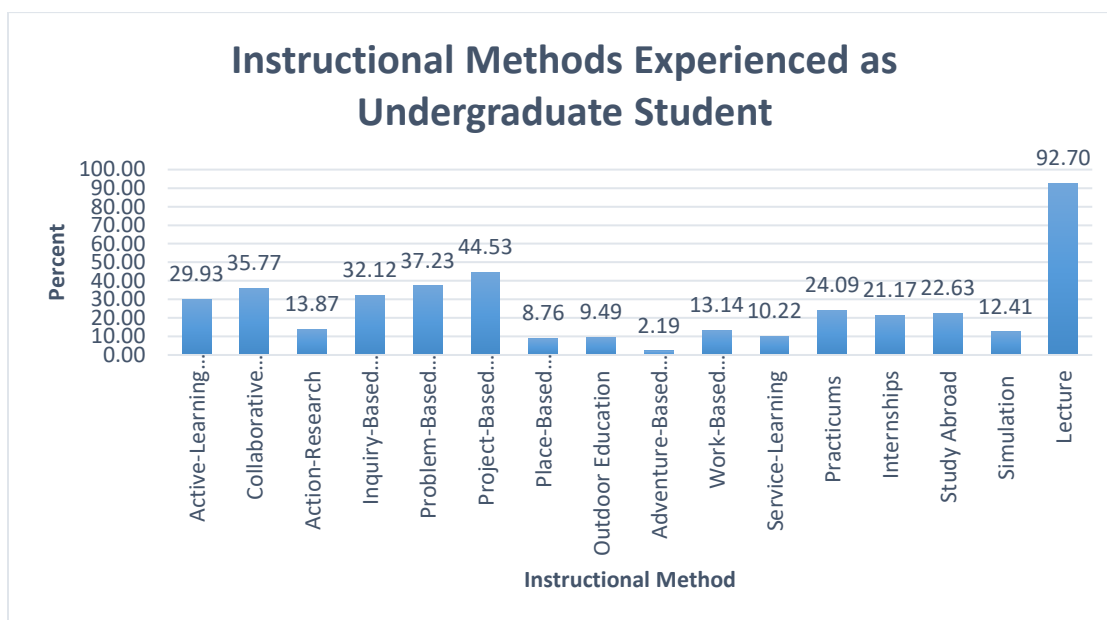
Figure 1: Instructional Methods Experienced as K-12 Student.
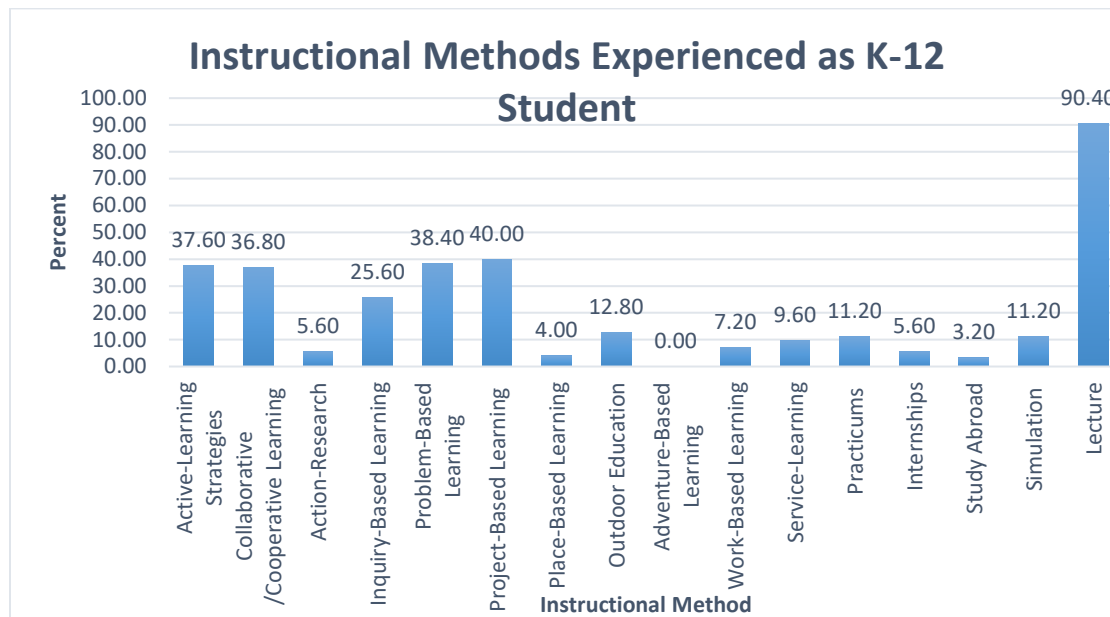
Instructional methods experienced as an undergraduate college student.

Ninety-two-point seven percent (92.7%) of the sample took a class at the undergraduate level where all or most of the instructional method was distributed through lecture. Forty-four-point five percent (44.5%) of the sample took a class at the undergraduate level where all or most of the instructional method was distributed through project-based learning. Thirty-seven-point two percent (37.2%) of the sample took a class at the undergraduate level where all or most of the instructional method was distributed through problem-based learning. Thirty-five-point seven percent (35.7%) of the sample took a class at the undergraduate level where all or most of the instructional method was distributed through collaborative / cooperative learning. Thirty-two-point one percent (32.1%) of the sample took a class at the undergraduate level where all or most of the instructional method was distributed through inquiry-based learning.

See figure 2, for a more complete picture of instructional methods experienced in undergraduate school.

**Figure 2:** Instructional Methods Experienced as an Undergraduate Student.

Instructional method experienced as a graduate student. Eighty-four-point seven percent (84.7%) of the sample took a class at the graduate level where all or most of the instructional method was distributed through lecture. Forty-nine-point two percent (49.2%) of the sample took a class at the graduate level where all or most of the instructional method was distributed through collaborative / cooperative learning. Forty-seven-point one percent (47.1%) of the sample took a class at the graduate level where all or most of the instructional method was distributed through project-based learning. Forty-two-point zero percent (42.0%) of the sample took a class at the graduate level where all or most of the instructional method was distributed through problem-based learning. Thirty-six-point nine percent (36.9%) of the sample took a class at the graduate

level where all or most of the instructional method was distributed through active or

inquiry-based learning.

See figure 3, for a more complete picture of instructional methods experienced in

graduate school.

Figure 3: Instructional Method Experienced as a Graduate Student.
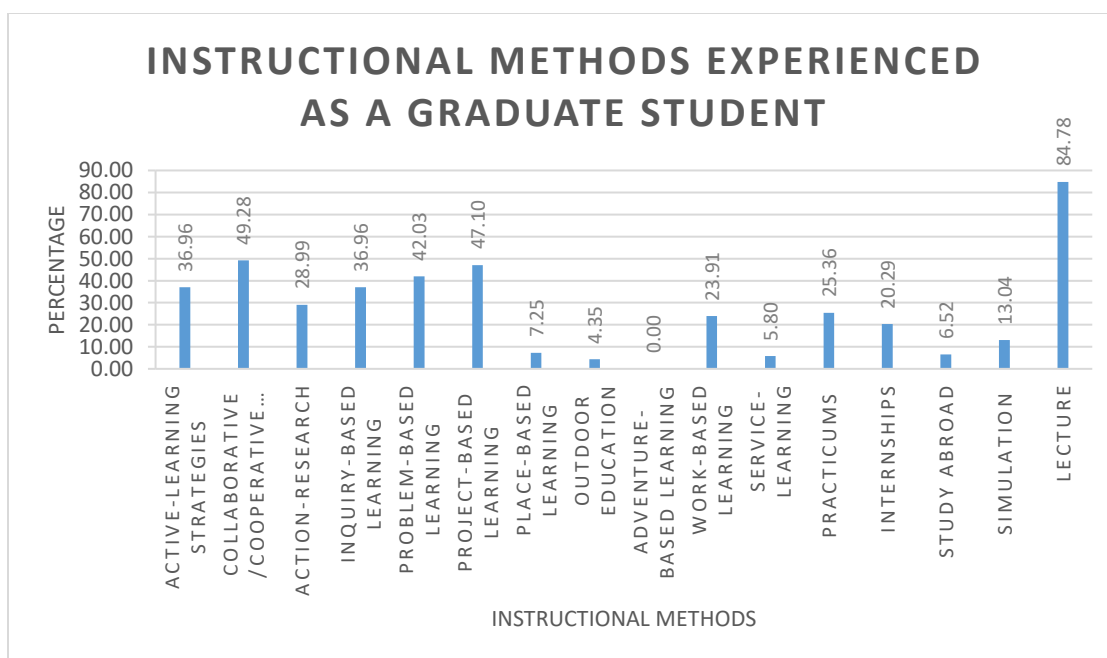
Formal training, development, and exposure to experiential learning. Taken

together the most common place college educators learned about experiential learning

was at a professional conference or workshop (eighty-two participants or 22.84%). The

second most common place was through colleagues and peers (sixty-nine participants or

19.22%). The third most common place was through websites, books and journal articles

(sixty participants or 16.71%). The fourth most common place was through on the job

trainings (fifty-nine participants or 16.43%). The fifth most common place was through

graduate work (thirty-two participants or 8.91%). The sixth most common place was

through college administration (fifteen participants or 4.18%). The seventh most common place was in undergraduate school (thirteen participants or 3.62%). Finally, twenty-nine participants or 8.08% of the respondents have not learned about experiential learning or were not in teaching roles.

Level of influence prior exposure had on current class instruction/teaching practice. Ten or 7.14% of the participants believe their prior experience with experiential learning has been extremely influential on their current instructional / teaching practices. Forty-one or 29.29% of the respondents believe their prior experience with experiential learning has been very influential on their current instructional / teaching practice. Another forty-one or 29.29% of the respondents believe their prior experience with experiential learning has been somewhat influential on their current instructional / teaching practice. Thirty-one or 22.14% of the respondents believe their prior experience with experiential learning has been slightly influential on their current instructional / teaching practice. Seventeen or 12.14% believe their prior experience with experiential learning has not been influential at all on their current instructional / teaching practice.

Sixty-five-point seven two percent (65.72%) of college educators believe their prior experience / exposure to experiential learning has been extremely, very, or somewhat influential on their current instructional / teaching practices. Additional examination is needed to determine the strength, direction and significance of these findings, as that type of analysis is beyond the scope of the current study.

Level of influence prior exposure had on current class assessment practices.
Seven or 4.96% of the participants believe their prior experience with experiential
learning has been extremely influential on their current assessment practices. Twenty-
two or 15.60% of the respondents believe their prior experience with experiential
learning has been very influential on their current assessment practices. Fifty or 35.46%
of the respondents believe their prior experience with experiential learning has been
somewhat influential on their current assessment practices. Thirty or 21.28% of the
respondents believe their prior experience with experiential learning has been slightly
influential on their current assessment practices. Thirty-two or 22.70% of the
respondents believe their prior experience with experiential learning has not been
influential at all on their current assessment practices.

Fifty-six- point zero two percent (56.02%) of college educators believe their prior
exposure to experiential learning has been extremely, very, or somewhat influential on
their current class assessment practices. Additional examination is needed to determine
the strength, direction and significance of these findings, as that type of analysis is
beyond the scope of the current study.

Ability to design classes and course outcomes. Overall college educators rate
their ability to design classes high. The two most common ratings college educators gave
themselves regarding their ability to design experiential learning classes were somewhat
competent (seventy-one responses or 50.71%) followed by extremely competent (thirty-
two responses or 22.86%). The two most common ratings college educators gave
themselves regarding their ability to design non-experiential classes was extremely

competent (eighty-four responses 60.87%) followed by somewhat competent (forty-three responses or 31.16%). The two most common ratings college educators gave their ability to design course level outcomes was extremely competent (sixty-one responses or 44.85%) followed by somewhat competent (fifty-seven responses or 41.91%).

See figure 4, for a more complete overview of how college educators rate their ability to design classes and course outcomes.

Figure 4: Perceived Ability to Design Classes and Outcomes.
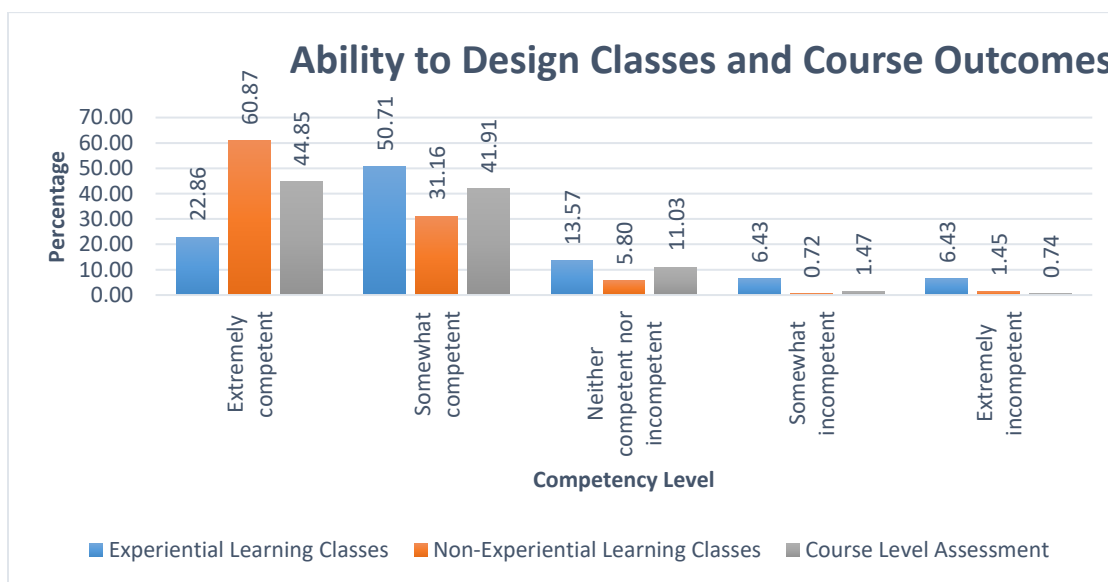
College educators who use experiential learning in their classes rated their ability to design experiential learning classes higher than college educators who do not use experiential learning in their classes. Specifically, eighty-six-point three percent (86.3%) of college educators who use experiential learning in their classes rated their ability to design experiential learning classes as extremely or somewhat competent compared to only forty percent (40.0%) of college educators who do not use experiential learning in their classes. Additional examination is needed to determine the strength, direction and

significance of these findings, as that type of analysis is beyond the scope of the current study.

Effectiveness of online experiential learning classes. Twenty or 14.7% of the participants believe online experiential learning classes can be extremely effective. Thirty or 22.1% of the participants believe online experiential learning classes can be very effective. Forty-four or 32.4% of the participants believe online experiential learning classes can be moderately effective. Thirty-one or 22.8% of the participants believe online experiential learning classes can be slightly effective. Eleven or 8.1% of the participants believe online experiential learning classes cannot be effective at all.

College educators who use experiential learning in their classes rated the perceived effectiveness of online delivery of experiential learning classes higher than college educators who do not use experiential learning in their classes. For example, seventy-four-point three percent (74.3%) of college educators who use experiential learning in their classes believe online experiential classes can be extremely, very, or moderately effective compared to fifty-two-point seven percent (52.7%) of college educators who do not use experiential learning in their classes. Additional examination is needed to determine the strength, direction and significance of these findings, as that type of analysis is beyond the scope of the current study.

Level of input students should have to design their learning experience. Seven or 5.0% of college educators believe students should have a great deal of input when it comes to designing their learning experience. Thirty-one or 22.1% of the college educators believe student should have a lot of input when it comes to designing their

learning experience. Seventy-five or 53.6% of college educators believe students should have a moderate amount of input when it comes to designing their learning experience. Twenty-five of 17.9% of college educators believe students should have a little bit of input when it comes to designing their learning experience. Two or 1.4% of college educators believe students should have no input when it comes to designing their learning experience.

College educators who use experiential learning in their classes differ slightly with those who do not use experiential learning in their classes on the level of input a student should have when it comes to designing their educational experience. Thirty-one-point six percent (31.6%) of college educators who use experiential learning in their classes believe students should have a great deal or a lot of input, when it comes to designing their educational experience compared to twenty-one-point one percent (21.1%) of college educators who do not use experiential learning in their classes.

Effectiveness of experiential learning as an instructional method. Forty-four or 32.8% of college educators believe experiential learning is a very effective instructional pedagogy. Sixty-four or 47.8% of college educators believe experiential learning is an effective instructional pedagogy. Twenty-five or 18.7% of college educators believe experiential learning is an average instructional pedagogy. None or 0.00% of college educators believe experiential learning is an ineffective instructional pedagogy. However, one or 0.7% of college educators believe experiential learning is a very ineffective instructional pedagogy.

College educators who use experiential learning in their classes rated the overall effectiveness of experiential learning as an instructional pedagogy higher than college educators who do not use experiential learning in their classes. Specifically, eighty-four-point two percent (84.2%) of college educators who use experiential learning in their classes believe experiential learning can be a very effective or effective instructional pedagogy compared to sixty-four-point seven percent (64.7%) of college educators who do not use experiential learning in their classes. Additional examination is needed to determine the strength, direction and significance of these findings, as that type of analysis is beyond the scope of the current study.

Level of expertise teaching experiential education classes. Fourteen or 10.2% of college educators have never taught experiential learning classes and chose not to rate their level of expertise. Eighteen or 13.1 % of college educators rate their experiential learning teaching expertise as novice. Twenty-three or 16.8% of college educators rate their experiential learning teaching expertise as advanced beginner. Thirty-five or 25.5% of college educators rate their experiential learning teaching expertise as competent. Thirty-three or 24.1% of college educators rate their experiential learning teaching expertise as proficient. Fourteen or 10.2% of college educators rate their experiential learning teaching expertise as expert.

College educators who use experiential learning in their classes rated their level of expertise or ability to teach experiential learning classes higher than college educators who do not use experiential learning in their classes. For example, forty-five-point three percent (45.3%) of college educators who use experiential learning in their classrooms

rate their ability to teach experiential classes at an expert or proficient level, compared to five-point three percent (5.3%) of college educators who do not use it. Additional examination is needed to determine the strength, direction and significance of these findings, as that type of analysis is beyond the scope of the current study.

Instructional methods and frequency of use. The six instructional methods used most frequently (always or most of the time) by college educators was active-learning (64.38% of the responses), inquiry / problem based (57.75% of the responses), project-based learning (55.04% of the responses), lecture (53.38% of the responses), collaborative learning (48.85% of the responses), and field, practicum, and internships (27.2% of the responses. The six instructional methods used least frequently (marked as used sometimes or never) by college educators was study abroad (94.36% of the responses), place, outdoor, nature, and adventure learning (90.98% of the responses), service-learning (80.80% of the responses), work-based learning (74.60% of the responses), other (70.70% of the responses) and simulation (68.55% of the responses).

See table 2, to see how often college educators use the following instructional methods in their classes.

Table 2: Use of Instructional Methods in College Educators Classes.

		Always	Most	Half	Sometimes	Never
Instructional Method	Active Learning	29.46%	34.88%	16.28%	16.28%	3.10%
	Inquiry / Problem-Based Learning	20.15%	30.60%	18.66%	25.37%	5.22%
	Project-Based Learning	19.85%	25.19%	17.56%	29.77%	7.63%
	Place, Outdoor, Nature, Adventure Learning	1.64%	3.28%	4.10%	22.13%	68.85%
	Work-Based Learning	7.94%	7.14%	10.32%	30.16%	44.44%
	Service-Learning	3.20%	9.60%	6.40%	27.20%	53.60%
	Field Experiences, Practicum, and Internships	10.40%	16.80%	12.00%	32.00%	28.80%
	Study Abroad	1.61%	1.61%	2.42%	25.81%	68.55%
	Lecture	20.30%	33.08%	23.31%	21.05%	2.26%
	Collaborative Learning	16.79%	32.06%	19.85%	29.01%	2.29%
	Simulation	5.65%	11.29%	14.52%	37.10%	31.45%
	Other	5.05%	10.10%	14.14%	32.32%	38.38%
		Always	**Most**	**Half**	**Sometimes**	**Never**
		Frequency of Use				

Level of input students should have to modify their learning experience.

Eight or 5.9% of college educators believe students should have a great deal of input when it comes to modifying their learning experience. Nineteen or 14.1% of college educators believe students should have a lot of input when it comes to modifying their learning experience. Sixty-two or 45.9% of college educators believe students should have a moderate amount of input when it comes to modifying their learning experience. Forty-one or 30.4% of college educators believe students should have a little bit of input when it comes to modifying their learning experience. Five or 3.7% of college educators believe students should have no input when it comes to modifying their learning experience.

College educators who use experiential learning in their classes disagree slightly with those who do not use experiential learning in their classes on the level of input a student should have when it comes to modifying their learning experiences. Twenty-three-point four percent (23.4%) of college educators who use experiential learning in

their classes believe students should have a great deal or a lot of input when it comes to modifying their educational experience compared to sixteen-point seven percent (16.7%) of college educators who do not use experiential learning in their classes.

Level of expertise evaluating experiential learning classes. Twenty-one or 15.7% of college educators have never evaluated experiential education. Twenty-one or 15.7% of college educators rate their level of expertise as novice. Twenty-three or 17.2% of college educators rate their level of expertise as advanced beginner. Thirty-six or 26.9% of college educators rate their level of expertise as competent. Twenty-three or 17.2% of college educators rate their level of expertise as proficient. Ten or 7.5% of college educators rate their level of expertise as expert.

College educators who use experiential learning in their classes rated their expertise level or ability to evaluate experiential learning classes higher than college educators who do not use experiential learning in their classes. For example, thirty-two-point three percent (32.3%) of college educators who use experiential learning in their classes rated their ability to evaluate experiential learning classes as expert or proficient compared to only five-point-sex percent (5.6%) of college educators who do not use it. Additional examination is needed to determine the strength, direction and significance of these findings, as that type of analysis is beyond the scope of the current study.

Assessment method and frequency of use. The six assessment methods used most frequently (always or most of the time) by college educators was instructor feedback / evaluation (73.28%), student participation (68.42%), performance / demonstration of skills (58.14%), presentations / teaching episodes (49.62%), and

formative quizzes / exams (49.61%). The six assessment methods used least frequently (sometimes or never) by college educators was stake-holder feedback (77.60%), peer feedback/ evaluation (56.82%), case studies (55.73%), self-feedback / evaluation (54.68%), reflective writing / journaling (51.14%), and direct observations (50.78%).

See table 3, to see how often college educators use the following assessment methods in their classes.

Table 3: Use of Assessment Methods in College Educators Classes.

Assessment Method	Always	Most	About half	Sometimes	Never
Instructor Feedback / Evaluation	46.56%	26.72%	9.92%	13.74%	3.05%
Student Participation	42.86%	25.56%	9.77%	16.54%	5.26%
Presentations / Teaching Episodes	22.90%	26.72%	12.21%	31.30%	6.87%
Performing or Demonstrating Skills	31.78%	26.36%	14.73%	17.05%	10.08%
Summative Quizzes / Exams	18.75%	28.13%	14.84%	28.13%	10.16%
Formative Quizzes / Exams	19.08%	30.53%	13.74%	25.95%	10.69%
Peer Feedback / Evaluation	14.39%	15.91%	12.88%	43.94%	12.88%
Research Papers	20.15%	22.39%	20.15%	23.88%	13.43%
Student Attendance / Presence	37.88%	23.48%	8.33%	16.67%	13.64%
Self-Feedback / Evaluation	15.63%	18.75%	10.94%	39.84%	14.84%
Direct Observations	15.63%	17.97%	15.63%	31.25%	19.53%
Reflective Writing / Journaling	20.61%	19.08%	9.16%	30.53%	20.61%
Case Studies	11.45%	16.03%	16.79%	33.59%	22.14%
Resource Projects	12.60%	16.54%	22.05%	22.05%	26.77%
Site- Stakeholder Feedback / Evaluation	9.60%	8.00%	4.80%	32.00%	45.60%

Frequency of Use (%)

Life skills students are learning in classes. The five most common life skills college educators believe students are learning in their classes are critical thinking (10.53%), communication (9.63%), problem solving (9.55%), collaboration (8.33%), and responsibility (7.43%). The life skills college educators believe college students are learning the least in their classes are other (0.57%), citizenship (2.37%), leadership (4.49%), personal transformation / development (4.90%), and job specific skills (5.22%).

See table 4, for a more complete list of life skills college educators believe students are learning in their classes.

Table 4: Life Skills College Educators believe Students are Learning in their Classes.

Skill	%	Response Count	Skill	%	Response Count
Citizenship	2.37%	29	Other	0.57%	7
Collaboration	8.33%	102	Perseverance	6.12%	75
Communication	9.63%	118	Personal Transformation / Development	4.90%	60
Creativity	5.31%	65	Problem Solving	9.55%	117
Critical Thinking	10.53%	129	Professionalism	7.02%	86
Exposure to Diversity and Culture	5.80%	71	Responsibility	7.43%	91
Job Specific Skills	5.22%	64	Self-Direction	6.20%	76
Leadership	4.49%	55	Time Management	6.53%	80
Not Applicable	0.00%	0			

After looking at the life skills college educators believe their students are learning in their classes, the researcher compared the life skill beliefs of college educators who use experiential learning in their classes with those that do not use experiential learning in their classes.

See figure 5, for a comparison of life skill learned in classes taught by college educators who use experiential learning in their classes verses those that do not use experiential learning in their classes.

Figure 5: Comparing Life Skill Learned in Classes Taught by College Educators

Who Use Experiential Learning Verses Those That Do Not.
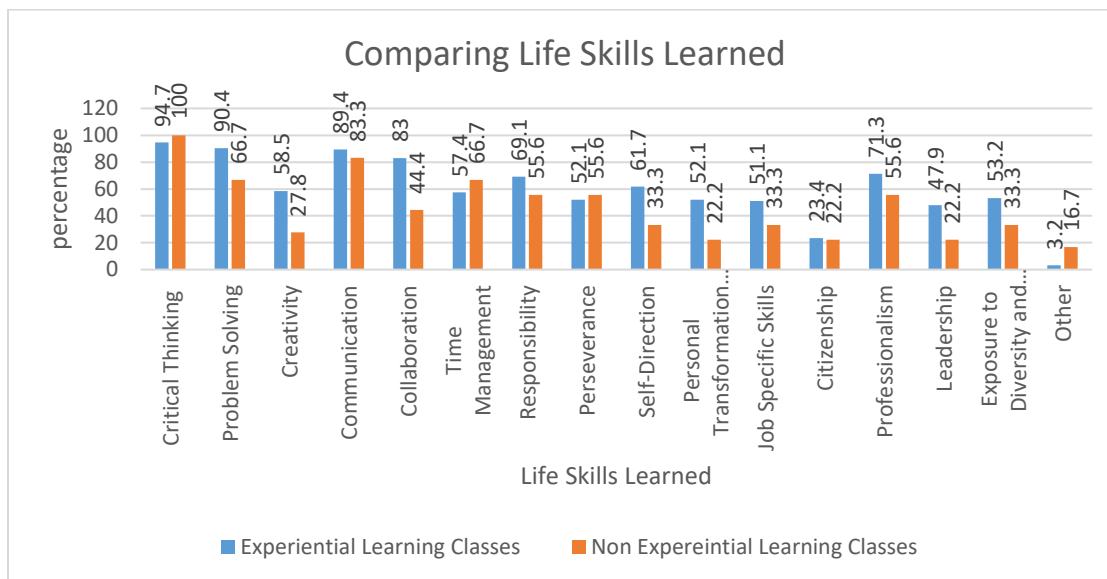
Level of input students should have to evaluate their learning experience.

Five or 3.7% of college educators believe students should have a great deal of input when it comes to evaluating their learning experience. Sixteen or 11.9% of the college educators believe students should have a lot of input when it comes to evaluating their learning experience. Fifty-four or 40.3% of college educators believe students should have a moderate amount of input when it comes to evaluating their learning experience. Forty-seven or 35.1% of college educators believe students should have a little bit of input when it comes to evaluating their learning experience. Twelve or 9.0% of college educators believe students should have no input when it comes to evaluating their learning experience.

When it comes to the level of input a student should have in evaluating their learning experience, there was a small difference between college educators who use

experiential learning in their classes compared to those who do not. Seventeen-point zero percent (17.0%) of college educators who use experiential learning in their classes believe students should have a great deal or a lot of input when it comes to evaluating their educational experience compared to 11.8% of college educators who do not use experiential learning in their classes.

In this chapter, the results of the research were presented. This included discussing the results of each survey item. This included descriptive statistics related to the relationship, direction, and mean, median, and mode ratios of the participants in this research. Comparison of instructors who use experiential learning in their classes with those who have not used experiential learning in their classes were discussed. Other topics discussed in this chapter were demographic, professional training, instructional methods, assessment tools, and life skills. In the next chapter themes, conclusions, and future research will be discussed.

Chapter V

Discussion

The purpose of this study was to investigate how college educators' perceptions of experiential learning influence the design, implementation, and assessment of their experiential learning courses. The primary research question was: How do college educators' perceptions of experiential learning influence the design, implementation, and assessment of their courses? In addition to a primary research question this research project had two sub questions. The first sub question was: In what ways have college educators had prior experience using experiential learning in their courses? The second sub question was: What is the relationship between college educators' prior experiences with experiential learning and how they utilize that prior experience to design, instruct, and or assess their courses?

Data Findings and Implications for Practice

Many researchers have described the history of the United States educational system and its ongoing battle of passive vs active learning (Kiefer and Kemple, 1998; Lewis and Williams, 1994). In 2016, Wurdinger speculated that the pendulum was starting to move from passive learning to active learning again. The results of this research support his hypothesis. Specifically, the findings in this research indicate most college educators who participated in this research study reported using experiential learning in their classes. Also, this research study found that college educators who use experiential learning in their classes rated the overall effectiveness of experiential learning as an instructional pedagogy higher than college educators who do not use experiential learning in their classes. In addition, college educators who use experiential

learning in their classes rated the perceived effectiveness of online delivery of experiential learning classes higher than college educators who do not use experiential learning in their classes. Additional examination is needed to determine the strength, direction and significance of these findings, as that type of analysis is beyond the scope of the current study. Results of this study also indicate that those who use experiential learning instructional pedagogy find it useful and effective. Taken together these findings support Cowart's (2010) claims that colleges, administrators and faculty who do not use experiential learning have concerns about its usefulness and effectiveness.

This research study found that college educators who use experiential learning in their classes rated their ability to design, teach, and evaluate experiential learning classes higher than college educators who do not use experiential learning. Additional examination is needed to determine the strength, direction and significance of these findings, as that type of analysis is beyond the scope of the current study. Results from this study suggest that the more exposure, experience, and confidence a college educator has with an instructional pedagogy, the more confident they will be in their ability to use that instructional pedagogy. The results of this research study are similar to Bandura's (1986) and Chang, Lin, & Song's (2011) findings that propose as self-efficacy increases so does the likelihood to engage in a given behavior.

One interesting finding from this research was related to the level of autonomy given to students to design, modify, and evaluate their learning experiences. This research found that college educators who use experiential learning in their classes believe students should have a greater level of input to design, modify, and evaluate their

learning experiences than college educators who do not use experiential learning in their classes. These results imply that college educators who use experiential learning in their classes allow students greater autonomy in the classroom. Additional examination is needed to determine the strength, direction and significance of these findings, as that type of analysis is beyond the scope of the current study. Currently, there is very little research on the level of autonomy given to students by college educators.

Johnson and Seagul's (1968) research suggest that examining how teachers are taught, can predict how they will teach. Although the purpose of this study was not to test Johnson and Seagul's outcome, this research did investigate how a college educators' prior experience influenced their class design, instruction, and assessment practices. Results from this study indicate lecture, project-based, collaborative/cooperative, problem-based, active, inquiry-based, practicums, and action research were the most common instructional methods taught to this sample (college educators) when they were students. Results from this study indicate adventure, place-based, service-learning, outdoor education, study abroad, simulation, work-based, and internships were the least commonly used instructional methods used with college educators when they were students.

See figure 6, for a visual summary of instructional methods taught to this population when they were students. This graph combines scores from this populations k-12, undergraduate, and graduate school experiences.

Figure 6: Instructional Methods Taught to Population when they were Students
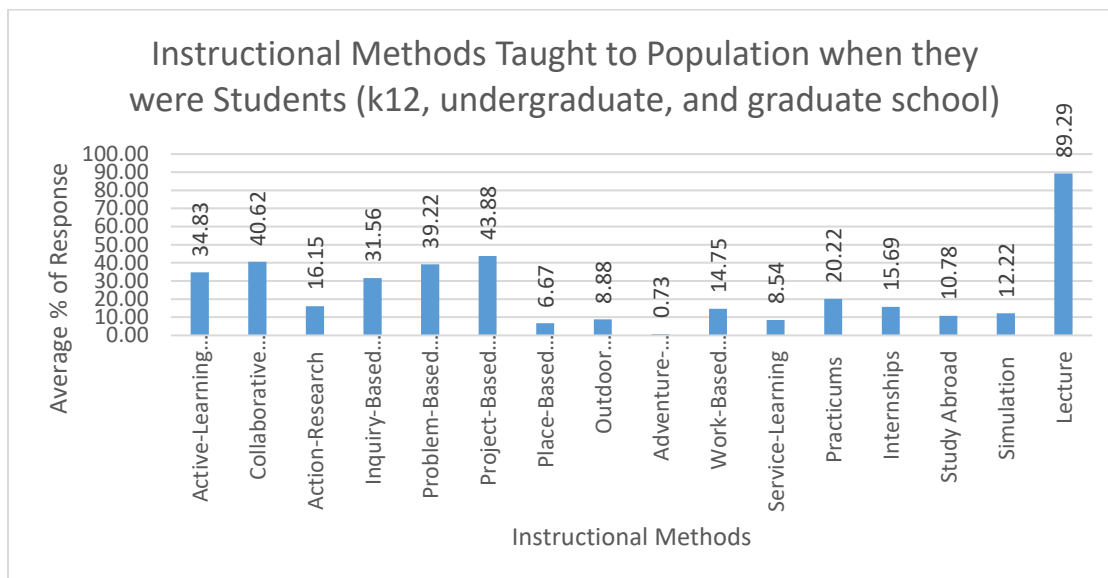
In looking at the instructional practices of this sample as professionals the researcher found the instructional methods used most frequently (marked as always use, most of the time, about half the time, and some of the time) were active-learning, inquiry / problem based, lecture, collaborative learning, project-based, and field experiences. Furthermore, the instructional methods used least frequently (marked as always use, most of the time, about half the time, and some of the time) were study abroad, place (outdoor, nature, adventure), service-learning, work-based, other, and simulation.

See figure 7, for a visual summary of instructional methods used by college educators. This figure, takes the average frequency use % for items marked as used always, used most of the time, used about half the time, and used some of the time.

**Figure 7:** Instructional Methods Used by College Educators
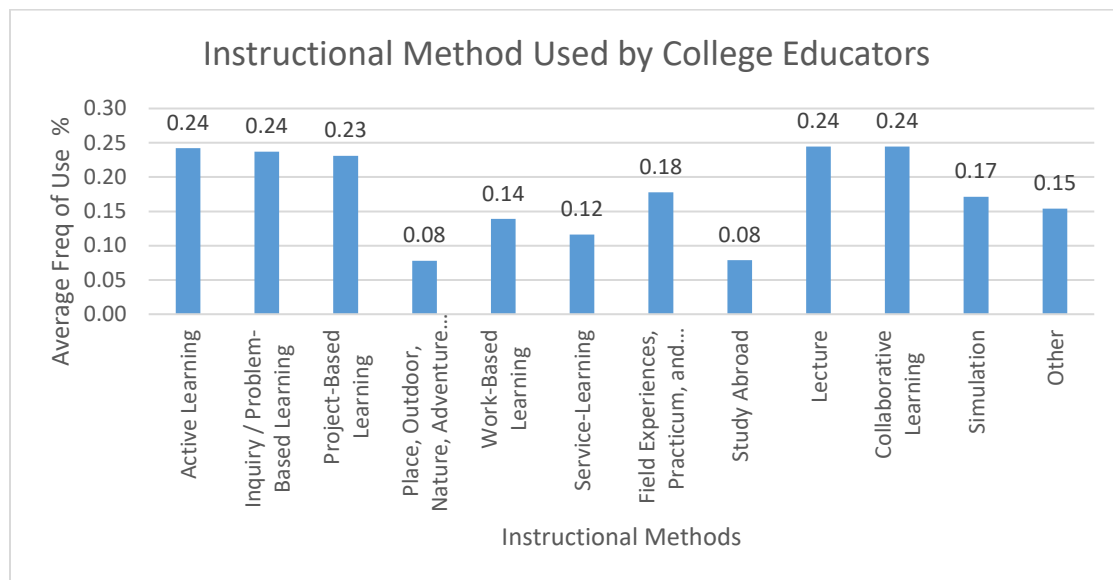
Subsequently, this research supports Johnson and Seagul's (1968) research, which claims teachers typically teach the way they were taught. These results of this study also show that college educators use a wide variety of experiential instructional methods in their classrooms. Although this research did not look at the assessment experiences of this population when they were students, the researcher speculates that the assessment strategies used on this population when they were students would likely influence their instructional practices as college educators. In retrospect that oversight in this study was a missed opportunity.

Chan (2011) and Jacoby (2015) describe common assessments used in experiential learning. The assessment described in these authors writings support what the researcher found, which is a wide variety of assessment options are used by college educators. Specifically, the results of this study indicate the assessment methods used most frequently (marked as always use, most of the time, about half the time, and some

of the time) by college educators was instructor feedback / evaluation, student

participation, presentations/teaching episodes, performance / demonstration of skills,

summative quizzes, formative quizzes, peer feedback, research papers, and student

attendance. In addition, the assessment methods used least frequently (marked as always

use, most of the time, about half the time, and some of the time) by college educators

were student feedback/evaluation, direct observation, reflective writings, case studies,

resource projects, and site-stakeholder feedback.

See figure 8, for a summary of assessment methods used by college educators.

This figure, takes the average frequency use % for items marked as used always, used

most of the time, used about half the time, and used some of the time.

Figure 8: Assessment Methods Used by College Educators
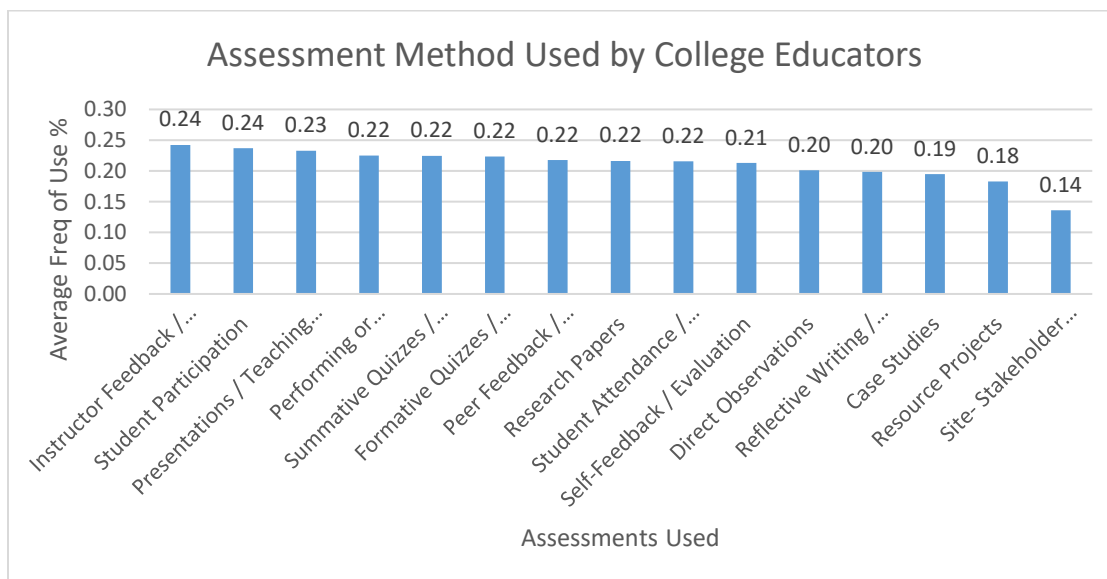
In addition to looking at the evaluation methods the researcher looked at course

objectives. Wurdinger and Qureshi (2015) and Wurdinger and Allison (2017) identified

common life skills assessed in experiential learning classes such as problem solving,

communication, creativity, responsibility and self-direction. Specifically, this research found critical thinking, communication, problem solving, collaboration, and responsibility to be the five most common life skills college educators believe students are learning in their classes. This researcher also found that life skills such as collaboration, creativity, personal transformation, job specific skills, and self-direction were taught more in experiential learning classes. Thus, the assessment results of this study support other authors research.

Omer, Choi, Brien, and Parry (2017) found most faculty develop competence (or self-efficacy) through faculty development opportunities such as face-to-face workshops, seminars, short courses, fellowships, and formal classes. This research supports the previous researchers' findings by identifying formal on the job trainings (conferences, workshops), collaboration with other professionals (peers, administrators), self-study (journals, books, websites), and college classes (undergraduate, graduate) as places where college educators developed competence and learned about experiential learning. In addition, this research found that most educators believe these trainings or their prior exposure to experiential learning was extremely, very, or somewhat influential on their current instruction and assessment practices. Additional examination is needed to determine the strength, direction and significance of these findings, as that type of analysis is beyond the scope of the current study. In summary the results from this study suggest that exposing college educators to experiential learning pedagogy increases the likelihood that they will merge these concepts and philosophies into their educational practice. The results of this study also suggest that designing experiential learning

classes, programs, or workshops, publishing experiential learning literature, and

modeling experiential instructional practices are good strategies for college educators

who want to make a systematic change by advocating for experiential learning pedagogy.

Limitations

One of the limitations of this research is related to construct validity or adequate

definitions and measurement of variables. In this study, the researcher combines project-

based, problem-based, place based, community, outdoor, and adventure-based learning

under one experiential phenomenon. The researcher also combines practicums, clinical

field work and internships together under a single phenomenon. Ultimately, the

researcher combines the established definitions from each of these constructs into a new

definition which highlights experiential learning similarities established in experiential

literature. Because of this redefinition, it is entirely possible that some of the data related

to these construct definitions may be limited.

In this study roughly sixty-five percent (65%) of the respondents indicated they

had prior experience using experiential leaning in their classes. Eighteen percent (18%)

of respondents said they were unsure if they had prior experience using experiential

learning and seventeen percent (17%) of the respondents said they did not use

experiential learning in their classes. There is a possibility that participants with previous

exposure to experiential learning may inflate the data by scoring differently than others

on this survey due to a bias with the content. Moreover, because of this, it is possible that

any measurement correlations and associations may be skewed as well.

Omitted, extraneous, and confounding variables are three related concepts that can be defined as unmeasured or unobserved variable's which influence the outcome. These three factors should also be considered when interpreting the data. In closing, the results of the study should not be generalized to other populations or areas. Research design characteristics (descriptive) and sample size also limit the generalizability of this study.

Recommendations for Future Research

Evaluating the relationship of how college educators were taught and how they teach should be further investigated. Comparing different experiential instructional and assessment practices of college educators who are in certain departments or who have different titles/ranks, or years of experience should be considered. Looking at program and institutional outcomes of experiential learning practices should be an area of future research as well. One area that should be researched further is the instructional autonomy given to students in designing, modifying, and evaluating their own leaning experiences. In closing, more research needs to be conducted on the relationship between college educators' prior experiences with experiential learning and how they utilize that prior experience to design, instruct, and or assess their courses.

Conclusion

In this chapter the author discussed chapter IV's data findings through an analytical frame. This included connecting this research with other researchers' findings. It also included discussing how these results might impact practice, as well as some of the

limitation used in interpreting results. Finally, this chapter offered suggestions for future

research.

References

Adams, D. (2001). Learning from experience – making the most of work-based learning. *International Journal of Contemporary Hospitality Management, 13*, 235-240.

Aditomo, A., Goodyear, P., Bliuc, A. M., & Ellis, R. (2013). Inquiry-based learning in higher education: Principal forms, educational objectives, and disciplinary variations. *Studies in Higher Education, 38*(9), 1239–1258.

Ajayi, L. J., & Lee, S. K. (2005). Perceptual difference between intern teachers and university supervisors on the expectations and preferences for the fieldwork program. *Education, 126*(2), 259-274.

Amador, J. A., Miles, L., & Peters, C. B. (2006). *The practice of problem-based learning: A guide to implementing PBL in the college classroom.* Bolton, MA: Anker Publishing Company Inc.

Apedoe, X. S., Walker, S. E., & Reeves, T. C. (2006). Integrating inquiry-based learning into undergraduate geology. *Journal of Geoscience Education, 54*(3), 414-421.

Bales, R. G. (1950). Interaction process analysis: A method for the study of small groups. Chicago: The University of Chicago Press.

Bandura, A. (1986). *Social Foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Beard, C., & Wilson, J. P. (2013). *Experiential learning: A handbook for education, training, and coaching (3rd ed).* Philadelphia, PA: Kogan Page.

Beatty, J. E. (2010). For which future? Exploring the implicit futures of service-learning. *International Journal of Organizational Analysis, 18*(2), 181-197.

Berry, W. (2008). Surviving lecture: A pedagogical alternative. *College Teaching, 56*(3), 149-153.

Bobilya, A. J., & Daniel B. (2011). Eleanor Duckworth: The teacher's teacher. In Smith, T. E., & Knapp, C. E., *Sourcebook of experiential education: Key thinkers and their contributions* (pp. 73-80). New York: Routledge Taylor & Francis Group.

Boud, D., & Feletti, G. (1997). *The challenge of problem based learning* (2nd ed). London, England: Kogan Page.

Boud, D., & Solomon, N. (2001). *Work-based learning: A new higher education?* Buckingham: SRHE- Open University Press.

Breunig, M. (2011). Paulo Freire: Critical praxis and experiential education. In Smith, T. E., & Knapp, C. E., *Sourcebook of experiential education: Key thinkers and their contributions* (pp. 56-63). New York: Routledge Taylor & Francis Group.

Bringle, R. G., & Hatcher, J. A. (1996). Implementing service-learning in higher education. *Journal of Higher Education, 67*, 221-239.

Buck Institute for Education (2015). *Gold standards for PBL: Essential project design element*. Retrieved on 08/10/2018 from, essential_project_design_elements.

Burke, D. D., & Carton, R. (2013). The pedagogical, legal, and ethical implications of unpaid internships. *Journal of Legal Studies Education, 30*(1), 99-130.

Butin, D. W. (2003). Of what use is it? Multiple conceptions of service learning within education. *Teachers College Record, 105*(9), 1674-1692.

Butler, T. A., (2014). School leadership in the twenty-first century: Leading in the age of reform. *Peabody Journal of Education, 89*(5). 593-602.

Campbell, J. M. (2006). *Essentials of clinical supervision: Essentials of mental health practice*. Hoboken, NJ: John-Wiley and Son.

Chan, C. K. Y. (2011). Assessment for community service types of experiential learning in the engineer discipline. *European Journal of Engineering Education, 37(*1), 29-38.

Chang, T., Lin, H., & Song, M. (2011). University faculty member's perceptions of their teaching efficacy. *Innovations in Education and Teaching International, 48(*1), 46-60.

Chin, C., & Li-Gek, C. (2008). Problem-based learning tools. *Science Teacher, 75*(8), 44-49.

Christenson, C., Horn, M., & Johnson, C. (2008). *Disrupting class: How disruptive innovation will change the way the world learns.* New York: McGraw Hill.

Clarke, D. J., & Copeland, L. (2003). Developing nursing practice through work-based learning. *Nurse Education in Practice, 3*, 236-244.

Clark, R. W., Threeton, M. D., & Ewing, J. C. (2010). The potential of experiential learning models and practices in career and technical education and career and technical teacher education. *Journal of Career and Technical Education, 25*(2), 46-62.

Clark, J., & White, G. W. (2010). Experiential learning: A definitive edge in the job market. *American Journal of Business Education, 3*(2), 115-118.

Clem, J. M., Mennicke, A. M., & Beasley, C. (2014). Development and validation of the experiential learning survey. *Journal of Social Work Education, 50*, 490-506.

Collier, P. J. (2013). Mentoring: Relationship building for empowerment. In Cress, C. M,
Collier, P. J., Reitenauer, V. L., & Associates (2nd Ed), *Learning through service:
A student guidebook for service-learning and civic engagement across academic
disciplines and cultural communities* (pp. 113-121). Sterling, VA: Stylus
Publishing LLC.

Collier, P. J., & Morgan, D. L. (2003). Is that paper really due today?: Differences in
first-generation and traditional college student's understandings of faculty
members class related expectations. Proceedings of 2003 Hawaii International
Conference on Education. University of Hawaii-West, Oahu.

Collier, P. J., & Voegele, J. D. (2013). Groups are fun, groups are not fun: Teamwork for
the common good. In Cress, C. M, Collier, P. J., Reitenauer, V. L., & Associates
(2nd Ed), *Learning through service: A student guidebook for service-learning and
civic engagement across academic disciplines and cultural communities* (pp. 51-
75). Sterling, VA: Stylus Publishing LLC.

Conn, S. R., Roberts, R. L., & Powell, B. M. (2009). Attitudes and satisfaction with
hybrid model of counseling supervision. *Educational Technology and Society,
12*(2), 298-306**.**

Coghlan, D., & Brannick, T. (2001). *Doing action research in your own organization.*
London, Sage Publishing.

Cozby, P. C., & Bates, S. C. (2015). *Methods in behavioral research (12th ed).* New
York. McGraw Hill Education.

Cowart, M. R. (2010). Growing and funding experiential learning programs: A recipe for

success. *New Directions for Teaching and Learning, (124),* 63-68.

Cress, C. M., Collier, P. J., Reitenauer, V. L, & Associates (2013). *Learning through serving: A student guidebook for service-learning and civic engagement across academic disciplines and cultural communities (2nd ed).* Sterling, VA: Stylus Publishing LLC.

Cress, C. M., Stokamer, S. T., Van Cleave, T. J., & Edwin, C. (2013). Global and immersive service-learning: What you need to know as you go. In Cress, C. M, Collier, P. J., Reitenauer, V. L., & Associates (2nd Ed), *Learning through service: A student guidebook for service-learning and civic engagement across academic disciplines and cultural communities* (pp. 177-189). Sterling, VI: Stylus Publishing LLC.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches (4th ed).* Thousand Oaks, Ca: Sage Publishing.

DeIve, C. I., Mintz, S. D., & Steward, G. M. (1990). *Community service as values education: New directions for student services.* San Francisco, CA: Josey Bass.

Dewey, J. (1897). My pedagogic creed. *The School Journal. 54*, 77-80.

Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. New York: NY: D.C. Heath and Company.

Dewey, J. (1938). *Experience & Education.* New York: Free Press.

Diambra, J. F., Cole-Zakrzewski, K. G., & Booher, J. (2004). A comparison of internship stage models: Evidence from intern experiences. *Journal of Experiential Education, 27*(2), 191-212.

Divine, R. L., Linrud, J. K., Miller, R. H., & Wilson, J. H. (2007). Required internship programs in marketing: Benefits, challenges and determinants of fit. *Marketing Education Review, 17*(2), 45-52.

Dochy, F., Segers, M., Van den Bossche, P., & Gijbels, D. (2003). Effects of problem-based learning: A meta-analysis. *Learning and Instruction, 13*(5), 533-568.

Drummond, C. N. (2003). Carl Rogers and the origins of experiential learning. *Journal of Geoscience Education, 51*(5). p. 462.

Duncan, L. L., Duncan, B. R., Burkhardt, B. L., & Benneyworth, L. M. (2015). Getting the most out of dual-listed courses: Involving undergraduate students in discussion through active learning techniques. *Journal of College Science Teaching, 45*(1), pg. 24-31.

Egan, G. (2002). *The skilled helper (7th Ed)*. Pacific Grove, CA: Brooks-Cole.

Erford, B. T. (2013). *Assessment for counselors (2nd ed).* Belmont, CA: Brooks-Cole Cengage Learning.

Erford, B. T. (2015). *Research and evaluation in counseling (2nd ed).* Stamford, CT: Cengage Learning.

Exploratorium Institute for Inquiry (2018). Pathways to learning. Retrieved on 08/10/2018 from: https://www.exploratorium.edu/sites/default/files/pdfs/ifi/Pathways-to-Learning.

Eyler, J. S., Giles, D. E., Stenson, C. M., & Gray, C. J. (2001). At a glance: What we know about the effects of service learning on college students, faculty, institutions, and the community 1993-2000*, Higher Education, 139,* 1-121.

Eyler, J. S., & Giles, D. E. (1999). *Where's the learning in service learning?* San Francisco, Ca. Jossey-Bass.

Eyler, J., Giles, D., & Schmiede, A. (1996). *A practitioner's guide to reflection in service learning: Students voice and reflections.* Nashville, TN: Vanderbilt University.

Felder, R. M., & Brent, R. (2004). The intellectual development of science and engineering students. Part I: Models and challenges. *Journal of Engineering Education, 93*, 269-277.

Furman, N., & Sibthorp, J. (2013). Leveraging Experiential Learning Techniques for Transfer. *Wiley Periodicals Inc, 137*, 17-26.

Furco, A. (1996). Service-learning: A balanced approach to experiential education. In Jacoby, B. (2015). Service-learning essentials: Questions, answers, and lessons learned (pp. 1-25). San Francisco, CA: John-Wiley & Son-Jossey-Bass.

Furco, A. (2002). *Self-assessment rubric for the institutionalization of service-learning in higher education*. Retrieved on 10/28/2018 from; viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1105&context=slceslgen..

Furco, A., & Holland, B. (2009). *Securing administrator support for service-learning institutionalization*. In Jacoby, B. (2015). Service-learning essentials: Questions, answers, and lessons learned (pp. 253-287). San Francisco, CA: John-Wiley & Son-Jossey-Bass.

Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.

Galvan, J. L. (2014). *Writing literature reviews: A guide for students of the social and behavioral sciences. (6th ed).* Glendale, CA: Pyrczak Publishing.

Gardner, H. (1999). *Intelligence reframed: Multiple intelligences for the 21st century.* New York: Basic Books.

Gelmon, S. B., Agre-Kippenhan, S., & Cress, C. M. (2013). Beyond a grad: Are we making a difference: The benefits and challenges of evaluation learning and serving. In Cress, C. M, Collier, P. J., Reitenauer, V. L., & Associates (2nd Ed), *Learning through service: A student guidebook for service-learning and civic engagement across academic disciplines and cultural communities* (pp. 163-176). Sterling, VA: Stylus Publishing LLC.

Gibbs, P., & Garnett, J. (2007). Work-based learning as a field of study. *Research in Post-Compulsory Education, 12*(3), 409-421.

Hamm, M., & Adams, D. (1992). *The collaborative dimensions of learning.* Norwood, NJ: Ablex.

Harris, T. H., & Sherblum, J. C. (1999). *Small groups and team communication.* Needham Heights, MA: Allyn & Bacon.

Haas, C., & Furman, N. (2008). Operation recreation, adventure challenge: Teaching programming through problem based learning theory. *Schole: A Journal of Leisure Studies Recreation Education, 23*, 60-65.

Han, L. F., & Foskett, N. H., (2007). Objectives and constraints in geographical field work. Teachers' attitudes and perspectives in senior high schools in Taiwan.

International Research in Geographical and Environmental Education, 16(1), 5-20.

Havard, T. S., Morgan, J., & Patrick, L. (2010). Providing authentic leadership opportunities through collaboratively developed internships: A university-school district partnership initiative. *Journal of Research on Leadership Education, 5*(12). 460-480.

Hawkins, R. O., Kroeger, S. D., Mustin-Rao, S., Barnett, D. W., & Ward, J. E. (2008). Preservice training in response to intervention: Learning by doing and interdisciplinary field experience. *Wiley Periodicals Inc, 45(*8), 745-762.

Henderson, A., & Trede, F. (2017). Strengthening attainment of student learning outcomes during work-integrated learning: A collaborative governance framework across academia, industry and student. *Asia-Pacific Journal of Cooperative Education, 18*(1), 73-80.

Heron, J. (1990). *Helping the client: A creative, practical guide.* London: Sage Publishing.

Heron, J. (1999). *The complete facilitators handbook.* London: Kogan Page.

Higgins, P., & Nicol, R. (2011). Sir Patrick Geddes: Vivendo discimus – by living we learn. In Smith, T. E., & Knapp, C. E., *Sourcebook of experiential education: Key thinkers and their contributions* (pp. 32-40). New York: Routledge Taylor & Francis Group.

Holmes, D. (2003). *One-to-one leadership: Coaching in Schools*. Nottingham: National College for School Leadership.

Hunt, J. S. (2011). Alfred North Whitehead: Educational emergence. In Smith, T. E., &
Knapp, C. E., *Sourcebook of experiential education: Key thinkers and their
contributions* (pp. 41-47). New York: Routledge Taylor & Francis Group.

Inkster, R., & Ross, R. (1998). Monitoring and supervising the internship. National
Society for Experiential Education Quarterly, 23(4), 10-26.

Jacoby, B. (2015) Service-Learning Essentials: Questions, Answers, and Lessons
Learned. San Francisco, CA: John Wiley & Sons.

James, W. (1890). The principles of psychology. (vol I & II). New York, NY: Rinehart
and Winston.

James, W. (1904) Does "consciousness" exist. *Journal of Philosophy, Psychology, and
Scientific Method, 1*, 477-491.

James, W. (1912). Essays in radical empiricism. New York: Longmans, Green & Co.

Johnson, K. (2013). Creating experiential learning in the graduate classroom through
community engagement. *American Journal of Business Education, 6*(1), 149-154.

Johnson, D. W., Johnson, R. T., & Johnson-Holubec, E., (1994). *The new circles of
learning: Cooperation in the classroom and school*. Alexandria, VA. The
Association for Supervision and Curriculum Development.

Johnson, J. L., & Seagull, A. A. (1968). Form and function in the affective training of
teachers. *Phi Delta Kappan, 50*(3), 166-170.

Jones, S. R., Segar, T. C., & Gasiorski, A. L. (2008). "A double edged sword": College
students' perceptions of required high school service-learning. *Michigan Journal
of Community Service Learning,* 5-17.

Joyner, R. L., Rouse, W. A., & Glatthorn, A. A. (2013). *Writing the winning thesis or dissertation: A step-by-step guide (3rd ed.).* Thousand Oaks, Ca: Sage-Corwin Publishing.

Kane, L. (2004). Educators, learners and active learning methodologies. *International Journal of Lifelong Education, 23(*3), 275-286.

Karakas, F., & Kavas, M. (2009). Service-learning 2.0 for the twenty-first century: Towards a holistic model for global social positive change. *International Journal of Organizational Analysis, 17(*1), 40-59.

Kiefer, J., & Kemple, M. (1998). *Digging deeper: Integrating youth gardens into schools and communities.* Montpelier, VT: Common Roots Press.

Kimbro, R., & Schachter, A. (2011). Neighborhood poverty and maternal fears of children's outdoor play. *Family Relations, 60*(4), 461-475.

Kiser, P. M. (2016). The human services internship: Getting the most from your experiences (4th ed). Boston, MA: Cengage Learning.

Kolb, A. Y., & Kolb, D. A. (2017). *The experiential educator: Principles and practices of experiential learning.* Kaunakakai, HI: EBLS Press.

Kumar, M., & Natarajan, U. (2007). A problem-based learning model: Showcasing an educational paradigm shift. *The Curriculum Journal, 18*(1), 89-102.

Larmer, J., Mergendoller, J., & Boss, S. (2015). *Setting the standards for project based learning: A proven approach to rigorous classroom instruction.* Novato, CA: Buck Institute for Education.

Lemieux, C. M., & Allen, P. A. (2007). Service learning in social work education: The
    state of knowledge, pedagogical practicalities, and practice conundrums. *Journal
    of Social Work Education, 43*(2), 309-325.

Lewin, K. (1948). *Resolving social conflicts: Selected papers on group dynamics*.
    Oxford, England: Harper.

Lewin, K. (1951). *Field theory in social sciences*. New York: Harper & Row.

Lewis, L. H., & Williams, C. J. (1994). Experiential learning: Past and present. *New
    Directions for Adult and Continuing Education, 62, 5-16.*

Manna, P. (2011). *Collision course: Federal education policy meets state and local
    realities*. Washington, DC: CQ Press and Sage Publishing.

Mackenzie, S. H., Son, J. S., & Hollenhorst, S. (2014). Unifying psychology and
    experiential education: Toward an integrated understanding of why it works.
    Journal of Experiential Education 37(1), 75-88.

Marienau, C., & Reed, S. C. (2008). Educator as designer: Balancing multiple teaching
    perspectives in the design of community based learning for adults. *New Directions
    for Adult and Continuing Education, 118*, 61-74.

Martinez, M. R., & McGrath, D. (2014). *Deeper learning: How eight innovative public
    schools are transforming education in the twenty first century.* New York: The
    New Press.

McKenzie, M. (2013). Rescuing education: The rise of experiential learning. *Independent
    School, 72*(3), 24-28.

Meaney, K. S., Housman, J., Cavazos, A., & Wilcox, M. L. (2012). Examining service
    learning in a graduate physical education teacher education course. *Journal of the
    Scholarship of Teaching and Learning, 12*(3). 108-124.

Miettien, R. (2000). The concept of experiential leaning and John Dewey's theory of
    reflective thought and action. *International Journal of Lifelong Education, 19*(1),
    54-72.

Mills, T. (1967). *Sociology of small groups*. Englewood Cliffs, NJ: Prentice Hall.

Mills, V., & Whittaker, S. (2001). Work based learning in Scottish higher education:
    Policy and practice. *The Learning Organization, 8*(2), 64-69.

Minner, D. D., Levy, A. J., & Century, J. (2010). Inquiry-based science instruction: What
    is it and does it matter? *Journal of Research in Science Teaching, 47*(4), 474-496.

Molee, L. M., Henry, M. E., Sesa, V. I., & Mckinney-Prupis, E. R. (2010). Assessing
    learning in service-learning courses through critical reflection**.** *Journal of
    Experiential Education, 33*(3), 239-257.

Monette, D. R., Sullivan, T. J., Dejong, C. R., & Hilton, T. P. (2014). *Applied Social
    Research: A tool for the human services (9ᵗʰ ed).* Belmont, CA: Brooks/Cole
    Cengage Learning.

Moore, D. T. (2013). *Engaged learning in the academy: Challenges and possibilities*.
    New York: Palgrave.

Morin, E. L. (2009). Service learning pitfalls: Problems you didn't see coming. College
    Teaching Methods & Styles Journal, 5(1), 43-51.

Morton, K. (1995). The irony of service: Charity, project, and social change in service learning. *Michigan Journal of Community Service Learning, 2*(1), 19-32.

Nandan, M. (2010). Service learning partnership between university and school students: Experiential learning inspired through community research. *Journal of College Teaching & Learning, 7*(7), 25-35.

National Association of Colleges and Employers. (2011, July). *Position statement: US internships.* Retrieved from: http://www.naceweb.org/about-us/advocacy/position-statements/position-statement-us-internships/.

Newell, R. (2007). *Project based learning*. Unpublished manuscript. In Wurdinger, S. D., & Carlson, J. A. (2010). *Teaching for experiential learning: Five approaches that work (pp. 50-51).* Lanham, MA: Rowman & Littlefield Publishing Group Inc

Omer, S., Choi, S., Brien, S, & Parry, M. (2017). Log in to experiential learning theory: Supporting web-based faculty development. JMIR medical education, 3*(2).* 77-86.

Papamarcos, S. D. (2002). The next-wave in service-learning: Integrative, team-based engagements with structural objectives. *Review of Business, 23*(2), 31-38.

Patrick, L. E., Howel, L. A., & Wischusen, W. (2016). Perceptions of active learning between faculty and undergraduates: Differing views among departments. *Journal of STEM Education, 17*(3). 55-63.

Pigza, J. M., & Troppe, M. L. (2003). Developing an infrastructure for service-learning and community engagement. In Jacoby, B. (2015). Service-learning essentials: Questions, answers, and lessons learned (pp. 51-79). San Francisco, CA: John-Wiley & Son-Jossey-Bass.

Place Based Education Evaluation Collaborative (2008) retrieved on 08/10/2018 from,

http://www.peecworks.org/PEEC/Benefits_of_PBE-PEEC_2008_web.pdf

Reitenauer, V. L., Spring, A., Kecskes, K., Kerrigan, S. M., Cress, C. M., & Collier, P. J.

(2013). Building and maintaining community partners. In Cress, C. M, Collier, P.

J., Reitenauer, V. L., & Associates (2nd Ed), *Learning through service: A student*

guidebook for service-learning and civic engagement across academic disciplines

and cultural communities (pp. 19-36). Sterling, VA: Stylus Publishing LLC.

Reynolds, P. (2009). Community engagement: What's the difference between service

learning, community service, and community based research. *Journal of Physical*

Therapy Education, 23(2), 3-9.

Rogers, C. R. (1959). A theory of therapy, personality, and interpersonal relationships, as

developed in the client-centered framework. In Kosh, S. (vol.3), *Psychology: A*

Study of a Science: Formulations of the person and the social context. (pp. 184-

256). New York, NY: McGraw-Hill.

Rogers, C. R. (1961). *On becoming a person: A therapist view of psychotherapy.* Boston,

MA: Houghton Mifflin Company.

Rogers, C. R. (1969). Freedom to learn. Columbus, OH: Charles E. Merrill Publishing

Company.

Rowley, J. (2003). Action Research: An approach to student work-based learning.

Education & Training, 45, 131-138.

Sagawa, S., & Segal, E. (2000). *Common interest, common good: Creating value through*

business and social sector partnerships. Boston, MA: Harvard Business School
    Press.

Seaman, J., Brown, M., & Quay, J. (2017). The evolution of experiential learning theory:
    Tracing lines of research in the JEE. *Journal of Experiential Education, 40*(4),
    NP1-NP21.

Seaman, J., & Gingo, M. (2011). Lev Vygotsky. Experiential education: A view from the
    future. In Smith, T. E., & Knapp, C. E., *Sourcebook of experiential education:
    Key thinkers and their contributions* (pp. 157-165). New York: Routledge Taylor
    & Francis Group.

Siebert, S., Mills, V., & Tuff, C. (2009). Pedagogy of work-based learning: the role of the
    learning group. *Journal of Workplace Learning, 21*(6), 443-453.

Sigmon, R. (1994). Serving to learn, learning to serve. In linking service with learning.
    Washington, DC: Council for Independent Colleges.

Shrestha, B. K. (2013). Public perception of the quality of academic education program.
    Journal of Education and Research, 3(1), 52-64.

Smith, G. A. (2002). Place-based education: Learning to be where we are. *Phi Delta
    Kappan, 83*, 584-594.

Smith, T. E. (2011). Carl Rogers. A way of being an experiential educator. In Smith, T.
    E., & Knapp, C. E., *Sourcebook of experiential education: Key thinkers and their
    contributions* (pp. 185-192). New York: Routledge Taylor & Francis Group.

Smith, T. E., & Knapp, C. E. (2011). *Sourcebook of experiential education: Key thinkers
    and their contributions*. New York: Routledge Taylor & Francis Group.

Smith, T. E., & Lemming, C. S. (2011). Kurt Lewin: Another Kurt for experiential educators to know. In Smith, T. E., & Knapp, C. E., *Sourcebook of experiential education: Key thinkers and their contributions* (pp. 173-179). New York: Routledge Taylor & Francis Group.

Sobel, D. (2004). Place-based education: Connecting classroom and community. Great Barrington, MA: The Orion Society.

Sobel, D (2013). *Place-based education: Connecting classrooms and communities* (2nd ed). Great Barrington, MA: The Orion Society.

Sobel, D. T. (2008). *Childhood and Nature: Design principles for educators*. Portland, ME: Stenhouse Publishers.

Stagnitti, K., Schoo, A., & Welch, D. (2010). Clinical fieldwork placement in the health professions. South Melbourne, VIC: Oxford University Press.

Stonehouse, P., Allison, P., & Carr, D. (2011). Aristotle, Plato, and Socrates: Ancient Greek perspectives on experiential learning. In Smith, T. E., & Knapp, C. E., *Sourcebook of experiential education: Key thinkers and their contributions* (pp. 18-25). New York: Routledge Taylor & Francis Group.

Struyven, K., Dochy, F., & Janssens, S. (2008). The effects of hands-on experience on students preferences for assessment methods. *Journal of Teacher Education, 59* (1), 69-88

Stuhr, P. T., & Sutherland, S. (2013). Undergraduate perceptions regarding the debriefing

process in adventure-based learning: Exploring the credibility of the Sunday
afternoon drive debrief model. *Journal of Outdoor Recreation, Education, and
Leadership, 5*(1), 18-36.

Sweitzer, H. F., & King, M. A., (1999). The successful internship: Transformation and
empowerment. Pacific Grove, CA: Brooks-Cole.

Swiderski, M. J. (2011). Maria Montessori: Founding mother of experiential education.
In Smith, T. E., & Knapp, C. E., *Sourcebook of experiential education: Key
thinkers and their contributions* (pp. 197-207). New York: Routledge Taylor &
Francis Group.

Thomas, J. W. (2000). *A review of research on project-based learning*. San Rafael, CA:
Autodesk Foundation.

Toncar, M. F., Reid, J. S., Burns, D. J., Anderson, C. E., & Nguyen, H. P. (2006).
Uniform assessment of the benefits of service learning: The development,
evaluation, and implementation of the SELEB scale. *Journal of Marketing Theory
and Practice, 14*(3), 223-238.

Torp, L., & Sage, S. (2002). *Problems as possibilities: Problem bases learning for k-12
education.* Alexandria, VA: ASCD.

Toole, J., & Toole, P. (2001). The service-learning cycle. Minneapolis: The Compass
Institute.

Torres, J. (2000). Benchmarks for campus / community partnerships. Providence, RI:
Campus Compact.

Tretten, R., & Zachariou, P. (1995). *Learning about project-based learning: Self-assessment preliminary report of results*. San Rafael, CA: The Autodesk Foundation.

Tuckman, B. W. (1965). Developmental sequences in small groups, *Psychological Bulletin*, 63, 384-399.

Tuckman, B. W., & Jensen, M. A. C. (1977). Stages of small-group development Revisited. Group & Organization Studies, 2(4), 419–427.

You, Z., & Rud, A. G. (2010). A Model of Dewey's moral imagination for service learning: Theoretical explorations and implications for practice in higher education. *Education and Culture 26*(2). 36-51.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wain, A. (2017). Learning through reflection. *British Journal of Midwifery, 25*(10), 662-666.

Washor, E., & Mojkowski, C. (2013). *Leaving to learn: How out-of-school learning increases student engagement and reduces dropout rates*. Portsmouth, NH: Heineman.

Whatley, L. R., Popa, A. B., & Kliewer, H. (2012). Community and leadership: The role of humility, rhythm, and experiential learning. *Journal of Leadership, Accountability and Ethics, 9*(4), 113-143.

Winter, R., & Maisch, M. (1996). *Professional competence and higher education: The asset programme*. London: Falmer Press.

Woodwell, D. (2014). *Research foundations: How do we know what we know.* Thousand
    Oaks, Ca: Sage Publishing.

Wurdinger, S. D. (2016*). The power of project-based learning: Helping students develop
    important life skills*. New York: Rowman and Littlefield Education Publishing.

Wurdinger, S., & Allison, P. (2017). Faculty Perceptions and use of experiential learning
    in higher education. *Journal of E-Learning and Knowledge Society, 13*(1), 27-38.

Wurdinger, S. D., & Carlson, J. A. (2010). *Teaching for experiential learning: Five
    approaches that work.* Lanham, MA: Rowman & Littlefield Publishing Group
    Inc.

Wurdinger, S., Haar, J., Hugg, R., & Bezon, J. (2007). A qualitative study using project-
    based learning in a mainstream middle school. *Improving Schools 10*(2). 150-161.

Wurdinger, S., & Qureshi, M. (2015). Enhancing college student's life skills through
    project based learning. *Innov Higher Education, 40*, 279-286.

Appendix A: Recruitment Letter

Dear College Educator,

My name is Wayne Finseth and I am a doctoral candidate at Minnesota State University, Mankato working under the direction of Dr. Scott Wurdinger. We are conducting research that examines the influence of prior experience with experiential learning on perceptions related to the design, instruction, and assessment of experiential learning.

You are being asked to participate in a voluntary, anonymous, online survey that is estimated to take about **10** minutes to complete. To see the informed consent form and / or take the survey visit: https://mnsu.co1.qualtrics.com/jfe/form/SV_1Nt0Le1vUnlc98x

If you have any questions about this research study, contact Dr. Scott Wurdinger at (507) 389-2919 or Scott.Wurdinger@mnsu.edu or Wayne Finseth at Wayne.Finseth@mnsu.edu.

MSU IRBNet ID#   1446932

Date of MSU IRB approval: June 13, 2019

Appendix B: Follow-up Letter

Dear College Educator,

My name is Wayne Finseth and I am a doctoral candidate at Minnesota State University, Mankato working under the direction of Dr. Scott Wurdinger. We are conducting research that examines the influence of prior experience with experiential learning on perceptions related to the design, instruction, and assessment of experiential learning.

I would like to thank those of you who have already taken the survey. Your participation is much appreciated!

For those of you who have not yet taken the survey, you are being asked to participate in a voluntary, anonymous, online survey that is estimated to take about **10** minutes to complete. To see the informed consent form and / or take the survey visit: : https://mnsu.co1.qualtrics.com/jfe/form/SV_1Nt0Le1vUnlc98x

If you have any questions about this research study, contact Dr. Scott Wurdinger at (507) 389-2919 or Scott.Wurdinger@mnsu.edu or Wayne Finseth at Wayne.Finseth@mnsu.edu.

MSU IRBNet ID#   1446932

Date of MSU IRB approval: June 13, 2019

Appendix C: Survey

Q 1. **Informed Consent Form**.
 	
   No, I do not consent or wish to participate in the survey (they will be directed to a thank you message, and asked to close their browser).
   Yes, I consent, I am at least 18 years of age, and I would like to particpate by taking the survey (they will be directed to the first question of the survey).
 	
   Demographics:
Q2 Please specify your race.
   White / Caucasian
   Hispanic / Latino
   Black / African American
   Native American / Alaska Native
   Asian / Pacific Islander / Native Hawaiian
   Two or more Races
   Other
 	
Q3 Please specify your gender.
   Male
   Female
   Transgender
   Other
 	
Q4 What is your highest level of education completed?
   High School Diploma
   Associate Degree
   Bachelor's degree
   Master's Degree
   Doctoral Degree
   Post-Doctoral Degree
 	
Q5 What type of educational institute do you work in?
   Career and Technical College
   Community College
   University
   More than one of the above types
   Other
Q6 How many years have you been a college educator (please enter a number)?
	Q7 What department or discipline do you teach or work in?
	   Arts (performing, visual)
	   Humanities (geography, history, language, literature, theology, philosophy)
	   Social Sciences (economics, law, political, psychology, sociology)
	   Natural Sciences (biology, chemistry, earth/space, mathematics, physics)
	   Applied Sciences (agriculture, computer, engineering, technology, health, medical)
	   Other
	
	Q8 What is your primary role in your current position at the college?
	   Leadership
	   Teaching
	   Research
	   Services to students or patients
	   Other
	
	Q9 What is your title or academic rank (or closest related)?
	   Adjunct
	   Instructor / Lecturer
	   Clinical Professor
	   Visiting Professor
	   Research Professor
	   Assistant Professor
	   Associate Professor
	   Full Professor
	   Other
	
	Q10 What best describes the typical college student in the classes you teach?
	   Not Applicable
	   Freshman / Sophomore (Associate Degree Level)
	   Junior / Senior (Bachelor Degree Level)
	   Graduate (Master Degree Level)
	   Graduate (Doctoral / Post Doctoral Level)
	   Combination of more than one of these levels

Q11 What is your typical class size?
    0 - 10 Students
    11 - 20 Students
    21 - 30 Students
    31 or more Students
    Not Applicable
	Q12 Do you have prior experience using experiential learning in your courses?
	    Yes
	    Maybe
	          No

PROFESSIONAL DEVELOPMENT

Q13 Indicate whether you took a **K-12 class** where most of the learning was distributed through any of the following instructional methods (mark all that apply)?
    Active-Learning Strategies
    Collaborative /Cooperative Learning
    Action-Research
    Inquiry-Based Learning
    Problem-Based Learning
    Project-Based Learning
    Place-Based Learning
    Outdoor Education
    Adventure-Based Learning
    Work-Based Learning
    Service-Learning
    Practicums
    Internships
    Study Abroad
    Simulation
    Lecture

Q14 Indicate whether you took a **Undergraduate college class** where most of the learning was distributed through any of the following instructional methods (mark all that apply)?

- Active-Learning Strategies
- Collaborative /Cooperative Learning
- Action-Research
- Inquiry-Based Learning
- Problem-Based Learning
- Project-Based Learning
- Place-Based Learning
- Outdoor Education
- Adventure-Based Learning
- Work-Based Learning
- Service-Learning
- Practicums
- Internships
- Study Abroad
- Simulation
- Lecture
- Not Applicable, I did not go to undergraduate school

Q15 Indicate whether you took a **Graduate college class** where most of the learning was distributed through any of the following instructional methods (mark all that apply)?

- Active-Learning Strategies
- Collaborative /Cooperative Learning
- Action-Research
- Inquiry-Based Learning
- Problem-Based Learning
- Project-Based Learning
- Place-Based Learning
- Outdoor Education
- Adventure-Based Learning
- Work-Based Learning
- Service-Learning
- Practicums
- Internships
- Study Abroad
- Simulation
- Lecture
- Not Applicable, I did not go to graduate school

Q16 Indicate whether you have taken any Formal **Professional Development (training**) related to experiential learning (mark all that apply):

    None of them / Not applicable
    Professional Conferences or Workshops
    On the Job Training
    Colleagues and Peer Collaboration or Discussions
    Administration at the College
    Books, Journals, or Online Websites
    Undergraduate Coursework / Program
    Graduate Coursework / Program

Q17 Rate the level of **influence** your prior exposure with experiential learning has had on your current **class instruction / teaching** practices?

    Not at all Influential
    Slightly Influential
    Somewhat Influential
    Very Influential
    Extremely Influential

Q18 Rate the level of **influence** your prior exposure with experiential learning has had on your current **class assessment practices?**

    Not at all Influential
    Slightly Influential
    Somewhat Influential
    Very Influential
    Extremely Influential

DESIGNING:

Q19 How would you rate your ability to DESIGN the following?

	Extremely competent	Somewhat competent	Neither competent nor incompetent	Somewhat incompetent	Extremely incompetent
Experiential Learning Classes	○	○	○	○	○
Non-Experiential Learning Classes	○	○	○	○	○
Course Level Outcomes	○	○	○	○	○

Q20 How effective do you think online delivery of experiential courses can be?
  Extremely effective
  Very effective
  Moderately effective
  Slightly effective
  Not effective at all

Q21 How much overall **input** should students have on **designing** their learning experiences (creating outcomes, creating learning experiences, or finding their own learning experience)?
  A great deal
  A lot
  A moderate amount
  A little
  None at all

INSTRUCTION:

Q22 How effective do you believe experiential learning is as an instructional pedagogy?
  Very Effective
  Effective
  Average
  Ineffective
  Very Ineffective

Q23 Rate your overall level of expertise, as it relates to **teaching** experiential education classes?
  NA (never done it)
  Novice
  Advanced Beginner
  Competent
  Proficient
  Expert

Q24 How **often** do you **use** the following instructional methods in your classes?

	Always	Most of the time	About half the time	Sometimes	Never
Active Learning	○	○	○	○	○
Inquiry / Problem-Based Learning	○	○	○	○	○
Project-Based Learning	○	○	○	○	○
Place, Outdoor, Nature, Adventure Learning	○	○	○	○	○
Work-Based Learning	○	○	○	○	○
Service-Learning	○	○	○	○	○
Field Experiences, Practicum, and Internships	○	○	○	○	○
Study Abroad	○	○	○	○	○
Lecture	○	○	○	○	○
Collaborative Learning	○	○	○	○	○
Simulation	○	○	○	○	○
Other	○	○	○	○	○

Q25 How much overall **input** should students have on **modifying** their learning experiences (i.e. modifying course material, changing how they learn the material, changing timelines, ect)?
    A great deal
    A lot
    A moderate amount
    A little
    None at all

ASSESSMENT

Q26 Rate your overall level of expertise, as it relates to **evaluating** experiential education classes?
    NA (never done it)
    Novice
    Advanced Beginner
    Competent
    Proficient
    Expert

Q27 How **often** do you **use** the following assessment methods in your classes?

	Always	Most of the time	About half the time	Sometimes	Never
Peer Feedback / Evaluation	○	○	○	○	○
Self-Feedback / Evaluation	○	○	○	○	○
Instructor Feedback / Evaluation	○	○	○	○	○
Site-Stakeholder Feedback / Evaluation	○	○	○	○	○
Student Attendance / Presence	○	○	○	○	○
Student Participation	○	○	○	○	○
Performing or Demonstrating Skills	○	○	○	○	○
Reflective Writing / Journaling	○	○	○	○	○
Research Papers	○	○	○	○	○
Resource Projects	○	○	○	○	○

Presentations / Teaching Episodes	○	○	○	○	○
Formative Quizzes / Exams	○	○	○	○	○
Summative Quizzes / Exams	○	○	○	○	○
Case Studies	○	○	○	○	○
Direct Observations	○	○	○	○	○

Q28 What skills do you believe your students are learning in your classes (check all that apply)?
  Not Applicable
  Critical Thinking
  Problem Solving
  Creativity
  Communication
  Collaboration
  Time Management
  Responsibility
  Perseverance
  Self-Direction
  Personal Transformation / Development
  Job Specific Skills
  Citizenship
  Professionalism
  Leadership
  Exposure to Diversity and Culture
  Other

Q29 How much overall **input** should students have on **evaluating** their learning experiences (grading self, determining their final grade) ?
  A great deal
  A lot
  A moderate amount
  A little
  None at all

MSU IRBNet ID# 1446932

Date of MSU IRB approval: