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Evaluating Leadership Development Through Experiential Learning In A Virtual Environment

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Evaluating Leadership Development through Experiential Learning in a Virtual Environment

By

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A DISSERTATION

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Evaluating Leadership Development through Experiential Learning in a Virtual Environment

ABSTRACT

The strategic leadership center of a senior military service college collaborated with an elite law school to provide leadership development to senior law school students. The focus was an International Strategic Crisis Negotiation Exercise set in the South China Sea. Due to an unexpected global health pandemic the course was forced online to a virtual environment. The strategic leadership center gathered data from volunteer students and their mentors to determine the impact of the virtual setting. Using four archival datasets, a program evaluation was conducted using a case study methodology to determine the effectiveness of experiential learning through simulation in a virtual environment and to gain an in-depth understanding of its impact on the development of the leadership soft skills of teamwork, communication, and negotiation techniques for senior law school students from the perspective of students and their mentors. The research study found that experiential learning through simulation in a virtual environment was highly effective and transformative. The interpretation of the ten findings is enlightening and contributes to a more complete understanding of experimental learning. The significance of the study is its contribution to leadership education, legal education, and education policies.

Key words: Experiential learning, simulation, virtual environment, leadership development, and reflection.
# TABLE OF CONTENTS

**CHAPTER 1: INTRODUCTION**

- Statement of the Problem ................................................................. 1
- Purpose of the Study ........................................................................... 3
- Research Question .............................................................................. 3
- Conceptual Framework ...................................................................... 3
- Assumptions, Limitations, and Scope ............................................... 4
- Rationale and Significance .................................................................. 6
- Definition of Terms ............................................................................ 7
- Conclusion ......................................................................................... 8

**CHAPTER 2: LITERATURE REVIEW**

- Conceptual Framework ..................................................................... 12
  - Theoretical Framework .................................................................. 12
- Review of the Literature .................................................................. 14
  - Experiential Learning ...................................................................... 15
  - Transformative Learning Theory ..................................................... 17
  - Experiential Learning Theory ......................................................... 20
  - Practices in Experiential Learning .................................................. 24
  - Action Learning ............................................................................... 27
  - Simulation ....................................................................................... 29
  - Virtual Learning ............................................................................. 30
  - Leadership Development .................................................................. 32
  - Cognitive Development ................................................................... 34
# CHAPTER 5: CONCLUSION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpretation of Findings</td>
<td>84</td>
</tr>
<tr>
<td>Experiential Learning</td>
<td>85</td>
</tr>
<tr>
<td>Simulation</td>
<td>86</td>
</tr>
<tr>
<td>Virtual Learning</td>
<td>87</td>
</tr>
<tr>
<td>Leadership Development</td>
<td>88</td>
</tr>
<tr>
<td>Overall Impressions</td>
<td>89</td>
</tr>
<tr>
<td>Implications</td>
<td>92</td>
</tr>
<tr>
<td>Recommendations for Action</td>
<td>94</td>
</tr>
<tr>
<td>Recommendations for Further Study</td>
<td>95</td>
</tr>
<tr>
<td>Conclusion</td>
<td>96</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>98</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1. Student Survey Findings ..................................................................................77
LIST OF FIGURES

Figure 1. Experiential Learning Model .................................................................22
Figure 2. Exercise Methodology ............................................................................72
Figure 3. Applicability ........................................................................................73
Figure 4. Learning Objectives ..............................................................................74
Figure 5. Preparation Materials ..........................................................................75
Figure 6. Overall Satisfaction ..............................................................................76
CHAPTER 1: INTRODUCTION

A face-to-face experiential education course was scheduled to take place at an elite law school in the Mid-Atlantic region of the United States. This course was a result of a collaboration between the law school and a senior military service college’s strategic leadership center, a pseudonym for the actual name. The course was based upon a simulated United Nations mandated conference to resolve an international strategic crisis in the South China Sea. The exercise was designed to develop senior law school students’ leadership soft skills while they attempted to find a diplomatic solution to the crisis. By offering a challenging simulation for students, course faculty intended to create a learning environment whereby students could develop their leadership skills as they engaged in problem solving.

Although legal education does not traditionally include leadership education, the faculty recognized its importance for student development. Specifically, the faculty sought to improve students’ leadership soft skills of teamwork, communication, and negotiation techniques. The teamwork component was intended to teach future attorneys how to work together to achieve a common objective. Communication, an essential aspect of any profession, was focused on developing effective skills with both internal and external parties. The development of negotiation techniques was designed to improve leadership skills when dealing with different parties that may have conflicting objectives for the same problem. Taken together, the faculty determined that developing these leadership soft skills constituted useful attributes for future attorneys.

The global health pandemic of 2020 added the vital component of learning in a virtual environment. This pandemic caused the faculty of both institutions to think creatively about how to move forward as the course was forced online to a virtual learning environment. The strategic
leadership center took the opportunity to gather data that would help them better understand how this educational change impacted learning from the perspective of participants. The gathering of data created the possibility for this research study. Exploring and evaluating the effectiveness of experiential learning through simulation to teach leadership soft skills in a virtual learning environment from the perspective of participants is the central focus of this study.

Statement of the Problem

The core problem this study addressed was the lack of knowledge regarding the effectiveness of experiential learning for teaching leadership soft skills through a simulation exercise in a virtual environment from the perspective of senior law school students and their mentors. Although experiential education and simulation have been shown to be effective, the effectiveness of experiential learning in a virtual environment specifically focused on developing leadership skills for senior law school students was not found in the literature prior to this study. According to the research of Staub and Bravender (2014), online simulations are an effective way to teach graduate students decision-making skills. Freitas and Routledge (2013) discovered that experiential learning through simulation in a virtual environment is an effective method for teaching leadership soft skills to business leaders in a global business organization. Experiential learning for teaching legal skills in a virtual environment, such as court room procedures has also been found to be effective (Thanaraj, 2016). The analysis of the collected data to determine the effectiveness of that delivery model provided knowledge about the potential effectiveness of experiential learning in a virtual environment and its impact on leadership development for senior law school students. That is the gap in the literature that this study addressed.
Purpose of the Study

The purpose of this study was to explore the effectiveness of experiential learning through simulation in a virtual environment to gain an in-depth understanding of its impact on the development of the leadership soft skills of teamwork, communication, and negotiation techniques for senior law school students, from the perspective of students and their mentors. It was determined that a program evaluation using a case study methodology was the most effective research design for exploring this topic. The study gained insight from multiple vantage points to achieve a holistic perspective of the subject matter. Access to the collected archival data for use in this research study was solicited by the researcher and granted by the director of the strategic leadership center. The data were collected, deidentified, and analyzed to complete the study.

Research Question

The research question was: What is the effectiveness of experiential learning through simulation in a virtual learning environment on the development of the leadership soft skills of teamwork, communication, and negotiation techniques from the perspective of senior law school students and their mentors?

Conceptual Framework

The theoretical framework for this study relied on Kolb’s experiential learning theory. Kolb (2015) envisioned a spiral-like 3-dimensional learning model that fully engaged the learner in their own education. The experiential learning model is comprised of four stages that are facilitated by a teacher: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Concrete experience is an action-oriented emotive event, simulation, or exercise that engages the learner. Reflective observation allows the learner to
discuss and process what occurred. Abstract conceptualization is the act of gaining new information, imagining possibilities, and developing new ideas. The final stage, active experimentation, is trying out new ideas. Kolb’s experiential learning theory is a well-established theoretical framework that enjoys a long track record of success in adult education (Merriam & Bierema, 2014).

The abrupt shift of an experiential educational course from a face-to-face experience to a virtual learning experience provided an opportunity to consider the impact of this change. Previously, face-to-face course work was the only method that had been used to teach the international strategic crisis negotiation exercise. The exercise was built upon the notion that teams would meet face-to-face in multiple negotiation sessions and team meetings over several days to work out key diplomatic issues as they sought potential solutions. Transitioning to a virtual learning environment created uncertainty about how the exercise would play out and specifically how negotiations and meetings would work virtually. Using Kolb’s experiential learning theory as a guide, course directors, mentors, and key role players sought to replicate a face-to-face experience in a virtual learning environment. This was done by adapting processes and using technology to fulfill the necessary experiential educational components. By conducting a program evaluation using a case study methodology, theory was applied to practice by exploring the topic to gain an in-depth understanding of the educational experience from the perspective of students and their mentors on student leadership soft skill development throughout the simulation exercise.

Assumptions, Limitations, and Scope

Online virtual simulations are an effective method of teaching graduate students and business professionals, as discovered by Staub and Bravender (2014) and Freitas and Routledge
Based upon their findings, it was reasonably assumed that senior law school students might also benefit by participating in an experiential learning simulation exercise in a virtual learning environment. Legal education is traditionally conducted through expert lectures, case studies, and a Socratic method of teaching, all principally focused on teaching legal doctrine (Thanaraj, 2016). These methods are useful and effective, but perhaps insufficient to develop the needed leadership skills of future attorneys. At the time this study was concluded, no specific leadership education was incorporated in the law school curriculum as noted in the law school catalog. However, lawyers often serve in leadership roles in business, law, and politics; therefore, it follows that leadership development could be an effective component of a legal educational experience. For this study, it was assumed that the effectiveness of learning in either a face-to-face or a virtual environment was largely dependent upon the teacher/facilitator’s ability to create the conditions for a successful learning experience (Kolb, 2015).

Limitations of this study included the specific topics of the study and the scope of the research population. This exercise incorporated the broad educational themes of experiential learning, leadership development, and learning in a virtual environment that may be widely applicable. It also provided a narrower focus on specific leadership soft skills and a specific type of simulation, which potentially limits the range of transferability.

The scope of this case study allowed the researcher to explore and evaluate archival data relating to senior law school students from one experiential learning course at one elite law school who were preparing for a variety of professional careers. Findings regarding this population may or may not be applicable to other populations. This means that the study required careful analysis to determine where and how it may be useful or applicable in other educational settings.
Rationale and Significance

The significance of this study falls into three distinct categories: impact on learning theories, effect on teaching practices, and influence on educational policies regarding experiential learning in a virtual environment. The findings of this study may impact adult learning theory in general, and experiential learning theory specifically, based upon the exploration and indications of effectiveness. Whereas the study may not be definitive, it sheds some light on how experiential learning practices perform in a virtual setting. Virtual environments differ from traditional face-to-face classroom settings because virtual settings lack physical human interaction. This study may inform teaching and facilitation practices in a virtual environment and how experiential learning through simulation works in this type of environment. The COVID-19 global health pandemic was an unusual circumstance challenging educational policy makers as they attempted to normalize an abnormal situation. Findings from this study may assist policy makers as they consider experiential learning a possible teaching modality for a virtual educational learning environment.

Moreover, because the study’s findings demonstrate successful educational outcomes, experiential learning practices may be deemed an important tool for improving graduate and legal education with respect to teaching leadership soft skills. A key objective of the educational experience at this law school was to leave a positive long-term impact on the development of leadership skills among future attorneys. Because law is ubiquitous in society and many future attorneys eventually serve in key leadership roles, it is logical that legal education be designed to develop leadership skills that can enhance leadership competency among law students. A change in educational delivery methods resulting in measurably better learning outcomes for senior law school students would be transformative for the law school, and by extension it could favorably
influence the curricula development of other law schools. Findings may contribute valuable knowledge to the field of leadership education generally, and more specifically to legal education.

**Definition of Terms**

The definitions of terms below are specifically intended for this study. They are meant to clarify meaning and enhance understanding.

*Adult learning theory.* The broad range of theories that relate to how adults learn and why adult learning is different from that of children (Merriam & Bierema, 2014).

*Cognitivism.* The field of psychology focused on learning as a mental rational activity and interested in how individuals process and learn. This theory is in some respects a forerunner of modern-day neuroscience (Kolb, 2015).

*Empiricism.* A concept developed from the pragmatism school of William James (1842–1910), and John Dewey (1859–1952) that postulated that human perception of experience is the source of learning (as cited in Merriam & Bierema, 2014).

*Experiential learning.* An action-oriented learning practice based on a comprehensive theory of adult learning that builds upon empiricism, humanism, cognitivism, transformative learning, and neuroscience to describe a holistic learning model (Kolb, 2015).

*Humanism.* The field of psychology that focuses on human growth and development. The foundational concept is that people have the capacity to mature and achieve their potential of self-actualization and become fully functioning persons (as cited in Merriam & Bierema, 2014).
Leadership development. Methods of teaching about leadership, including the leadership soft skills of teamwork, communication, and negotiation techniques through experiential learning and simulation (Freitas & Routledge, 2013).

Legal education. The process of developing future attorneys through the application of traditional and nontraditional educational modalities (Thanaraj, 2016).

Simulation. Using an educational framework built upon an artificial scenario that requires student interaction, so that students are fully engaged mentally and emotionally in their own learning to achieve predetermined learning outcomes (Aldrich, 2009).

Transformative learning. A school of thought that contends intense experiences coupled with reflection create new meaning and a transformative learning outcome (as cited in Merriam & Bierema, 2014).

Virtual learning environment. A learning environment that relies on the internet and a virtual setting as the medium for conducting an educational course or exercise, connecting students with one another and with faculty (Aldrich, 2009).

Conclusion

This chapter introduced a study exploring the effectiveness of experiential learning through simulation in a virtual learning environment on the development of leadership soft skills for senior law school students. It introduced adult learning theories related to experiential learning and the importance of leadership education for future attorneys as the theoretical framework for the study. To provide a valuable educational experience with a leadership focus, a prominent law school collaborated with a senior military service college’s strategic leadership center to offer a course for senior law school students based upon a simulated international strategic crisis negotiation exercise. Unexpectedly, a global health pandemic closed both
institutions for face-to-face classes and forced the course online to a virtual learning environment. The strategic leadership center used this circumstance as an opportunity to gather research data on a virtual course. They collected mentor after-action review notes, semistructured interviews from student volunteers, semistructured interviews from mentor volunteers, and student surveys. All the collected data were deidentified and became archival data at the strategic leadership center. The researcher received official written permission to access this archival data to conduct research and evaluate the data through a program evaluation using a case study methodology.

The primary purpose of this study was to explore the effectiveness of experiential learning through simulation in a virtual environment to gain an in-depth understanding of its impact on the development of the leadership soft skills of teamwork, communication, and negotiation techniques for senior law school students from the perspective of students and their mentors. Topics this researcher explored included experiential learning, simulation, learning in a virtual environment, and leadership development. Each of these topics are essential components of this study. The virtual learning aspect of the course is a key component that addressed a gap in the literature and answered the research question about the effectiveness of experiential learning through simulation in a virtual learning environment.

The unifying learning theory that served as the theoretical framework for this study was the experiential learning theory developed by Kolb (1984, 2015). It was built upon and reinforced by a wide range of interdisciplinary fields including adult learning, social science, and neuroscience. Experiential learning theory began with the ideas of William James and John Dewey in the early twentieth century, emphasizing that all learning originates from the human perception of experience. It continued to later theories and findings in psychology, social
psychology, and neuroscience that lead to our current understanding of how adults learn through experience. In addition to experiential learning theory, the conceptual framework for this study includes the topical research for exploring the impact of experiential learning as described, and the researcher’s personal interest in program evaluation using a case study methodology.

There are some assumptions and limitations, and the scope of the study is narrow. Four key assumptions about the value of this learning experience were made: (a) senior law students can gain significant value through experiential learning, (b) leadership education for law school students is essential, (c) experiential learning through simulation in a virtual environment is effective for teaching leadership skills, and (d) learning outcomes are highly dependent upon the teacher/facilitator for creating the conditions and environment for a successful learning experience. Limitations included the specific topic of study on leadership development in a virtual environment and the scope of the research population at one law school. To overcome the limitations, archival datasets required careful analysis. Some topics of the study are more widely applicable than others. The scope of the study was narrow: however, the themes were broad and therefore findings may be quite useful elsewhere.

The rationale for the study was its unique situation, timing, and opportunity. The strategic leadership center seized upon an opportunity to collect data on a type of collaborative exercise that had never previously been attempted in a virtual learning environment. This offered a unique research opportunity and thus a plan was developed for a potentially meaningful study. The literature review that follows provides greater depth of understanding by exploring a wide range of related theories and topics. These begin with experiential learning, followed by transformative learning theory, experiential learning theory, practices in experiential learning, action learning, simulation, virtual learning, leadership development, cognitive development, and
Integrative learning. These topics are supported by neuroscience, which has provided new scientific evidence of how and why experience is central to learning.
CHAPTER 2: LITERATURE REVIEW

The focus of this study was evaluating the effectiveness of experiential learning through simulation in a virtual learning environment for the development of the leadership soft skills of teamwork, communication, and negotiation techniques. The study stemmed from an interest in documenting the perspectives of senior law school students and their mentors. The topical research for this study was examined in a holistic manner that revealed how various relevant topics are interconnected. Kolb’s (2015) experiential learning theory provided the primary intellectual framework and structure for the study. This review of the literature develops key themes around the broader concept of how adults learn, then examines the impact of experiential learning in adult education with a specific emphasis on key topics.

**Conceptual Framework**

This study applied a conceptual framework comprised of three major components:
(a) topical research on experiential learning, experiential learning theory, simulation, learning in a virtual environment, and leadership development; (b) Kolb’s experiential learning theory as the foundational theoretical framework; and (c) personal interest related to program evaluation design based upon findings from a case study methodology using the triangulation of archival datasets as the source for research and analysis. Topical research, the selected theoretical framework, and personal interest are well integrated throughout this study.

**Theoretical Framework**

The theoretical framework of experiential learning theory, as defined by Kolb (2015), is a well-established theory built upon numerous supporting disciplines including adult learning theories, social science, and neuroscience. Kolb (2015) developed experiential learning theory
as a flexible educational model, and it has a proven track record of success in adult education (Merriam & Bierema, 2014).

This research study evolved based upon the researcher’s background of more than a dozen years teaching professional military graduate education. In that role the researcher applied concepts and techniques of experiential learning while serving as lead instructor for operational planning, course director for strategic leadership, and division director of facilitation for strategic war games. It became evident to the researcher that adult learners responded well to the application of experiential learning practices. The experiential education course that served as a case study for this research offered a unique combination of circumstances. It used simulation, it was forced online into a virtual learning environment, and it focused on teaching leadership soft skills. This combination of circumstances presented an unexpected opportunity to discover new insights into the effectiveness of experiential learning.

Kolb (2015) discovered the transformative potential for implementing experiential learning theory across leadership education in many diverse settings. In face-to-face settings he found that experiential learning offered positive implications for topical research in leadership development, experiential education, cognitive development, integrated learning, adult learning, and simulation. In practice the key component stages of experiential learning as put forth by Kolb (2015) are concrete experience, reflective observation, abstract conceptualization, and active experimentation. Each of these components may be incorporated into a well-designed experiential education course using simulation. This study reveals the effectiveness of experiential learning through simulation in a virtual environment for teaching leadership soft skills to senior law school students.
According to Kolb (2015), experiential education is both emotive and action-oriented, with students fully engaged in their own learning. Experiential learning theory and experiential education are rooted in the ideas of Dewey (1938), Lewin (1947), and others, always requiring the full engagement of participants (as cited in Kolb, 2015). Program evaluation design using a case study methodology provided a superb research framework to explore the effectiveness of experiential learning from the perspective of participants in this course. The student participants in this research setting were senior law school students with a solid foundation in legal education. They arrived prepared to participate in a professionally constructed face-to-face experiential learning simulation exercise that challenged and developed their critical thinking, problem-solving, and leadership skills. Circumstances related to the COVID-19 global health pandemic pushed the exercise to an online virtual environment. The review of the literature explores the topical research and theoretical framework related to this case study.

**Review of the Literature**

The review of the literature is organized in a thematic manner, beginning with an overview of the history of experiential learning. This is followed by a close look at experiential learning theory, practices in experiential learning, simulation, virtual learning, and leadership development. Additionally, this review of the literature considers the related research topics of transformative learning theory, action learning, cognitive development, and integrative learning through community based educational practices as well as an interdisciplinary integrative approach that enhances learning and improves learning outcomes. The range of topics helps expand an awareness and understanding of how these learning methods are interconnected as a way of comprehending the boundaries of experiential learning and how it works in practice. These topics are also relevant to the study itself because they incorporate the interdisciplinary
nature of the course and the integration of the collaborating faculty from different disciplines and institutions.

**Experiential Learning**

Kolb (2015) traces the history of experiential learning back to William James (1842–1910) in 1907 and John Dewey (1859–1952) in 1938. Supporting Kolb’s claim, Merriam and Bierema (2014) found a long tradition in educational theory that adults learn best through experience. An important finding revealed by Merriam and Bierema (2014) is that experiential learning and transformative learning are rooted in the same intellectual framework. This common thread of theory permeating how adults gain knowledge and expand their understanding through their perception of experience reinforces the transformative nature of experiential learning.

William James, an academic practicing in the late nineteenth and early twentieth centuries, created the philosophy of pragmatism (Merriam & Bierema, 2014). The basis of James’s philosophy as it relates to educational theory is the concept he called radical empiricism (Kolb, 2015). In the early twentieth century John Dewey, another American pragmatist and educational theorist, labeled James’ philosophical concept immediate empiricism. With both James and Dewey, the reference was intended to describe how people learn from their perception of experience (Kolb, 2015). Dewey (1938) postulated that experience was primarily social and interactive, and meaningful experience was the best teacher (as cited in Merriam & Bierema, 2014).

As educational and learning theories developed, social psychologists engaged in the process and subsequently the school of humanistic psychology became central to the development of modern educational theory and experiential learning theory. Humanistic
psychologists argued that learning was primarily about the development of the whole person, that people have the potential for growth and development, and they are free to make their own choices (Merriam & Bierema, 2014). Two of the prominent theorists among the humanistic school of psychology were Abraham Maslow (1908–1970) and Carl Rogers (1902–1987). Maslow developed the well-known theory of the human hierarchy of needs, postulating that all humans must satisfy basic needs and then they may eventually progress to achieve their potential through the process of self-actualization, while Rogers theorized that people have the potential to become fully-functioning persons (as cited in Merriam & Bierema, 2014). Humanism became the basis of new learning theories, including Rogers’s concept of student-centered learning and the teacher as facilitator (Merriam & Bierema, 2014). Rogers’s theory is based upon five principles: (a) quality of whole person development includes feeling and cognition; (b) learning is self-initiated internally even if the stimulus is external; (c) learning is pervasive in the behavior, attitudes, and even personality of the learner; (d) learning is evaluated by the learner; and (e) its essence is meaning (Merriam & Bierema, 2014, p. 30). Kolb (2015) later integrated these concepts into his experiential learning theory.

In the mid-twentieth century Malcolm Knowles (1913–1997), building on the ideas of humanism, advanced a new theory of adult learning. He labeled his theory andragogy, to describe how adults learn, as opposed to pedagogy that described educational concepts of learning that apply to children (as cited in Merriam & Bierema, 2014). According to Knowles’s (1989) theory of andragogy, adults learn differently than children because adults are independent, self-directed, and internally motivated, using experience as a resource for learning (as cited in Merriam & Bierema, 2014). Andragogy was firmly established in the humanistic psychology of Maslow’s concept of self-actualization and Rogers’s idea of the fully functioning person who is
self-directed and internally motivated. These concepts support the idea that humans have
tremendous potential and that a learning environment can enhance or diminish the ability for
human growth and development. The discovery by Knowles of the importance of reflection was
supported by the humanistic school of psychology concept of growth and development and later
incorporated into experiential learning theory by Kolb (2015). This key discovery regarding
learning and reflection helped transition adult learning theory and replace andragogy with the
new dominant adult educational theory of transformative learning (Merriam & Bierema, 2014).

**Transformative Learning Theory**

Transformative learning is about self-development and drawing meaning from
experience. This theory supports the transformative nature of experiential learning. Educational
theorist Jack Mezirow (1923–2014) in 1978 and 1991 postulated that we are changed by
transformative sense experiences as our interpretation and perspective becomes more inclusive,
open, and permeable (as cited in Merriam & Bierema, 2014). Mezirow’s theory reinforced what
Dewey observed in 1938 and what Kolb (1984, 2015) later theorized, specifically that
knowledge is constructed based upon the perception of experience by the person in the
environment (as cited in Merriam & Bierema, 2014). Transformative learning theory as
originally conceived by Mezirow in 1978 was primarily a cognitive process whereby
assumptions and, more specifically, premises of beliefs were changed through experience and
subsequent reflection resulting in new meaning being derived from said experience (as cited in
Merriam & Bierema, 2014).

The idea behind transformative learning theory was that people are constantly making
meaning from experience. This new meaning can transform mindset, enhance levels of
awareness, and ultimately help develop new perspectives through learning, as Mezirow
concluded in 2000 (as cited in Merriam & Bierema, 2014). In transformative learning theory, reflection includes both content and process components. For Mezirow, the goal of adult education was to help people realize their potential through experience and critical reflection, these being the central features of transformative learning theory (as cited in Merriam & Bierema, 2014). Transformative learning theory, like experiential learning theory, is built upon and fully supported by the previous theories of James, Dewey, Maslow, Rogers, and Knowles.

A later theorist from the transformative school found fault with Mezirow’s rationalistic approach. Dirkx (2001) theorized that emotion plays a much larger role than Mezirow acknowledged (as cited in Merriam & Bierema, 2014). He made the case for transformative learning as an emotive process of transformation from the unconscious mind to the conscious mind or ego (as cited in Merriam & Bierema, 2014). By 2012, Dirkx claimed that emotion was present in all learning experiences and that learning was a holistic and integrated meaning making and framing experience; it was emotional soul work (as cited in Merriam & Bierema, 2014). Mezirow later acknowledged emotion as a key yet secondary factor to cognition in transformative learning (as cited in Merriam & Bierema, 2014). Kolb (2015), sharing the same intellectual framework as Mezirow, incorporated similar concepts found in transformative learning theory into his experiential learning theory. Kolb (2015) took his theory a step further and developed an experiential learning model that could be implemented in a variety of educational settings.

**Teacher as facilitator.** A key concept for Rogers, Knowles, and Kolb was the idea of the teacher as facilitator in adult learning (as cited in Merriam & Bierema, 2014). The adult learner has a need to be central to the educational process while the instructor’s role as facilitator sets the climate for learning. Knowles found that when self-directed learning was combined with a
critical reflection component, it could inspire true transformational learning among students (as cited in Merriam & Bierema, 2014). Kolb (2015) developed this idea by imagining an evolving concept of the instructor. Kolb theorized that the instructor’s role evolved throughout the learning process, from facilitator to expert to evaluator and finally to coach. In the practice of experiential learning, facilitation is a vital component in achieving successful learning outcomes. Throughout this process, facilitation and reflection are considered key elements to effective learning.

**Cognitivism.** A school of thought related to both transformative learning and experiential learning is cognitivism, promulgated by Swiss developmental psychologist and epistemologist Jean Piaget (1896–1980). Piaget discovered that learning was a mental process of cognition and understanding that developed in stages as we mature (Kolb, 2015). Piaget’s idea was that as people develop and mature, they become increasingly capable of learning at more advanced levels of understanding. How people learn, epistemology, is at the root of cognitivism (Kolb, 2015). An extension of this theory is found in Bloom’s taxonomy, a hierarchical learning model with analysis, synthesis, and evaluation at the highest levels of the learning progression (Bloom’s, 2020).

Several additional theories round out an understanding of experiential learning. Social cognitive theory advanced the concept that adults learn by observing and modeling in a social context (Merriam & Bierema, 2014). Constructivism, advanced by Driscoll (2005), claimed that learning is a matter of creating meaning from experience, and people are active participants seeking meaning (as cited in Merriam & Bierema, 2014). Candy (1991) found that meaning is determined through exchange and meaning is derived by the learner, based upon their personal construct of the situated cognitive experience, indicating that processing and learning are
situationally dependent (as cited in Merriam & Bierema, 2014). This finding reinforced the idea of the teacher/facilitator playing the key role of creating a comfortable, adult-oriented learning climate that enables learners to effectively access the rich resources of their life experience.

**Experiential Learning Theory**

These learning theories, and ideas that have been reviewed, are unified by Kolb’s (2015) experiential learning theory. The key concept is that experience and learning take place by participants engaging in, reflecting on, and making meaning of their experiences—physical, emotional, cognitive, social, and spiritual (Kolb, 2015). Experiential learning theory is a holistic approach to learning. It incorporates growth and development as well as self-directed activities facilitated by the teacher/facilitator (Kolb, 2015). The theory begins with Dewey’s principle of continuity, stating that experience in the past, present, and future all matter, and that experience affects the future (Merriam & Bierema, 2014).

According to Kolb (2015), experiential learning is practiced as an emotive action-oriented educational concept. The various components and related topics have evolved over many years, providing broad application opportunities applying simulation and gaming through in-person and virtual e-platforms (Freitas & Routledge, 2013). These components often blend in various ways to complete learning experiences. The boundaries of experiential learning also extend to simulation and leadership development.

This review considers how experiential educational modalities impact leadership education in a variety of ways. These include enhancing leader capabilities and improving cognitive development through action learning and other methods (Kolb, 2015). Thanaraj (2016) found that experiential learning using virtual simulations was effective for conducting practical legal education in a virtual environment that enhanced learning. In developing a holistic Master
of Business Administration (MBA) program, Dixon (2014) found Kolb’s experiential learning model to be highly effective in leadership development (as cited in Merriam & Bierema, 2014).

David A. Kolb (2015) built his experiential learning theory upon the foundational concepts developed by Dewey, Piaget, Lewin, Maslow, Zull, and many others from the fields of education, psychology, and neuroscience. Kolb (2015) developed experiential learning theory to be holistic and sensory, continuously connecting the learner with the subject of study. Experiential learning theory, as described by Kolb (2015), begins with the foundational theories of Dewey’s pragmatism finding that experience is the basis for learning, Lewin’s T-group and action research concepts that call for fully engaging the learner, and Piaget’s cognitivism focused on epistemology or how we learn, and specifically upon the dialectics of learning from experience through assimilation and accommodation. These concepts permeate experiential learning theory. Kolb (2015) also incorporated components of the psychological theories of Maslow, Rogers, Erickson, Jung, and others who focused on human growth and development.

Kolb acknowledged that his theory was criticized by some academics for lacking a rigorous scientific foundation. In response he has systematically updated his theory and he subsequently incorporated the latest findings in neuroscience into his theory, giving it a strong scientific foundation (Kolb, 2015). The neuroscience research of Zull (2011) demonstrates scientifically that action-oriented learning through experiential education connects the brain to experience and completes the learning cycle by reconnecting the brain to the world. Zull’s (2011) work illustrates a great cognitive transformation and leap forward in understanding, changing sensory experience to action experience through the brain’s temporal integrated cortex.
Additionally, Kolb (2015) developed a learning cycle model that provides a practical tool comprised of four stages and a range of phases and actions that he describes as a spiral rather than a two-dimensional cycle. This was further augmented by a Learning Style Inventory designed to identify nine different learning styles. Understanding learning styles is essential knowledge for teachers/facilitators so that they can adapt to both participants and various learning environments.

Figure 1. Kolb’s Experiential Learning Model (from S. McLeod, 2017, Kolb’s Learning Styles and Experiential Learning Cycle. https://www.simplypsychology.org/learning-kolb.html)

The order of applying the four experiential learning model stages reflected in Figure 1 is variable (Kolb, 2015). Guthrie and Jones (2012) explored the experiential learning theory and
specifically Kolb’s cycle of learning by applying the model in a leadership educational exercise with an emphasis on the activity of reflection to produce better learning outcomes. The researchers used frameworks from both experiential learning and reflective pedagogy to design a learning model that maximized leadership learning (Guthrie & Jones, 2012). They developed a usable concept table with reflective questions and reflection activities to study experiential and reflective frameworks; they discovered that experiential learning and reflection are critical to maximizing leadership learning, and reflection becomes an important habit of mind for life-long learning.

**Neuroscience.** These findings concur with those of Knowles and others while fully reinforcing experiential learning theory as a solid theoretical framework for this study. These findings also support reflection as a vital component of learning from experience. This begs the question of why reflection is so important. The answer is found in the neuroscience work of Zull (2011), who concluded that experience coupled with reflection connects the brain with the world directly. Zull’s scientific work brought together various learning theories of how and why people learn best through experience.

In another study, Schenck and Cruikshank (2014) determined that learning is more complex than previously understood and that neuroscience has gained significant knowledge since Kolb published his initial theory. They agreed with Kolb that multiple modalities are effective in learning, but they contended that Kolb had the neuroscience wrong and a new model of teaching that incorporates an advanced understanding of neuroscience that can be empirically tested should be developed. Rather than focusing on a learning model, Schenck and Cruikshank (2014) developed a new experiential teaching theory to overcome the perceived weaknesses in Kolb’s experiential learning theory.
This new fractal-like spiral was based on biological science and is called Co-constructed Developmental Teaching Theory (CDTT), which proposes that adults must be explicitly taught and that experience itself is insufficient. The CDTT model of Schenck and Cruikshank (2014) has a science-based foundation rooted in research from neurobiology, cognitive psychology, gaming, chaos and complexity theory, experiential education, educational psychology, behavioral psychology, and developmental psychology. CDTT conceptualized five phases that could be empirically tested through research: framing, activity, direct debriefing, bridge building, and assimilation, alongside experience-based facilitated instruction with feedback loops and socially based relationship-focused learning using neuroscience research as a foundation for how people learn.

Because experiential learning is an evolving field, Kolb (2015) updated his experiential learning theory to include the most current research in neuroscience from Zull (2011). These new research findings explained how empiricism and new discoveries in neuroscience confirmed and reinforced experiential learning theory. This does not diminish the value or legitimacy of CDTT; however, it does acknowledge and confirm a strong connection between neuroscience findings and the impact of experiential learning. It also confirmed that more research is warranted to explore these findings. The major weakness of CDTT is that it is overly complex and therefore difficult to implement, whereas Kolb’s experiential learning theory is well established, relatively easy to implement by a trained teacher/facilitator, and it has a verified track record of success.

**Practices in Experiential Learning**

Practices in experiential education cover a wide range of topics and offer some useful ideas when implementing an experiential education program. This review of practices
incorporates a variety of examples to demonstrate a range of possibilities. Wilson, Yates, and Purton (2018) conducted a study to determine the most effective assessment methods for students in an experiential learning course.

They discovered that the most effective and accurate assessment method was quite different from the students’ most preferred assessment method. They found that preferences and perceptions relating to student engagement were not necessarily aligned with traditional assessment methods in education. Student subjects preferred group assessments over individual assessments, and they were least engaged in individual journal assessments (Wilson, et al... 2018). The authors concluded that a learning experience followed by multiple assessment methods using mixed methods may be the best approach to assessments. While students prefer the more engaging group assessments, the individual assessments of journal entries, though less engaging, were the best measure of performance (Wilson et al., 2018).

In related research, Glazier, Bolick, and Stutts (2017) conducted a field study of teacher educators and their students. They analyzed instructor journal reflections, research-assistant field notes, a collective interview transcript, narrative case studies, and conducted a cross case analysis. By combining experiential education with teacher education through a field study, the researchers uncovered new teaching possibilities for experiential education and the benefits of experiential education for advancing greater understanding of teaching modalities among educators (Glazier et al... 2017). Findings indicated that teachers require new experiences to imagine new possibilities, and that experiential education is considered a holistic endeavor by teacher participants. Applied in this manner, experiential learning becomes a centering experience for teachers (Glazier et al., 2017).
Along with expanding teaching modalities, Lyons (2006) found that in motivation theory, a training script creation model can improve learning outcomes. The relevance to experiential education is that a script may serve as a guide for teachers, facilitators, and even employees. It can keep the experience on track and improve skills more effectively (Lyons, 2006).

Another study in vocational education found that a better understanding of adult learning theories can improve teaching practices in vocational educational settings (Haycock, 2009). These studies indicate that misconceptions of adult learning theories and experiential learning persist in many sectors of adult education. However, practitioners in various disciplines quickly perceive the benefits of experiential learning once they are adequately acquainted with the educational theory and the modalities that may be applied.

In 2015 the American Bar Association (ABA) modified its education requirements by mandating experiential education for future attorneys (ABA Program of Legal Education, 2015). Beginning in the 2015–2016 academic school year, under the new ABA Standards, all accredited law schools were required to add six credit hours of experiential education coursework as a requirement for students to graduate. This change was enacted as a recognition that experiential education adds a valuable component to legal education. It also acknowledged that experiential education and other modes of learning are not mutually exclusive and can complement one another. This recognition of the value of experiential education is also prevalent in other disciplines.

The business field emphasized the value of experiential learning at the 14th International Cognition and Exploratory Learning in the Digital Age conference (CELSA). Son (2017) reported that the use of experiential education and e-learning were essential components of twenty-first-century global management education to develop better and more responsible
business leaders. This report also points to the value of online learning and learning in a virtual environment. According to Burns (2016), experiential learning was found to be effective using case-in-point methods to teach sustainability leadership in a graduate course. Burns (2016) found that experiential learning and reflection, along with peer learning and community building, were the most impactful educational elements of a leadership course.

In an attempt to improve Kolb’s learning cycle, Miller and Maellaro (2016) postulated that the experiential learning cycle was insufficient by itself, so they modified it to make it more effective. They discovered that by combining the experiential learning cycle with the 5 Whys root cause problem solving tool along with collective reflection, learning results were significantly improved (Miller & Maellaro, 2016). The 5 Whys root cause problem solving tool is a facilitation process of asking why for five iterations from the initial answer to get to the real root of a problem. These above findings do not fundamentally change the effectiveness of the experiential learning model or the learning cycles that Kolb developed; however, they do offer several useful ideas and concepts for facilitating student learning to achieve better outcomes. Along with the need for competent teacher/facilitators is the importance of infusing experiential learning with action-oriented design to fully engage participants.

**Action Learning**

A related discipline to experiential learning is action learning. According to the World Institute for Action Learning (2020) and the Massachusetts Institute of Technology Sloan School for Action Learning (2020), action learning is a problem-solving and learning process that engages the full person. Experiential learning and action learning are related in that both are action oriented and they fully engage participants in the learning and problem-solving process. Both also rely on facilitation and reflection as key components. A review of this topic may help
develop a better understanding of key aspects and strengths of experiential learning theory involving facilitation, reflection, and leader development.

**Technology.** In this age of globalization, technology has enabled professionally facilitated virtual action learning to become an essential and growing aspect of global organizational education (Pedler, Hauser, & Caulat, 2014). With technology as the key enabler, virtual action learning is a growing trend for developing important competencies for diverse organizations in business, military, government, and other enterprises (Pedler et al., 2014). When educating or training adults in large diverse organizations that span cultures it is essential that facilitators are cognizant of a wide range of cultural norms, so that they remain effective and avoid offending anyone. Virtual action learning relies on unique and highly trained facilitators who can avoid local cultural bias and who have cultural understandings across the globe (Pedler et al., 2014).

**Reflection.** In addition to the importance of professional facilitation, action learning relies on reflection as a key learning enabler. In a study using a coaching model, Harris (2012) found that action learning improved leadership behavior, problem solving techniques, self-reflection, self-confidence, and learning outcomes. The combination and integration of action learning and reflective practices in educational design had the greatest positive contribution to learning results. Consistent with this study, Backus (2018) found that leadership coaches develop competencies through strong emotional experiences with clients and through reflection on those experiences.

Reflection was also central to a study of executive leadership coaching. Urquhart (2018) discovered that a combination of the elements of experiential, transformative, and reflective learning created an effective training regimen for senior leaders. These findings point to the
value of a holistic approach in adult education. They also reinforce the importance of integrating diverse, but related educational concepts in course structures. These findings reinforce Dewey’s concept of the perception of experience as the foundation of learning, Piaget’s theory of cognitivism, and Mezirow’s idea of making meaning out of experience (Merriam & Bierema, 2014).

**Simulation**

An effective action-oriented method of implementing experiential learning is through what is known as simulation and gaming. This is a broad term that in this case does not refer to video or computer gaming, but rather interactive simulation exercises, held either face-to-face or virtually. While experiential learning is a holistic educational methodology, simulation is often used as an enabler within an experiential program or exercise. It can be used as a component part or an integral artificial framework to support learning outcomes. It is a method of immersing participants in an artificial yet realistic scenario whereby they role play and attempt to deal with a given situation or problem.

Ncube (2010) described simulation and gaming as a growing practice for the application of experiential learning that has proved to be highly effective in the generalize-and-apply phases of Kolb’s experiential learning model. The component stages in the experiential learning model are concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 2015). Within these stages there are five phases of experiential learning: (a) engage in a concrete experience, (b) publish through discussion and process the experience, (c) the facilitator generalizes new information, (d) participants develop new ideas, and (e) participants apply these ideas through new active experimentation (Kolb, 2015).
Ncube (2010) found that games promote communication and interaction in experiential learning. They foster teamwork among participants and tend to draw participants into their own learning. Simulation helps participants imagine a new scenario and it engages them emotionally in the game. In a business study, Kiili and Lainema (2008) had several findings relating to a game flow questionnaire as a useful tool in game design: (a) game flow is a key factor in game design for enhancing learning, (b) game flow experience has a positive impact on learning, (c) game flow questionnaire and the experiential learning model are useful in studying game design, and (d) game flow antecedents are an important factor in game design and should be considered when designing games in order to maximize learning.

In teaching graduate students in educational leadership, Staub and Bravender (2014) concluded that on-line simulation with reflection and debriefing sessions were an effective way to teach decision-making skills. The combination of experience and reflection reveal an important key to learning: they found that decision-making processes could be accurately modeled, resulting in successful learning outcomes. Dixon (2014) described a holistic leadership course that used experiential learning and simulation along with outdoor challenge activities. The course produced successful learning outcomes due to its application of simulation and experiential learning practices.

**Virtual Learning**

Traditionally, experiential learning is conducted in a face-to-face environment where participants interact with one another regularly throughout an educational program or exercise. This human interaction, guided by a teacher/facilitator, has the benefit of participants engaging fully in the learning process and communicating through verbal and nonverbal cues. In recent
years, enabled by technology, online and virtual learning have become a growing trend in higher education and organizational training.

Virtual and online learning are related, but not equivalent. Although they both use the internet to connect, online learning does not usually involve a synchronized timing pattern. It usually operates through a classroom management system, and it may occasionally offer interaction through a web camera.

By comparison, virtual learning is done in a synchronized manner that incorporates real time voice and videoconferencing. The missing component in both online and virtual learning is the physical human contact participants experience in a face-to-face environment. The COVID-19 global health pandemic forced schools to temporarily suspend face-to-face educational experiences, so the challenge was to determine how effective various teaching modalities might be in a virtual learning environment.

Virtual learning is often effectively combined with experiential education to enhance learning experiences. Thanaraj (2016) found a wide range of research that indicated simulation and virtual learning have great potential for legal education. There are a range of theories identified by Thanaraj (2016), including the experiential learning theory, that support the concept of using experiential learning through simulation in a virtual environment to conduct legal education. According to Thanaraj (2016), the legal profession has been slow to embrace virtual learning. However, with the experience of the pandemic requirements to conduct virtual learning, attitudes regarding virtual learning in legal education may change.

In related findings, technology has also enabled virtual learning and virtual action learning to become an essential and growing aspect of global organizational education (Pedler et al., 2014). Virtual action learning is a growing trend in a diverse number of fields as technology
makes it possible to create educational opportunities across the world (Pedler et al., 2014). In virtual learning of all types, well trained and skilled facilitators have been identified as an essential aspect of educational success (Pedler et al., 2014).

An early proponent of virtual learning, Aldrich (2009) reported that games and simulation in a virtual environment were especially effective when compared to traditional learning methods. Simulation helped students connect at an emotional level, making learning more impactful and long lasting. In a related study focused on the benefits of online education, Myers (2008) discovered that senior military leaders’ ability to synthesize information and apply learning to leadership experiences improved.

Myers (2008) also found that properly structured online graduate programs can significantly increase understanding, improve cognitive development, and advance an appreciation of strategic level thinking. The online learning Myers (2008) references is traditional online education where students and faculty communicate over the internet without visual interaction. Recent technological advances allow students to see one another and interact verbally and visually in real time, but that is only an occasional aspect of current online educational practice. This in no way diminishes Myers’s (2008) findings; it simply demonstrates the increasing range of options available in a virtual learning environment. Along with demonstrating the value of online learning, Myers’s (2008) study reinforced findings related to experiential learning: cognitivism as described by Piaget, reflection on experience that Dewey postulated, and the neuroscience findings of Zull (Kolb, 2015).

**Leadership Development**

Merriam and Bierema (2014) discovered substantial evidence that experiential learning modalities are effective in leadership education in a variety of meaningful ways. Leadership
development is a common theme in experiential education, and it is often associated with outdoor educational experiences (Guthrie & Jones, 2012). More recently, leadership education has been conducted in a virtual environment (Thanaraj, 2016). Findings from other studies indicated that leader development was enhanced, and cognitive development improved through experiential learning methods (Kolb, 2015).

Experiential learning using simulation was found to be effective in developing leadership soft skills in business leaders, such as communication, teamwork, and negotiation (Freitas & Routledge, 2013). Through a proprietary e-learning program for a far-flung global company, leadership soft skills among business leaders in the global organization were developed with great success by applying experiential learning methodologies (Freitas & Routledge, 2013). The proprietary nature of the software limits the usefulness of the findings, but it does provide some indication of what may be possible. This application of experiential learning through an e-learning modality demonstrates the flexibility of experiential education. It also demonstrates the potential range of possibilities that exist with experiential learning in a virtual environment when participants are fully engaged in their own learning.

Harkening back to Rogers’s student-centered learning concept, Bakken and Dobbs (2016) found that effective leader development requires a pedagogical shift from teacher-centered to learner-centered education. They postulated that effective leader development requires a balance between institution-centered experiential exercises and learner-centered pedagogy. Focusing on four types of knowledge—declarative, procedural, contextual, and somatic—the authors concluded that experiential learning through direct learner engagement was central to successful leader development. A key finding was the need to engage the whole person and find a balance between the institution-centered experiential exercises and learner-centered pedagogy while also
accounting for the importance of context in learning (Bakken & Dobbs, 2016). The inclusion of pedagogy in this university-based study rather than andragogy or transformative learning may be considered another indication of the lack of widespread understanding of adult learning theory.

Phillips et al. (2017) conducted the self-leadership project with results demonstrating the effectiveness of experiential learning in self-development educational topics, including self-leadership, personal change, personal vision, self-management skills, and self-improvement. They found that self-leadership prepares future leaders to be more effective and to have greater self-management skills, and those skills are a prerequisite for leadership (Phillips et al., 2017). Self-leadership course projects with hands-on training had a positive impact on targeted change. This is an example of how experiential learning can be adapted to different learning environments. Jones (2015) concluded that leaders with a broader range of leadership experiences and a stronger learning motivation achieve greater results than other populations in leadership development training.

**Cognitive Development**

The impact of cognitive development research has important implications for leadership development and experiential learning in adult education. In a university study using surveys and interviews, Coker and Porter (2016) found that experiential education with diverse learning opportunities can extend the mind and improve understanding. The diversity of learning experiences supports the idea that people learn from a range of experience. Students reported an expanded understanding, and they valued experiential learning for worldview growth and career opportunities. These findings also indicated significant support for making experiential learning a more substantial part of the curricula.
A related study by Moore, Boyd, and Dooley (2010) found that incorporating experiential learning classes in a curriculum enhances and deepens learning. An emphasis on integrating experiential learning into the curriculum has the possibility of creating synergy to expand learning opportunities. The application of experiential learning cycles in teaching and assigning reflective journal and paper assignments enhanced learning and improved learning outcomes (Moore, Boyd, & Dooley, 2010). These findings are consistent with other studies in the literature. The findings support the idea that learning from experience with the additional focus on reflection leads to cognitive development.

**Integrative Learning**

Integrative learning has many possible definitions. For this study, the focus is on community-based educational practices and an interdisciplinary integrative approach to expanding learning and enhancing learning outcomes. Using experiential learning in this manner creates additional learning opportunities. As discussed throughout this review of the literature, the possibilities for experiential learning applications in adult education and leadership development are seemingly endless. Community educational practices offer a rich opportunity for learning.

**Community-based learning.** Willness and Bruni-Bossio (2017) developed an integrative approach of business school entrepreneurial models with a community-based experiential learning model, resulting in a unique and effective design canvas for curriculum development. They began with a broad-based design perspective, followed by meetings with curriculum specialists, both individuals and a focus group, a community leader-based focus group, and finally workshops with faculty and workshops with students (Willness & Bruni-
Bossio, 2017). Results included a well-developed curriculum innovation canvas worksheet that began with a canvas that had only broad outlines.

The Willness and Bruni-Bossio (2017) findings included: (a) an integrative approach with community-based experiential learning provided an effective design canvas for curriculum development, (b) community-based inclusion improved outcomes, (c) experiential learning contributed to creativity in achieving outcomes, and (d) the combination of business entrepreneurial models with community-based experiential learning was powerful (Willness & Bruni-Bossio, 2017). Additional studies supported the benefits of integration as well. Eyler (2009) found that community experiences and reflection enhanced liberal learning objectives and improved learning outcomes. In a related study, Smith and MacGregor (2009) concluded that institutions that became learning communities enhanced and improved educational quality.

**Interdisciplinary and integrative learning strategies.** The case for interdisciplinary and integrative strategies is prevalent in adult education and particularly in experiential education. According to Canhoto and Murphy (2016), an integrative approach is the optimal method for training and educating adults. They found that it was possible to determine the correct combination of approaches for deep learning. Dinmore (1997) determined that interdisciplinary studies fit perfectly with integrative experiential education for adults. In looking at gaming, Arora (2012) concluded that interdisciplinary strategic games are valuable tools for strengthening an organization and enhancing profitability for a business.

**Conclusion**

Throughout this literature review experiential learning remained a central focus. It is a learning modality that is broad, flexible, effective, and widely applicable (Kolb, 2015). This researcher was interested in the effectiveness of experiential learning in legal education,
specifically with respect to using simulation to teach leadership soft skills in a virtual environment to senior law school students. Attorneys play a vital role throughout society and their influence and impact continues to grow as society increasingly relies on the rule of law for nearly all aspects of life. Leadership education has the potential to improve the effectiveness of future attorneys (Jones, 2015).

Merriam and Bierema (2014) explain that experiential learning has a long track record of success in adult education. However, at the time of this study the literature was not clear how this learning modality might impact senior law school students in a virtual environment. This research study explored the impact by conducting a program evaluation using a case study methodology with archival data from an applied experiential learning course.

Many consistent themes appeared throughout the literature review that support the effectiveness of experiential education. Experiential learning theory is well established, and the application of experiential educational modalities are powerful and effective methods for improving educational outcomes among adult learners (Merriam & Bierema, 2014). William James, John Dewey, and the ideas of American pragmatism began the journey into the perception of experience as the basis for adult learning. The ideas from the schools of cognitivism, humanism, and constructivism all contributed to the general understanding of human growth and development. The evolution of adult learning theories of andragogy, transformative learning, and experiential learning alongside advancements in neuroscience provided a comprehensive intellectual foundation for this study.

The research of Kolb (1984, 2015), Guthrie and Jones (2012), and Schenck and Cruikshank (2014) demonstrate a steady progression and evolution of experiential learning theory. This progress, backed by numerous studies, indicates that experiential learning is a
highly effective educational methodology in adult education, but more research is required to
determine how it may perform in various disciplines and settings. The literature supports the
notion that experiential education coupled with reflection is a powerful way to develop leaders.

The gap in the literature at the time of this study was understanding how experiential
learning through simulation impacts the leadership development of senior law school students in
a virtual environment. There is some useful preliminary research of the application of
experiential learning theory in leadership development, but the data are insufficient regarding its
impact on learning outcomes for senior law school students, specifically in a virtual learning
environment. There are indications of a positive impact on leadership skill development with
business leaders in a virtual environment (Freitas & Routledge, 2013); however, the methods of
examination are unclear and further research on leader development in the legal field is
warranted.

This case study may contribute to knowledge addressing this gap in the literature. It may
assist researchers in gaining a deeper understanding of how experiential learning impacts
leadership development in a virtual environment. The study may also provide greater insight
into the strengths and weaknesses of experiential learning theory. A program evaluation using a
case study methodology provides a comprehensive approach to assess the effectiveness of
experiential learning through simulation in a virtual environment for the development of
leadership soft skills.
CHAPTER 3: METHODOLOGY

The core problem this study addressed is the lack of knowledge regarding the effectiveness of experiential learning for teaching leadership soft skills through a simulation in a virtual environment to senior law school students. This study focused on an experiential education course for a law school that was unexpectedly forced online to a virtual learning environment due to a global health pandemic that forced the closure of the physical space at the law school. The study was conducted as a program evaluation applying a case study methodology using archival data collected from one experiential education course.

Purpose of the Study

The purpose of this study was to explore the effectiveness of experiential learning through a simulation in a virtual environment to gain an in-depth understanding of its impact on the development of the leadership soft skills of teamwork, communication, and negotiation techniques for senior law school students from the perspective of course participants. It was determined that a program evaluation design using a case study methodology was the most effective research approach for exploring this topic. Access to the collected archival datasets that were used for research purposes was solicited by the researcher and granted by the director of the strategic leadership center. The data were collected, deidentified, and analyzed.

Research Question and Design

The research question was: What is the effectiveness of experiential learning through simulation in a virtual learning environment on the development of the leadership soft skills of teamwork, communication, and negotiation techniques from the perspective of senior law school students and their mentors?
According to Bloomberg and Volpe (2016), case study research may be organized in a variety of ways. It is characterized by in-depth exploration and multiple perspectives of a rich and complex bounded phenomenon. This particular study met these criteria and is explained in this chapter through eight related component parts: (a) research question and study design, (b) site information and population, (c) sampling methods, (d) sources of data and data collection, (e) data analysis methods, (f) limitations of the research design, (g) ethical issues, and (h) a conclusion and summary. Each component was considered through the lens of program evaluation while applying a case study design. The study used archival data collected on behalf of the strategic leadership center that sponsored the educational experience in collaboration with the law school for the benefit of senior law school students.

For this research, the program evaluation using a case study methodology was a nonhuman-subject research study. This case study was intended to determine the effectiveness of experiential learning in a virtual environment from the perspective of the participants. The researcher reviewed and analyzed archival datasets to glean insight and gain an in-depth understanding of the perceptions of students and mentors to answer the research question.

Research methods were applied for the purpose of exploring and evaluating a triangulation of archival datasets. Available datasets were designed to provide a range of perspectives, including after-action review notes from mentors, qualitative semistructured interview transcripts from students and mentors, and student surveys. This case study was rigorous and comprehensive. It was intended to get a clear and complete picture of the actual experience and its impact from the perspective of participants from multiple vantage points stemming from the different types of archival datasets.
Site Information and Population

The research site from which data were collected was a virtual learning environment involving two separate and distinct educational institutions, a senior military service college’s strategic leadership center and a large private university’s law school, collaboratively engaged in the activities being evaluated. The law school is situated in the mid-Atlantic region of the United States and the strategic leadership center is in the eastern United States. The exercise was created at the strategic leadership center and was designed to engage senior law school students in a complex international strategic crisis negotiation exercise.

Under normal circumstances the course would have been held in a face-to-face environment at the law school; however, due to the COVID-19 global health pandemic the course was moved to a virtual environment. Students and mentors were spread across the world for the duration of the two-and-a-half-day exercise. This move to a different learning platform offered a unique opportunity for the strategic leadership center’s team to gather research data on an experiential learning course held in a virtual learning environment. It also afforded this researcher a chance to develop a research study around the research problem.

The strategic leadership center, in collaboration with the law school, sponsored the course for 75 senior law school students. A total of 20 faculty, staff, and mentors were involved in the course to support student learning. Faculty and staff members were from the law school and the strategic leadership center. Mentors were a combination of law school faculty, strategic leadership center faculty, and seasoned alumni attorney volunteers.

The law school has a population of a few hundred students in Juris Doctor and advanced law degree programs, and the diverse student body includes people from countries across the world. Graduates from these programs go on to work in some of the most prestigious legal
positions in the United States and globally. The strategic leadership center’s faculty was comprised of a special team with subject matter expertise in experiential learning through simulation.

The senior military service college annually educates several hundred senior military officers, senior civilian government leaders, and senior military leaders from allied nations for future service in positions of strategic import. The strategic leadership center is a component of the senior military service college with approximately 100 military and civilian professionals. The center provides subject matter expertise in simulation and gaming throughout the senior military service college and with external partners at universities across the United States. The researcher has served as a faculty and staff member at the senior military service college, the strategic leadership center, and the law school. This case study research is solely based upon collected archival data present and available at the strategic leadership center.

**Sampling Method**

Data were collected at the end of the educational exercise by the strategic leadership center team using convenience sampling. Three data collection methods were identified: (a) after-action review notes from mentor volunteers, (b) qualitative semistructured interviews with student and mentor volunteers, and (c) surveys from student volunteers. The 75 students and 12 mentors were asked if they wanted to volunteer to contribute to the strategic leadership center’s data collection effort about the course. They were told that the strategic leadership center was soliciting feedback on participants’ experience, from the perspective of students and mentors.

Student volunteers were not prescreened, and participation was voluntary for interview and survey participation. After-action review notes from mentors were completed on a voluntary
basis and interviews with mentors were also voluntary. All interviews were recorded with the permission of the participants, the recordings were then transcribed, run through transcription review procedures for accuracy, deidentified, and placed in the archival database at the strategic leadership center.

**Sources of Data and Data Collection**

The strategic leadership center team developed multiple data sources and collection tools to gain a broad understanding of what transpired throughout the exercise. Various data collection methods were used to gain an in-depth understanding of the exercise and student learning outcomes from the perspective of students and mentors. The first source of data was the after-action review notes from mentors. After-action review notes were submitted by 10 of the 12 mentor volunteers on the course. Review notes offered mentor perceptions of student learning, and they were useful in gaining an understanding of mentor perspectives of what went well and what they believe could be improved upon in future course iterations.

Next, deidentified transcripts of semistructured interviews from 12 student volunteers and 12 mentor volunteers were analyzed. The original interviews were conducted using Zoom technology, recorded, transcribed, run through transcription review procedures, deidentified, and transferred to the strategic leadership center’s archival database. They explored the effectiveness of experiential learning and its impact on the development of the leadership soft skills of teamwork, communication, and negotiation techniques for senior law school students, from the perspective of student and mentor volunteers. Student transcripts also included answers to a question about a reaction paper, which focused on the impact of reflection from the student’s perspective.
Finally, to gain insight into student perspectives regarding the overall value and impact of the course, students were provided with a five-question survey designed to elicit responses from the students regarding the two-and-one-half-day international strategic crisis negotiation exercise. This survey was sent to 75 students via the classroom management system Canvas and it resulted in 17 responses. The survey results provided a broad perspective of the course from the perspective of the 17 student volunteers. Once collected, all these data sources were deidentified and became archival datasets exclusively at the strategic leadership center.

This researcher accessed and analyzed existing deidentified data from the archival database at the strategic leadership center. Permission was solicited by the researcher and granted by the director of the strategic leadership center to access these data for research purposes. The threefold instrumentation used to collect data for the strategic leadership center was intended to gather information from several vantage points.

**Data Analysis**

Findings that relate to the purpose of the study and the perceived impact of the course from the perspective of students and mentors were considered relevant to the research question. This study used a triangulation of datasets to gain an in-depth understanding of the research as it relates to the problem and purpose of this study. The researcher explored each of the three types of datasets in detail to compare findings.

After-action review notes by mentors were manually coded, analyzed, and thematically organized. Interview transcripts of students and mentors were manually coded and carefully analyzed to explore findings and to gain a holistic perspective of the results of the exercise as it relates to the purpose of the research study. The survey instrument was processed through
proprietary software at the strategic leadership center’s analysis department, based on the researcher’s directions, to produce meaningful and understandable results in a table and figures.

These diverse archival datasets were sufficient to conduct a comprehensive analysis and provide a detailed case study with a special focus on important themes that arose. The sources provided abundant information that allowed the researcher to gain an in-depth understanding of how this educational process unfolded and to address the problem and purpose of this study. These data sources allowed for a robust case study; however, some limitations did exist.

**Limitations of the Research Design**

The limitations of this case study were principally the topics being researched and the scope of the study. The topics included the broad educational themes of experiential learning, leadership development, and learning in a virtual environment that will likely be of interest to a wide audience. A narrower focus involved leadership development about specific leadership soft skills, and the application of a specific type of simulation, which potentially limits the transferability of the findings.

The scope of the case study was limited to archival data from one experiential learning exercise designed to teach leadership soft skills to senior law school students at one school. This singular population may limit applicability. The specific educational focus of the study may also limit the findings of the research from being definitively applicable in other settings. However, the results may provide some strong evidence concerning the validity of the results in this and similar settings. Each of these potential limitations was considered in turn as this study unfolded.

The deidentified data collected by the strategic leadership center team was used as it existed. The credibility of the collected archival research material is based upon a triangulation
of the various types of datasets collected from volunteer participants. The volunteer procedures for data collection and the transcript review procedures incorporated into the data collection process improved the content and dependability of the data collected.

The transferability of the study is an important consideration to support both the validity and confirmability of the study. The careful attention to detail by the strategic leadership center team protected the quality of the datasets. This researcher further protected the transferability of this study by improving the ability to replicate it in a variety of settings. This was done by providing a well-planned design involving identifiable and distinct component parts, supported by a comprehensive literature review and a well-organized methodology. Although a new study might change environments, populations, and even scenarios, the structure of this study makes transferability, and therefore, confirmability, highly probable.

**Ethical Issues in the Study**

This researcher is keenly aware that bias and conflicts of interest may influence any research study, so it is important to recognize and acknowledge the researcher’s long-time association with experiential learning through 15 years of teaching graduate education. Additionally, the researcher’s experience and expertise with simulation and gaming is extensive with more than six years of experience at the strategic leadership center and the senior military service college. The researcher has a long history as a faculty and staff member with the strategic leadership center at the senior military service college and works closely with strategic leadership center colleagues as part of his employment as a faculty member at the law school where the exercise and data collection took place.

These potential conflicts of interest have been considered carefully, and the researcher believes that they posed no risk to the data collected or to the research study. The researcher is
aware of the positive bias for the effectiveness of experiential learning through simulation in a virtual environment and accounted for that bias by using archival data that was gathered from multiple sources to ensure the objectivity and credibility of the study. This researcher accepted the data as they were without preconceived notions and the data analysis was objective. All data sources and collection methods by the strategic leadership center team were carefully vetted by leaders from the strategic leadership center and the law school before data collection began. Actual research for this program evaluation design using a case study methodology was conducted based upon archival datasets collected, processed, deidentified and maintained by the strategic leadership center team.

**Conclusion**

By applying a case study methodology, this researcher explored and evaluated the effectiveness of experiential learning through simulation in a virtual learning environment by seeking an in-depth understanding of the development of the leadership soft skills of teamwork, communication, and negotiation techniques from the perspective of students and their mentors. The entire dataset that was used for the research study was collected as convenience sampling. An analysis was conducted using the available archival data in the form of after-action review notes by mentors, transcripts from semistructured student interviews, transcripts from semistructured mentor interviews, and surveys from students. Data analysis incorporated a triangulation of datasets, and data sources were reviewed and analyzed both individually and collectively to gain a comprehensive and holistic understanding of the findings.

First, after-action review notes from mentors were manually coded and analyzed to discover evidence of student learning. Semistructured interview transcripts from students and mentors were manually coded and separately analyzed to find common themes and gain deeper
insight. Student transcripts provided additional information based upon questions pertaining to a reaction paper that students were required to complete at the end of the course; however, the actual papers were not part of the collected data. Transcripts from students and mentors included the subjects of experiential learning, simulation, learning in a virtual environment, and the development of the leadership soft skills of teamwork, communication, and negotiation techniques. Surveys from students were run through a proprietary program at the strategic leadership center to develop a meaningful report with a table and figures that provide an overview of how students perceived the value of the exercise.

Limitations of the study were considered and determined to be primarily related to the topics being studied and the scope of the case study. The findings concerning the broad topics of experiential learning, leadership development, and learning in a virtual environment may be of interest to many, and the more specific topics of a unique simulation and particular leadership soft skills may be of less interest. One experiential learning exercise at one law school is a narrow scope and may hinder the transferability of the study, but that does not necessarily preclude its validity. To mitigate these limitations, the researcher made sure that sample sizes were robust, and a triangulation of different archival datasets were used, increasing the study’s credibility. Moreover, by having a process that is well structured in an organized manner, it is possible to conduct a similar study in a different environment focused on a different topic resulting in credible and meaningful findings.

There are no ethical issues that present a problem for this research study and the research data was well protected throughout the process. The researcher understands the potential for bias in any research study, therefore full transparency was maintained throughout the study. There are some important and relevant disclosures to be made, including the researcher’s background
in experiential education using simulation and his professional affiliation with the law school and the strategic leadership center at the senior military service college. This background includes more than 15 years teaching graduate education using experiential learning practices and six years of working with various simulations at the strategic leadership center. The researcher was fully committed to objectivity when using the data that was available from the archival datasets.
CHAPTER 4: RESULTS

The purpose of this study was to explore the effectiveness of experiential learning through a simulation in a virtual learning environment to gain an in-depth understanding of its impact on the development of the leadership soft skills of teamwork, communication, and negotiation techniques for senior law school students from the perspective of course participants. This research was based upon a case study of an international strategic crisis negotiation exercise scenario set in the South China Sea. The exercise was designed by the strategic leadership center at a senior military service college in collaboration with an elite law school as a face-to-face event intended to develop leadership soft skills in senior law school students as they worked through a challenging diplomatic simulation based upon guidance and special instructions they received. Due to the COVID-19 global health pandemic, the entire course was unexpectedly forced online to a virtual platform, thus changing the nature of the exercise. This was a major challenge for course administration, technology, coordination, and teaching through experiential learning. During the course, students, mentors, faculty, and staff were operating from across the United States and globally, as far away as China.

The transition from a face-to-face to a virtual learning environment involved significant changes that were not fully appreciated until after the course began. This shift to a virtual environment provided the impetus for the strategic leadership center to gather data and the researcher to conduct a study using that data to better understand participant perceptions of learning in a virtual environment. Findings from an analysis of the collected datasets provided new insights into the effectiveness of experiential learning through simulation for leadership development in a virtual environment.
The course itself included 75 students, 12 mentors, four faculty members, and several staff and administrators, for a total of 95 course participants. The international strategic crisis negotiation exercise that served as the central exercise for the course was a simulation built around a United Nations summit conference of the Association of Southeast Asian Nations (ASEAN) focused on addressing disputes in the South China Sea. The problem scenario involved eight nations in a dispute over freedom of navigation, national sovereignty, land claims, resource disputes, and legal disagreements related to the United Nations Convention of the Law of the Sea (United Nations, 1994). The exercise was moderated by a retired United States Ambassador who is a Southeast Asia regional expert playing the role of Special Representative for the United Nations Secretary General. A senior military service college faculty member served as the exercise director and role-played Foreign Minister or Secretary of State for eight student country-teams, and finally, seasoned professionals with legal and diplomatic experience were assigned as mentors to each country-team.

The law school administration determined that Zoom technology would be used as the course technology platform. A technology specialist was identified and hired to run the various Zoom technology components for the duration of the course. Technology virtual course requirements included eight virtual country-team rooms, a leadership virtual room, an operations virtual room, a plenary virtual room and 24 virtual negotiation rooms used twice per day. In sum, the technology specialist oversaw the movement of 95 people from virtual room to virtual room throughout each day and set up plenary sessions for 95 participants at the beginning and end of each day for the two-and-one-half-day exercise. A second technology specialist set up data gathering through the course software for a student survey developed by the strategic leadership center.
Several data sources were used to gather a wide range of input. Once the course was complete, the strategic leadership center collected data in the form of after-action review notes from ten course mentors who worked closely with students. They also gathered student surveys from online software made available to all students. The final data sources were transcripts from qualitative semistructured interviews with student and mentor volunteers. Included in the students’ semistructured interviews were questions pertaining to a reaction paper the students had completed following the end of the exercise. This additional student requirement provided data from students about their perceptions of the value of reflection as it relates to learning. After-action reviews, interview transcripts, and student surveys were carefully deidentified and all the datasets became archival data at the strategic leadership center.

The virtual simulation exercise employed the key aspects of face-to-face experiential learning by using a realistic scenario about a potential conflict with global strategic implications (Kaplan, 2014). The exercise included a challenging simulation with negotiation and plenary sessions designed to engage students. As the exercise unfolded it offered students opportunities for abstract conceptualization as teams imagined what was possible, and students participated in active experimentation through problem engagement.

Convenience sampling from student and mentor populations was used to solicit volunteers. End-of-course assessments and reflections were collected from the participants, archived, and then following permission protocols made available to this researcher to conduct this study. Mentor volunteers who participated in the after-action review process provided their perspectives of the effectiveness of experiential learning in a virtual environment and its effectiveness on student learning. Semistructured interview results from student and mentor volunteers provided a wide range of data related to the effectiveness of the educational exercise.
with respect to experiential learning, simulation, virtual learning, and leadership development. The student interviews also included data about the value of reflection.

Student surveys designed by the strategic leadership center elicited feedback from student volunteers about the effectiveness of the course. Surveys focused on how students perceived the course with a particular emphasis on negotiation techniques. The analysis methodology that follows gives a detailed look at how these datasets were carefully analyzed and how they provide a clear picture of the effectiveness of this educational methodology for enhancing senior law school students’ education through transformative change and leadership development.

**Analysis Method**

The method of analysis followed a systematic look at ten themes drawn from the datasets of the case study. Each of the four archival datasets were carefully analyzed and manually coded to find and explore evidence of relevant findings with respect to the problem and purpose of the research study related to these and other relevant topics. The analyzed datasets were considered in the order of 10 mentor after-action review notes, 12 student interview transcripts, 12 mentor interview transcripts, and 17 student surveys.

The interview transcript detail sections for both students and mentors were distilled down from an average of five transcript pages per interview participant to relevant details that emerged from coding. The datasets were coded and analyzed for notable quotes that would exemplify major findings, expected information, surprising information, and conceptually interesting or unusual findings. This process was followed by a holistic analysis of all datasets to discover an overarching finding that answered the research question: What is the effectiveness of experiential learning through simulation in a virtual learning environment on the development of
the leadership soft skills of teamwork, communication, and negotiation techniques from the perspective of senior law school students and their mentors?

Presentation of Results

There were ten initial themes resulting from an analysis of this study that are represented as the major findings. The first five themes are drawn from mentor after-action review notes, student interview transcripts, and mentor interview transcripts, while the second five themes are drawn from student survey results. The major themes of the study include these topics: experiential learning, simulation, virtual learning, leadership development, reflection, exercise methodology, applicability, learning objectives, preparation materials, and overall rating.

Based upon an analysis of the archival datasets, findings of this case study are organized thematically for presentation, beginning with detailed findings followed by ten consolidated major findings. To begin, detailed findings of mentor after-action reviews, mentor interview transcripts, and student interview transcripts are presented for experiential learning, simulation, virtual learning, leadership development, and reflection. This is followed by a presentation of detailed findings of student surveys for exercise methodology, applicability, learning objectives, preparation materials, and overall rating. The ten consolidated findings complete the presentation of results.

Experiential Learning Detail Findings

Mentor after-action review. “With students, mentors, and instructors literally spread across the country and the world, it was remarkable to see everyone come together to pull this off. As an upshot, everyone involved in this course now has a new way of looking at a crisis, both from the scenario and from real life” (Mentor 1). Learning progressed in unforeseen ways as students used various unofficial platforms to modify how they moved forward. This created
ad-hoc negotiation sessions, modified trade agreements, and a plethora of activities that dissociated students from the planned path forward. There was consensus that mentors needed more information, clarity, and guidance to facilitate in a virtual environment. The need for a pre-session for mentors was an important finding. The teams that had a co-mentor found it beneficial. Zoom technology was an effective technology for an experiential learning exercise.

**Mentor interview transcripts.** All 12 mentors perceived the exercise as a highly effective teaching methodology and found it to be beneficial in enhancing learning for law students. “For students to actually engage and experience something tangible about what they are learning in school is especially useful” (Mentor 1). “This teaching modality is a very beneficial mode of learning” (Mentor 4). “This is much more effective than just a classroom” (Mentor 6). Mentors universally concluded that actual exposure improves understanding and applied learning connects ideas.

The experiential learning component was noted by three mentors for developing creative and critical thinking skills in a condensed timeframe and reinforcing learning objectives. Two mentors observed that the virtual component degraded the effectiveness of the exercise. “The biggest learning point was how to work with a team” (Mentor 3). All mentors noted that students had to adapt to overcome as they were forced to use the materials and technology available and they learned to assess issues from different perspectives. Students needed to be incredibly adaptable, nimble, and able to think on their feet.

“I think it is an absolutely terrific way to learn” (Mentor 12). Two mentors perceived leadership development as a central accomplishment, and they observed that the exercise advanced preparation and organization skills within given parameters. One mentor noted that clear communication and a clear definition of terms were areas that improved. Students learned
the importance of personnel selection and team planning, while leadership skills were enhanced. One mentor observed that collaboration and strategy were key areas of development as students learned to be cognizant of specific parameters and their negotiation power.

Role playing and an emphasis on real-world issues were perceived by all mentors to bring greater meaning to the exercise and enhance learning. “Here the students had to learn the powers of persuasion and it was a learning experience both for those serving in leadership positions on the delegations and those who were not in leadership positions” (Mentor 7). “The course I think does a good job of putting students in a situation where they are all working on the same thing at the same time” (Mentor 9). Two mentors felt that because students had to absorb and understand a large quantity of new information and then participate based upon their understanding, students internalized the knowledge they gained. Decision-making skills were noted by three mentors as particularly developed.

One mentor found that the exercise was a great chance to explore coordination and deconfliction dynamics. All mentors indicated that the set-up and pre-course requirements were essential and most helpful. Two experienced mentors noted that new mentors would benefit from more guidance and coaching.

**Student interview transcripts.** Students universally perceived experiential learning as highly effective. “I think experiential learning is a great learning modality. I am a huge proponent. I also think that it’s a more engaging method of education” (Student 1). One student felt that it stretched their knowledge and improved their professional understanding of how to approach professional conferences.

“The experiential learning course was incredible. It was definitely impactful. I am a hands-on learner, so it was great for me because I got to solve the issue then and there, and I
learned how to negotiate as I was going along” (Student 2). “I think that it is a great teaching modality. On a personal level, you really confront aspects of yourself that you may not get in other types of learning environments” (Student 3).

The process was consistently considered impactful and a great way to enhance collaboration among students. “This was helpful, especially with teamwork, a leadership focus, that is hard to teach in a classroom setting. It helped put into practice what we learned in school” (Student 4). “This was really, really effective. Anything put into practice is much better than trying to study it” (Student 5).

Six students specifically noted that they perceived this as an effective way to develop creative and critical thinking skills. “In general, I think it is a great way to learn” (Student 6). “It took a bit of creative thinking at the beginning. I think that once we had a set of tools that we could use, then the experiential learning just kind of became really seamless with everything else we were doing” (Student 7).

Five students also noted its benefits and effectiveness, especially as it relates to the education of law school students. “I think experiential learning is a very effective learning modality in general. I think especially in law school where you do not get the opportunity to practice the skills that you will be using in your career. I think it is a really great experience to learn and prepare us for future careers” (Student 9). All students noted a great experience and learning process overall.

In all cases lessons in critical thinking about interactions were gained as students were forced to think analytically from their own perspectives. It was perceived as effective for teaching the topics of evaluation, communication, and negotiation techniques. Using a simulation was found to be an important contribution to learning.
“It was definitely impactful. I think that it’s a lot easier to learn when you are given a real-world scenario and you are forced to interact with that” (Student 11). “It was absolutely impactful. It is important to punctuate our law school education with experiences like the simulation that I just participated in. Overall I thought it was a very effective course” (Student 12).

**Simulation Detail Findings**

*Mentor after-action review.* Ten mentors perceived that a greater level of collaboration was required between the strategic leadership center and the law school to coordinate and achieve a high-level simulation experience. This included hiring an outside Information Technology consultant to manage the vast technology requirements to run the exercise. They all noted that incorporating the Coronavirus pandemic into the simulation introduced an additional level of realism into the course. Two mentors emphasized that other real-world developments contributed to a more difficult exercise and scenario.

A surprising finding related by one mentor was that the United States was perceived by many students to be an untrustworthy actor that could not be relied upon in the actual negotiation. One experienced mentor noted that “America First” rhetoric in the real world actually made negotiations difficult for the American delegation in the scenario. All mentors felt that the simulation worked well overall in a virtual environment; however, some roles were more difficult to play than others, such as foreign minister. So, each role and how it might play out in a virtual simulation must be considered carefully.

*Mentor interview transcripts.* Two mentors found the simulation to be a low risk and practical approach to develop leadership skills through teamwork, communication, and negotiation techniques. “This is a low stakes way to way to get comfortable and really learn”
Mentor 1). All mentors perceived this as an enjoyable and creative way to learn. “It’s very exciting for students. Students get to actually put what they have learned into practice and it’s a lot of fun for them” (Mentor 2).

Universally, mentors concluded that the realism of the simulation and the challenges it posed based upon real-world issues added great value to the learning experience. “The simulation forces students to take on leadership responsibilities in a time sensitive manner, enhancing their development” (Mentor 4). The structure of the simulation and having clear rules were also noted by three mentors as essential elements for success. The simulation was perceived by all mentors to enhance experiential learning, especially with fully engaged role players.

All mentors found that the realism of the simulation was an effective way to engage students to develop critical thinking skills followed by action. “They had to get through and synthesize material and learn to apply basic legal principles to facts. They had to figure out how to deal with ambiguity in terms of how to get to a goal” (Mentor 7). One mentor mentioned that getting preliminaries out of the way beforehand was perceived to make the simulation more beneficial.

One mentor noted that students were challenged to improve their planning, decision making, and problem-solving skills while working with and against others. “It contributed to learning by putting students in the situation of needing to think through how to approach the problem” (Mentor 9). All mentors perceived that the process of learning by doing was important to improving leadership at both the country-team and plenary levels. “I thought it was a great experience and great exercise” (Mentor 12).
**Student interview transcripts.** Students universally perceived the simulation as creating new learning and understanding by generating an experience that encompassed international themes and leadership skills, particularly negotiation techniques. “I think that simulating the real-world experiences, or real-world problems, or scenarios, it affords students in a constrained, safe environment an opportunity to explore the bounds of actions and responses and to sort of beta test what they should or should not do” (Student 1). “I tend to forget this a simulation and really get into the role as you’d want students to do. So, I really think it’s a great way to learn and kind of feel the human dynamic element to negotiation that doesn’t often come from studying and reading” (Student 3). The simulation was perceived by all to improve with time and practice.

Students universally considered simulation as an effective component in a virtual learning environment. “The real-world scenario helped us put skills we have learned into practice” (Student 4). Everyone determined that the application of the simulation experience was most effective. “This was well organized and set the stage for success. Even the small effects of conflicting principles are important” (Student 5).

“Although it is not exactly how it would play out, it gives you a glimpse of the kind of tensions that could arise” (Student 6). The realism and tempo were important as it was universally perceived to make people more accountable to do their work and be prepared. Every student mentioned that creative ideas launched multiple technologies to make things work better and being well organized was especially important.

Students consistently perceived simulation as an effective tool that created realism and brought the exercise to life, while encouraging students to think about transferable soft skills.
“The simulation was extremely useful for learning. It made me think about how people in actual crisis negotiations are functioning in the pandemic world” (Student 8).

Teamwork, personal development, and professional knowledge became particularly important to all. One student noted that it required both independence and team cohesion. “I think simulation makes the lessons easier to remember because there are distinct human interactions that stand out in our minds” (Student 12).

Virtual Learning Detail Findings

Mentor after-action review. A consistent refrain by all was that courses in a virtual learning environment require greater preparation by the instructors than face-to-face learning environments. Four mentors noted that there are few opportunities to make changes once they began teaching in the virtual environment. Two mentors stated that mentors require more thorough and complete guidance as well. An example was a loss of document version control as students made changes to diplomatic communications.

“The exercise took on a new level of required innovation and learning on behalf of both students and instructors” (Mentor 1). Three mentors mentioned that preplanning negotiation rooms and scheduling events ahead of time were vital factors in creating a smooth exercise. Four mentors noted that prearranged meetings kept things moving but stifled some creativity.

As a practical matter, the remote participation in some ways allowed more effective communication among the students (and by mentors with students). While we lost the benefits of face-to-face communications and negotiations, group communications were more effective at times as all present in an electronic room heard all that was said, as opposed to the side discussions and separate meetings that are inevitable when students
are meeting in person in a conference room and walking around the law school facilities.

(Mentor 7)

Mentors universally noted that students had an ongoing connection to all developments with constant access to a computer connection in a virtual environment. At times, due to multiple technological connections students experienced information overload, hindering effectiveness. Better coordination and distribution of cell phones, pagers, and backup technology was seen as necessary by three mentors. Nine mentors felt that the primary technology of Zoom worked well, but additional robust features like greater cloud storage and video capabilities would be helpful.

**Mentor interview transcripts.** The virtual learning environment was perceived by all mentors as a component with mixed outcomes. “The virtual setting was a blessing and a curse” (Mentor 5). The virtual setting appeared to offer some new learning opportunities and enhance leadership development because everyone had to engage in some key role. However, it was noted by every mentor that some in-person benefits were missing, and fewer negotiations were held, thus detracting from learning. Three mentors considered it to be valuable for important long-term lessons for real life such as the importance of preparation and an understanding that virtual negotiations are a reality in today’s world.

Moreover, it was universally perceived to be more challenging than in-person and students had to be called on at times. It was noted by five mentors that an essential aspect for successful outcomes in virtual learning settings is to have a structure that does not let individuals hide out. Two mentors mentioned that the team leader was the key to keeping everyone accountable and engaged, and the virtual setting made it obvious when students were not participating. One mentor stated that coaching student leaders in advance was a key element of
success. A good lesson that was advanced by four mentors was that being virtual made it necessary for students to be more articulate because of fewer body language cues, and the loss of the interpersonal component of face-to-face learning.

Students were universally perceived to be creative and adaptable as they used various compatible technologies as work arounds. Two mentors felt that technology issues and glitches made it more difficult, and were more pronounced than in-person, while three others thought that the virtual platform worked very well and presented few technical issues. All mentors noted that it did prevent informal interactions, but it focused people and diminished distractions. Five mentors perceived it to enhance a more in-depth experience.

Mentors universally felt that they needed to be vigilant to spot issues, and engagement seemed to improve over time. The virtual setting appeared to help with structure, but limit spontaneity, and ten mentors felt that it hindered creativity of ideas and a broader perspective. A benefit expressed by all was that because the virtual setting forced students to focus on communication at hand, listening to understand became a key lesson. “I actually think that the virtual environment worked really well” (Mentor 12). Consistently, mentors perceived some of the most difficult issues were the timing challenges and screen time on the computer.

**Student interview transcripts.** Students universally indicated that the loss of interpersonal interaction made the virtual setting more challenging. Nuances in communication were missing; however, significant value was found on the virtual platform overall and it was considered an effective medium. Students adapted to the environment by using multiple technologies in addition to the official platform, although access to bandwidth and technologies varied. The comfort of being at home was noted by five students as a plus but all students felt that being on the computer constantly was tiring.
Students universally noted that the virtual environment created a hesitancy in the beginning; it required an adjustment period. It was difficult to build rapport in the virtual environment. It took time for students to develop a comfort level and engage more; however, interaction and communication gradually improved. Students became more individualized in the virtual setting as they were put on the spot to speak or respond to others. Logistical challenges and lack of control also became issues.

All students perceived that a more concerted effort was required in a virtual environment. They felt that staying on track required better organization than in person. Practice gradually improved outcomes and four students thought that early assignments might give students a better comfort level. Three students noted that students felt challenged and thought that it was difficult going into a virtual environment not knowing their teammates. “Without personal interaction it was hard to read people because visual cues and body language were missing” (Student 4).

One student noted that in-person communication is better than virtual because “The virtual environment hampers one-on-one communication” (Student 5). Two students felt that stronger voices sometimes dominated weaker voices. “This hampered communication, so often the loudest voice would win” (Student 6). The virtual environment was noted by three students for contributing to the achievement of negotiation goals because it was hard to effectively object to outcomes. At the same time, students universally perceived that negotiation learning suffered.

All students perceived that multitasking became a norm, and it was necessary to be more accountable and intentional in every respect. Too much computer screen time in a virtual setting was universally perceived to detract from the experience. While the virtual setting enhanced learning to engage quickly, it was awkward in the beginning, but improved over time. Timing
became crucial and students learned to be more efficient. The virtual environment contributed to some communication breakdowns between students resulting in some missed opportunities.

Common downsides noted by nine students was that the virtual environment included some loss of personal control and a loss of some informal connections. It was more difficult to engage in sidebars. Leadership and teamwork became more important. The virtual environment was universally perceived to inhibit full communication and strong stances on issues.

The virtual aspect was universally perceived as largely effective and a great new experience, yet it was perceived as more structured and formal than in-person. More creativity was required in a virtual environment. Four students noted that limitations resulted in frustrations with students and technology limitations impacted all aspects of learning. Although the virtual environment was more stressful, five students noted that it forced students to rely on one another and work more closely together.

**Leadership Development Detail Findings**

*Mentor after-action review.* “Designating students to be an expert on a specific country helped keep them all involved and limited opportunities for free riding” (Mentor 4). Mentors universally perceived facilitation competencies for mentors to be more important in the virtual environment. Two mentors noted that guidance and coaching were crucial in leadership development for students, as mentors made sure students thought through their actions and teamwork responsibilities.

While this exercise is ultimately a negotiation event, critical learning takes place across several other domains including leadership, communication, strategy, and group dynamics. Whether in the rotating position as team leader, in ad-hoc negotiations, or just in internal team functioning, students’ leadership skills were challenged and stretched.
Law students will be required to take on leadership roles at various points in their careers, and this exercise necessitated leadership in an ambiguous setting, providing a great practice venue. (Mentor 1)

It was consistently established that students had numerous opportunities to practice key skills of great value to their careers. Students quickly adapted their communication methods to include multiple devices, text messages, and the use of other technologies to work around limitations of the virtual learning environment.

*Mentor interview transcripts.* Mentors universally perceived teamwork development to be more difficult in a virtual environment, but students learned to adapt and be more creative. Students used other technologies to have real-time conversations that contributed to positive outcomes. Mentors all felt that stress was greater than in-person, everything took longer, and it was more awkward than in-person. Missing visual cues were the biggest challenge. Mentors universally felt that many students seemed to really develop their leadership skills while others lost out.

Solid team rapport and trust were seen by all mentors as more important in the virtual environment. The virtual setting provided a safe environment to share individual opinions and resolve conflicts. Being well organized was seen as more important, while getting everyone to participate was challenging at times. Assignments, organization, and planning mattered more. Students were forced to plan better and be more strategic.

“Teamwork is much more challenging virtually” (Mentor 8). Students learned to be flexible and to listen better. The lack of body language made it harder to coach and mentor students, so making use of a camera ahead of time is recommended. Two mentors noted that it was easy for introverts to hide out and not participate.
The perception among all mentors was that communication development was more difficult and took longer virtually, but creativity and adaptability were enhanced. Communication required greater clarity because of the lack of visual body cues, so the virtual setting enforced good communication strategies. Order and structure became especially important. Students were forced out of their comfort zones in a virtual setting.

Key communication challenges included fatigue by the end of each day due to excessive screen time on the computer, some students hiding out, and the tendency for students to revert to nonprofessional technology habits. Having specific planning and inclusion actions were noted by two mentors as a way to mitigate these issues. One mentor explained that, with everyone present and visual cues missing, candor was difficult to achieve. Disputes were in the open, so conflict resolution was more cordial. Communication development was diminished because they lacked visual cues and body language.

On a positive note, all mentors found that listening skills improved. Adaptive behavior occurred and students became more creative. Communication needed to be succinct and precise. There was pressure to be well organized and make decisions within strict time constraints. Communication was advanced by assigning specific roles and creating structure, thus making it easier to engage.

Every mentor perceived that communication practices led to the use of multiple platforms concurrently. Flexibility was paramount and shared documents were common. Communication required patience, thoughtfulness, and a strong team dynamic. Students needed to be well prepared, relevant, and timely.

Negotiation techniques were adapted, but personal connections were diminished. One mentor noticed that the lack of physical contact like handshakes detracted, but students learned
to adapt and develop a negotiation trapeze. Negotiation techniques developed and became more efficient in time. Mentors universally found that negotiations required greater focus and a more deliberate approach than in-person. Students adjusted and adapted, but two mentors perceived that practicing different techniques was difficult.

Negotiation techniques were more difficult without access to nonverbal cues, and it became easier to misinterpret others. All mentors perceived that the process required more formality and planning. Development of negotiation techniques evolved slowly and gradually improved over time. It was more difficult to persuade without body language and nuances.

“Learning how to negotiate in a remote environment is probably a good thing” (Mentor 8). It required a different set of soft skills. Negotiation required more deliberate organization and intentional action, so being flexible was critically important. The virtual environment contributed to less clarity of negotiated outcomes. Team support from operations was crucial.

**Student interview transcripts.** Students universally found that teamwork was more challenging and difficult at first but improved with time. It developed slowly due to missing communication cues and lack of body language. Consensus was harder to build virtually and the need for flexibility and adaptability became apparent. Leadership development through team building done in a virtual setting was universally considered a benefit for future legal careers. It was also noted by one student that technology left nowhere to hide because it tracked everyone’s contribution to work.

Two students perceived that prior experience in team building was beneficial. Precision and organization were seen as particularly important attributes. To build teams, students universally acknowledged that they had to be clear and articulate in everything they
communicated. Although some informal team building and cohesion was lost, collaboration and teamwork were enhanced throughout the exercise.

Communication dynamics were perceived by all students to be generally less effective, but also improved over time. Strategic communication lessons, including the importance of being well organized, were learned. Eight students noted that it was difficult to gauge people due to a lack of visible micro-expressions, so students noted that an initial practice session was something that may have helped. Communication skills took time to adjust and adapt and these skills improved with practice on multiple platforms.

To overcome challenges, good preparation and precise language became especially important. “Communications had to be more straightforward and direct, so this was a learning area” (Student 4). “Regarding communication, I learned to figure out exactly what I wanted to say before the meetings” (Student 5). “We were definitely more deliberate in our communications” (Student 11).

Using good listening skills was also considered critical for success and everyone had input out of necessity. Time sensitive deadlines seemed to improve learning. Students needed to be more creative to achieve effective communication, and written communication was a key skill development that enhanced clarity.

All students perceived that negotiations required preparation, precision, and time management. They had to be better organized and have better clarity than in person, and these challenges led to learning. “Learning how to interact with other people, and figure out what they want, all virtually, was a massive learning experience” (Student 12). While some bargaining opportunities were lost, all students learned to be well prepared and use precise language. A conscious effort was necessary in negotiations to keep pressing forward.
Students universally found that negotiation techniques were more difficult to apply in a virtual environment. However, three students noted that negotiation techniques were somewhat enhanced in the sense that they forced students to really listen and pay attention. As the exercise progressed some conflict ensued because of missed cues. It was less nuanced than in-person, but students adapted. “Once we got the hang of it, we were all on the same path” (Student 2).

Two students recognized that the requirement for organization helped with negotiation goal achievement because negotiations had to be more efficient. Unexpected learning outcomes were common. Leadership development through negotiation was universally perceived as being effective.

**Reflection Detail Findings**

*Mentor interview transcripts.* One mentor observed that practice followed by thinking and reflecting led to more internalized learning. “I think that having something at the end is definitely useful for students to kind of reflect and think through the experience. This capstone exercise served as a culmination experience” (Mentor 1). The reaction paper with prompts was perceived to be quite effective in the learning process. It encouraged reflection and enhanced learning.

*Student interview transcripts.* Students universally agreed that prompts helped guide reflection and the reflective exercise brought everything together. “I mean it was fine to reflect. I can let my feelings out on paper” (Student 3). “I think that the prompts really did help me stay focused. They helped me think through the experience” (Student 7).

The exercise was considered highly effective by all students in clarifying ideas and giving meaning to the experience. “This was a great way to finish” (Student 6). Waiting a few days after the course was beneficial for many students as it helped them gain some perspective.
“This was a good way to think about what I got out of the simulation exercise from a teamwork soft skills standpoint. This was the capstone of the exercise” (Student 8). “I especially liked the prompt questions” (Student 9). Pointed questions improved learning and reflection. The timing before graduation worked well because students were more reflective.

“Writing the reaction paper really brought the experience all together because it helped me to organize and articulate my thoughts” (Student 10). “I thought it was a really good exercise in reflection” (Student 11). One student noted that engaging in a country-team debriefing was seen as a process that could enhance the reflection component.

**Student Surveys Detail Findings**

Student surveys were created by the strategic leadership center and distributed to the 75 students enrolled in the course through the classroom management system Canvas. The surveys included five statements focused on exercise methodology, applicability, learning outcomes, preparation materials, and overall satisfaction. The students were asked to rate each area based upon their personal perceptions.

Of the 75 students who received questionnaires, 17 students completed the surveys. This was a 23% voluntary completion rate for the student population in the course. Ratings were expressed from 1–10, with 1–2 *strongly disagree*, 3–4 *disagree*, 5–6 *neither agree nor disagree*, 7–8 *agree* and 9–10 *strongly agree*. For analysis of findings, 1–3 were considered *low ratings*, 4–6 were considered *moderate ratings*, and 7–10 were considered *high ratings*. Only a few comments appeared on the survey responses. They fell into two categories: 1) all students who gave high ratings were enthusiastic about the exercise; 2) the four students who gave ratings in the moderate or low categories complained about too many pre-reading assignments leading up to the exercise.
**Exercise methodology.** Statement: The International Strategic Crisis Negotiation Exercise was an effective method for learning about negotiations. There were no low ratings for this question. Three students neither agree nor disagree, resulting in an 18% moderate rating. Three students agree and 11 students strongly agree, so 82% of respondents gave a high rating for exercise methodology.

*Figure 2. Exercise Methodology*
**Applicability.** Statement: The conduct of strategic decision-making and strategic negotiations is something that is important to my professional education. There were no low ratings for this question. One student or 6% gave a moderate rating. Five students agree and 11 students strongly agree, this resulted in 94% giving a high rating.

*Figure 3. Applicability*
**Learning objectives.** Statement: This exercise met the learning objectives of enhancing negotiation techniques, leadership, and decision-making skills. There were no low ratings for this question. Two students neither agree nor disagree, giving a moderate rating of 12% of survey respondents. Three students agree and 12 students strongly agree for a total of 88% giving a high rating.

*Figure 4. Learning Objectives*
**Preparation materials.** Statement: The read-ahead articles, scenario and maps as well as the negotiation technique read-aheads effectively prepared me to participate in this exercise. There were two low ratings for this question, or 12%. Two students gave a moderate rating for an additional 12%. Five students agree and eight students strongly agree, resulting in 76% giving a high rating.

![Figure 5. Preparation Materials](image-url)
**Overall satisfaction.** Statement: The experience and learning achieved during this event make it a worthwhile investment of time and it should be continued in the future. There were no low ratings for this question. Two students neither agree nor disagree, for a moderate rating of 12%. Two students agree and 13 students strongly agree, resulting in a high rating of 88%.

*Figure 6. Overall Satisfaction*
Table 1

*Student Survey Findings*

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**Major Findings**

**Finding 1.** *Experiential learning is a highly effective and transformative learning methodology.* “The experiential learning course was incredible. It was definitely impactful” (Student 2). “For students to actually engage and experience something tangible about what they are learning in school is especially useful” (Mentor 1). The experiential component developed creative and critical thinking skills in a condensed timeframe.

The emphasis on real-world issues was found to enhance learning by assessing issues from different perspectives. This process helped students internalize the knowledge they gained while improving leadership, team building, decision making, and communication skills. Learning progressed in unforeseen ways as students used various unofficial technology platforms to modify how they moved forward. There was a consensus that mentors needed more information, clarity, and guidance to facilitate in a virtual environment.

**Finding 2.** *Simulation creates realism that enhances learning.* The simulation effectively developed teamwork, communication, and negotiation techniques in a practical way. The realism of the simulation challenged students’ planning, decision making, and problem-
solving skills. Students learned to synthesize material and apply basic legal principles to facts in an ambiguous situation. “This is a low stakes way to way to get comfortable and really learn” (Mentor 12).

I tend to forget this a simulation and really get into the role as you’d want students to do. So, I really think it’s a great way to learn and kind of feel the human dynamic element to negotiation that doesn’t often come from studying and reading. (Student 3)

Simulation and the realism it created worked well overall in a virtual environment; however, some roles were more difficult to play than others, so each role and how it might play out in a virtual simulation must be considered carefully.

**Finding 3. Virtual learning is more difficult and requires more preparation than in-person learning.** A consistent refrain was that courses in virtual learning environments require greater preparation by the instructors than face-to-face learning environments. There are limited opportunities to make changes once one begins teaching in a virtual environment. “Without personal interaction it was hard to read people. Visual cues and body language were missing” (Student 4). It is difficult to build rapport in the virtual environment because some interpersonal components and nuances in communication were missing, although significant value was found on the virtual platform and it was an effective medium.

The challenges of a virtual environment offered new learning opportunities as they led to a more in-depth experience. Leadership development was enhanced as everyone engaged in key roles by necessity. Activity was diminished, but there was a need for better organization. Students had to be very articulate because of diminished body language cues. Students were creative and they adapted with other technologies.
Mentors were required to be more vigilant to spot issues, and coaching student leaders in advance was a key element of success. Listening to understand became a key lesson. Some of the most difficult issues were the timing challenges and time spent on the computer.

**Finding 4. Leadership development was more challenging in a virtual environment.** Leadership mentor guidance and coaching were determined to be crucial in leadership development for students, as mentors facilitated students through their thoughts, actions and teamwork responsibilities. “While this exercise is ultimately a negotiation event, critical learning takes place across several other domains including leadership, communication, strategy, and group dynamics” (Mentor 1).

Teamwork was more challenging and required more effort. Students required precision in communication, and it was generally less effective than in person. “Regarding communication, I learned to figure out exactly what I wanted to say before the meetings” (Student 5). Negotiation techniques required better organization and better clarity than in person.

Solid team rapport and trust were especially important. Teamwork suffered, stress increased, and a greater commitment was needed. Communication was diminished without visible body language cues. It needed to be succinct and precise. This led to assigning specific roles and using multiple platforms concurrently.

Negotiation techniques were the most difficult to develop due to the structure and limitations of a virtual exercise. Negotiation required more deliberate organization and intentional action. Flexibility, creativity, adaptability and being strategic were critical. Order and structure became especially important.

**Finding 5. Reflection is an essential component for deeper learning.** “Writing the reaction paper really brought the experience all together because it helped me to organize and
articulate my thoughts” (Student 10). The reaction paper with prompts was a very effective tool that encouraged reflection and enhanced the learning process. “I think that having something at the end is definitely useful for students to kind of reflect and think through the experience. This capstone exercise served as a culmination experience” (Mentor 1). Practice followed by thinking and reflecting led to more internalized learning.

**Finding 6.** *Exercise methodology of experiential learning through simulation is highly effective.* The International Strategic Crisis Negotiation Exercise was an effective method for learning about negotiations. 82% of respondents gave a high rating.

**Finding 7.** *The International Strategic Crisis Negotiation Exercise was strongly applicable to professional legal education.* The conduct of strategic decision-making and strategic negotiations is something that is important to my professional education. 94% of respondents gave a high rating.

**Finding 8.** *Learning objectives were effectively met.* This exercise met the learning objectives of enhancing negotiation techniques, leadership, and decision-making skills. 88% of respondents gave a high rating.

**Finding 9.** *Preparation materials were good but could be improved.* The read-ahead articles, scenario, and maps, as well as the negotiation technique read-aheads, effectively prepared me to participate in this exercise. 76% of respondents gave a high rating.

**Finding 10.** *Overall rating: the exercise was a great success in learning.* The experience and learning achieved during this event make it a worthwhile investment of time and it should be continued in the future. 88% of respondents gave a high rating.
Summary

This chapter presented multiple findings from this study. It began with an overview of the course structure and analysis method, followed by detail findings for each of the archival datasets used for the case study. Results included findings from 10 mentor after-action reviews, 12 mentor interview transcripts, 12 student interview transcripts and 17 student surveys.

All the findings from the datasets were presented in detail from the perspective of the student and mentor course participants. Extensive quotations were used in the findings to provide authentic perspectives from students and mentors who participated in the study. Taken together in a holistic manner, the findings from the datasets provide a comprehensive understanding of this case study.

Ten major findings resulted from the consolidation of the detail findings that were derived from the archival datasets. These ten findings include:

1. Experiential learning is a highly effective and transformative learning methodology
2. Simulation creates realism that enhances learning
3. Virtual learning is more difficult and requires more preparation than in-person learning
4. Leadership development is more challenging in a virtual environment
5. Reflection is an essential component for deeper learning
6. Exercise methodology of experiential learning through simulation is highly effective
7. The International Strategic Crisis Negotiation Exercise was strongly applicable to professional legal education
8. Learning objectives were effectively met
9. Preparation materials were good, but could be improved
10. The exercise was a great success in learning

Taken together, the results of the evaluation point to an extraordinarily successful educational program for learning.

The overall conclusion of the findings from this case study is that experiential learning through simulation in a virtual learning environment is a highly effective educational methodology for the development of the leadership soft skills of teamwork, communication, and negotiation techniques from the perspective of senior law school students and their mentors. The International Strategic Crisis Negotiation Exercise was found to be a transformative experience by participants. This conclusion is a summation of the detail findings and the 10 major findings discovered across all archival datasets.
CHAPTER 5: CONCLUSION

The primary purpose this study was to explore the effectiveness of experiential learning through simulation in a virtual environment to gain an in-depth understanding of its impact on the development of the leadership soft skills of teamwork, communication, and negotiation techniques for senior law school students from the perspective of students and their mentors.

This chapter begins with the amalgamation of the 10 findings based upon the results of the case study into five major themes: experiential learning, simulation, virtual learning, leadership development, and overall impressions. The themes are then interpreted through a careful process of analysis and synthesis. Next, implications of the interpretations are considered, followed by recommendations for action, recommendations for further study, and a conclusion focused on the significance of the study.

Five major themes are the culmination of a careful synthesis of the major findings discovered from an analysis of the archival datasets. The analysis began with a detailed look and manual coding of 10 mentor after-action reviews, 12 mentor interview transcripts, 12 student interview transcripts, and 17 student surveys. Each dataset was scrutinized for information that shed light on the problem, purpose, and research question of this study. Coding brought clarity to the process by revealing important information from the datasets that generally fell into four key categories. The analysis resulted in expected findings that coincided with the literature, surprising findings that presented new information, conceptually interesting findings that enlightened understanding, and meaningful quotes that brought it all together.

Taken together, these categories provided a clear picture of meaningful outcomes within each of the five themes. Overall, experiential learning through simulation in a virtual learning environment was found to be a highly effective educational methodology for the development of
the leadership soft skills of teamwork, communication, and negotiation techniques from the perspective of senior law school students and their mentors. Students and mentors concluded that the experience was transformative and that leadership soft skills were significantly improved and enhanced through this teaching methodology.

**Interpretation of Findings**

Major themes derived from the findings of this study indicated that the course and exercise conclusively answered the research question: What is the effectiveness of experiential learning through simulation in a virtual learning environment on the development of the leadership soft skills of teamwork, communication, and negotiation techniques from the perspective of senior law school students and their mentors? The experience was considered highly effective regarding its contribution to learning. Themes derived from the perspective of students and mentors who participated in the exercise indicated that experiential learning through simulation in a virtual environment was a transformative learning experience that effectively taught leadership soft skills.

This concept of transformative learning through experience and critical reflection is supported by both Kolb’s (2015) experiential learning theory and Mezirow’s transformative learning theory (as cited in Merriam & Bierema, 2014). Critical reflection was considered an important and essential aspect of this course. The critical reflection component came in the form of a requirement for students to write a reaction paper following the International Strategic Crisis Negotiation Exercise. The overall conclusions are considered throughout the major themes derived from the case study. Each theme was carefully deconstructed for analysis and synthesis to gain an in-depth understanding of its meaning.
Experiential Learning

The finding that experiential learning is highly effective and transformative is important to legal education and it was consistent with the literature. It reinforced experiential learning as an effective learning methodology as described by Thanaraj (2016). Students and mentors consistently praised experiential learning for its effectiveness in teaching leadership soft skills to senior law school students. This positive outcome aligned with the findings of Freitas and Routledge (2013) regarding educational games and soft skill development in a professional business organization.

The experiential nature of the course seemed to help students internalize the knowledge they gained while improving leadership, team building, decision making, and communication skills. “The experiential learning course was incredible. It was definitely impactful” (Student 2). “For students to actually engage and experience something tangible about what they are learning in school is especially useful” (Mentor 1).

Innovation became an important indicator of learning as students adapted to their virtual circumstances by creating ways to overcome limitations and successfully achieve their objectives. An unexpected finding was a consensus among mentors that they needed more information, clarity, and guidance to effectively facilitate in a virtual environment. This perspective supported the idea advanced by Kolb of the teacher as facilitator having changing roles throughout the experiential learning process (Kolb, 2015).

Reflection is an essential component for deeper learning. “Writing the reaction paper really brought the experience all together because it helped me to organize and articulate my thoughts” (Student 10). The reaction paper with prompts was universally considered an effective tool that encouraged reflection and enhanced the learning process. Students indicated a great
appreciation for the reflection exercise, and they valued its contribution to learning. This component of the course seems to have had a profound impact on learning by bringing the experience to a proper conclusion.

Because of its importance to learning, Kolb (2015) included reflection as a vital component of experiential learning theory. This was further reinforced by Zull (2011), who discovered in his neuroscience research that experience coupled with reflection connects the brain with the world directly. The findings of Kolb (2015) and Zull (2011) were evident in the findings regarding reflection. “I think that having something at the end is definitely useful for students to kind of reflect and think through the experience. This capstone exercise served as a culmination experience” (Mentor 1). Zull’s (2011) findings proved to be accurate as students perceived practice followed by thinking and reflecting led to more internalized learning.

**Simulation**

The findings demonstrated that simulation creates realism that enhances learning. Realism within the simulation seemed to be an effective tool to develop teamwork, communication, and negotiation techniques in a practical manner. Mentors felt that the exercise helped advance students’ legal education as they learned to synthesize material and apply basic legal principles to facts in an ambiguous situation. Supporting this concept were strong indications that the realism of the simulation challenged students’ planning, decision making, and problem-solving skills. The work of Thanaraj (2016) reinforced this idea and promoted simulation as a useful tool in legal education. “This is a low stakes way to way to get comfortable and really learn” (Mentor 12). This perspective supports realistic simulations as an effective tool for learning and enhancing important soft skills for senior law school students.

Students also reiterated these thoughts.
I tend to forget this is a simulation and really get into the role as you’d want students to do. So, I really think it’s a great way to learn and kind of feel the human dynamic element to negotiation that doesn’t often come from studying and reading. (Student 3)

It appears that while simulation is an important learning tool, some roles were much more challenging than others in the virtual environment, so role play must be considered carefully in this type of setting.

*Exercise Methodology.* The exercise methodology of experiential learning through simulation was considered to be highly effective. Students and mentors perceived great value in the exercise methodology for learning about negotiations, although findings indicated that the development of negotiation techniques was found to be the most challenging of all soft skills. Simulation in a virtual environment seemed to both hamper learning overall and enhance certain attention to detail and structure.

Even with the limitations of the exercise, students indicated that learning through simulation in a virtual environment was an effective methodology for learning about negotiations. The rating of 82% of respondents indicated a highly favorable rating for exercise methodology, with most giving a 9 or 10 out of 10. This finding supported and was consistent with the other findings in this study regarding the highly effective nature of the exercise methodology.

*Virtual Learning*

The study shows virtual learning was more difficult and required more preparation than in-person learning. Mentors overwhelmingly felt that courses in virtual learning environments require greater preparation than in face-to-face learning environments. The lack of visual cues and a corresponding difficulty in making changes once teaching began appeared to be the two
most important challenges for teaching in a virtual environment. “Without personal interaction it was hard to read people. Visual cues and body language were missing” (Student 4).

Although virtual learning was deemed effective, the communication challenges clearly required additional planning and consideration. Interpersonal communication was difficult for students and mentors alike. Some mentors felt that a virtual environment offered new learning opportunities and led to a more in-depth experience as students were required to engage in key leadership roles by necessity. The lack of visual cues seemed to force students to be more creative, organized, and articulate.

Students and mentors indicated that adapting to unofficial technologies and learning to practice keen listening to understand were enhancements to learning. These side benefits were unexpected. Additionally, the facilitation practices of mentors adapted as they needed to be more vigilant to spot issues and coach student leaders in advance to ensure successful outcomes. This situation is consistent with Kolb (2015) in finding that the role of the teacher/facilitator changes throughout an experiential learning course. Two additional challenges that unfolded were the timing challenges of events inside the exercise and time spent on the computer, so these should be managed proactively in virtual learning environments.

**Leadership Development**

Leadership development was more challenging in a virtual environment. Findings regarding mentor guidance and coaching indicated a need to provide more facilitator/mentor training ahead of virtual educational events because mentors play a crucial role in the leadership development for students, as mentors make sure students think through their actions and teamwork responsibilities. “While this exercise is ultimately a negotiation event, critical learning takes place across several other domains including leadership, communication, strategy,
and group dynamics” (Mentor 7). This finding was also supported by the concept Kolb (2015) developed of an evolving facilitator role throughout an experiential exercise.

Teamwork development was found to be more challenging and required more effort due to missing visual cues. The positive aspect to this finding was that students needed to learn how to be more precise in their communication, while the downside appears to be that team building was generally less effective than in person. “Regarding communication, I learned to figure out exactly what I wanted to say before the meetings” (Student 5). Negotiation techniques also required better organization and better clarity than in person.

There was a balancing act that required nuanced leadership throughout the exercise. While teamwork suffered and stress increased, team rapport and trust appeared to be more important than it might have been in an in-person setting. The lack of visible body language cues meant that communication needed to be succinct and precise, thus adaptation through specific role assignments and using multiple technology platforms concurrently became a norm. Negotiation technique development was perhaps the most difficult task as it required a high level of organization and structure. It appeared that some good was derived as students learned the importance of being flexible, creative, and adaptable in an ambiguous environment.

**Overall Impressions**

These final four findings all relate to the overall impressions students had about the course. Overall impressions were derived from student surveys and they provided insight into how students perceived the value of the course. Students gave high ratings in each category, and they indicated a weakness in preparation materials for the course. This specific feedback means that teachers and mentors have room to improve the course in this area.
**Applicability to the profession.** The International Strategic Crisis Negotiation Exercise was considered strongly applicable to professional legal education. The student respondents indicated that the format and type of exercise was favored and applicable to their legal education. This question elicited the most favorable rating, resulting in a 94% high rating, with all but one respondent giving a high rating. Students felt strongly that strategic decision-making and strategic negotiations are important to them in professional legal education. This pointed to the value of the course content as well as how it was conducted.

The experiential nature of the course along with the realism of the simulation seemed to have a positive impact on students. The positive response to its applicability provided valuable input to the law school. This may impact a curriculum modification to include more courses that use an experiential learning methodology with simulation. A 94% highly favorable rating reveals that respondents felt that the course was applicable to the legal profession. Findings of 10 of 17 respondents giving the highest rating and 6 giving a high rating for applicability supports the importance of leadership education in the profession of law.

**Learning objectives.** The study showed learning objectives were effectively met. Students overwhelmingly indicated that the exercise met the learning objectives of enhancing negotiation techniques, leadership and decision-making skills. With 88% giving a high rating, it seems that the learning objectives were well considered and successfully met.

This result supports the idea that experiential learning was effective in this format and that the combination of experiential learning with simulation worked well. The focus on leadership development was embraced by the law school students. Fifteen of 17 gave a high rating. The 88% high rating is consistent with other data sources and strengthens findings on the effectiveness of this learning methodology in a virtual environment.
**Preparation materials.** Learning materials were reported to be good but could be improved. The rating of preparation materials was the lowest rating among all findings. Although 76% of students gave a high rating, there is clearly room for improvement in read-ahead articles, scenario, and maps or the negotiation technique read-aheads. This is important because the preparation materials are the first components of the course that students receive, and these materials set the stage for the course and the main exercise.

Preparation materials included readings and lectures. The volume of material seemed to overwhelm some students. The virtual nature of the course may have also been a factor because coaching was more challenging, so students having trouble could not get all the guidance they needed.

The lower rating in this category is cause for reflection. Some of the course preparation materials seem to be an issue, but these findings also indicate that some aspect of the course structure may also be an issue. The 76% high rating means 13 of 17 students gave a high rating and 4 of 17 gave a lower rating. It is sufficiently high by itself, but when compared to the ratings in other categories, the 76% indicates a need to reassess all aspects of course preparation.

**Overall rating.** The exercise was a great success in learning. Students indicated overwhelmingly that the experience and learning achieved during this course made it a worthwhile investment of time and it should be continued in the future. With 88% giving a high rating, the course appears to be highly successful overall in its preparation, format, and execution. This finding strongly supported the primary finding that students and their mentors perceived experiential learning through simulation in a virtual environment as an effective
educational methodology for teaching the leadership soft skills of teamwork, communication, and negotiation techniques to senior law school students.

The highly favorable overall rating of 88%, with most respondents giving a 9 or 10 out of 10, indicates a highly effective course. This finding supported and was consistent with all the other major findings in this case study. The combination of experiential learning through simulation in a virtual environment for leadership development resulted in superior learning outcomes that provided significant research findings.

Implications

Implications are multifaceted and touch on many issues, including the problem of the study, the gap in the literature, study assumptions, and the significance of the study. Essential implications indicated that the core problem of this study was addressed and an important gap in the literature was filled. This study provided solid evidence from the perspective of students and their mentors that experiential learning through simulation in a virtual environment is effective and transformative for the development of leadership soft skills for senior law school students. By addressing the research problem and the gap in the literature, the study reinforced and expanded upon related research, thus enhancing the credibility of this study.

Three key assumptions of this study were fully supported by the evidence from the interpretation of findings: online virtual simulations are an effective way to teach graduate students decision-making skills, leadership education is important in legal education, and the effectiveness of experiential learning is dependent on the competencies of the teacher/facilitator. The analysis and synthesis from this study was consistent with the research of Staub and Bravender (2014) that online simulations are an effective way to teach graduate students decision-making skills. The study implications also expand on the research of Freitas and
Routledge (2013) that concluded experiential learning through simulation in a virtual environment is an effective method for teaching leadership soft skills to business leaders in a global business organization. The implications for legal education reinforce the research of Thanaraj (2016) who determined experiential learning to be an effective educational methodology for teaching legal skills in a virtual environment. Perhaps most revealing was the fact that the facilitation acumen and skills of mentors was central to setting the conditions for the success and effectiveness of the learning experience, as supported by the research of Kolb (2015).

The significance of the outcomes of this study include a potentially valuable impact on learning theories, teaching practices, and educational policies. The findings contribute to adult learning theory by demonstrating that experiential learning is an effective learning methodology when coupled with simulation and delivered in a virtual learning environment. This confirmed that engagement and practice are important aspects of adult learning and they contribute to effectiveness. Moreover, the study’s findings reinforce adult learning theory as it relates to the transformative possibilities of a well-designed experiential learning course.

Teaching and facilitation practices are informed by this study and benefit by the findings of how experiential learning through simulation works in a virtual environment. The positive learning outcomes for the senior law school students may contribute to expanded experiential educational opportunities at this and other law schools for teaching leadership soft skills. Finally, consistent with Kolb (2015), reflection was found to be a vital component and outcomes indicated that a reflection component should be incorporated into all experiential learning courses to enhance learning.
The influence on educational policy, specifically at law schools, may be of major significance. This study has demonstrated that leadership development was beneficial to legal education and that this educational delivery method resulted in transformative learning outcomes for students. Therefore, a change in educational policy that incorporates more leadership education into law school curricula by applying an experiential learning methodology through simulation in either an in-person or virtual learning environment may be a distinct possibility. Finally, this study will likely contribute valuable knowledge to the fields of leadership and legal education.

**Recommendations for Action**

Overall, themes from this study were positive and encouraging for expanding the use of experiential learning through simulation in virtual learning environments for leadership development. However, there are three areas where significant improvements are recommended. On a positive note, experiential learning should be expanded for teaching additional practical soft skills such as strategic planning, decision making, and problem solving. This should also be coupled with a realistic simulation in a virtual or face-to-face learning environment.

The focus on leadership development for future attorneys was highly beneficial and should be expanded. This concept was supported by Martin (2017) who promoted the need for quality leadership education and the importance of competent leaders in all fields. In related research that aligns with this study, Robinson (2016) concluded that educational outcomes will improve if learning styles and curricula are better aligned. The enhanced creativity and flexibility found in this study further supports expansion in the curricula. This recommendation is in line with Robinson (2016) who discovered that a student’s learning flexibility was closely
correlated with their flexibility as leaders and that executives who have more flexible leadership styles learn from their experiences and tend to be successful throughout their careers.

It is important to note that leadership development must be properly structured and aligned to achieve specific outcomes that are desirable in particular professions. Qadi (2016) pointed out that leadership styles and leadership focus may differ depending on the professional field. He identified eight key principles of good leadership: a clear vision, effective planning, inspiration and motivation, new ideas, employee relations, crisis management, creating confidence, and building morale (p. 18-19). All these principles apply to the legal profession and are applicable to other professions as well, but how they are taught may differ from one profession to another.

Areas that need improvement and careful attention according to this study are threefold. Preparation materials must be carefully selected and organized to be most useful, otherwise they can overwhelm some students and cause frustration and confusion. Mentor/facilitation training should be more deliberate and comprehensive, focusing on the evolving roles that are relevant in a given setting. Time spent on the computer must be well considered and include breaks to avoid burn-out.

**Recommendations for Further Study**

The assessment of findings from this study point to many possible beneficial options for further research. Most notable among these are the leadership soft skills of strategic planning, decision making, and problem solving; facilitation practices in virtual and in-person settings; and the impact of experiential learning through simulation in other educational settings. Each of these research topics offer opportunities to enhance understanding of the effectiveness of this educational methodology, and they address key knowledge gaps.
These research concepts can be combined in various ways to provide greater understanding in particular educational settings. A valuable research area would be the study of the effectiveness of experiential learning through simulation for the development of the strategic leadership skills for strategic planning, decision making, and problem solving in a virtual environment. These topics may have real world implications for legal professionals and senior military leaders. They could impact development and application across a broad range of actual strategic activities in the military. Potential strategic import may enhance senior leader education, skills, and most importantly, the effectiveness of future strategic leaders.

**Conclusion**

This chapter provided an interpretation of findings from four archival datasets along with implications, recommendations for action, and recommendations for further study. The interpretation of findings from mentor after-action review notes, mentor interview transcripts, student interview transcripts, and student surveys provided a clear picture of the effectiveness of experiential learning through simulation in a virtual environment on the development of leadership soft skills for senior law school students from the perspective of students and their mentors. Strong indications of the transformative nature of this learning methodology for leadership development were found.

Four themes emerged from the findings that were interpreted from the data: experiential learning, simulation, virtual learning, and leadership development. A fifth theme, overall impressions speaks to the overall effectiveness of the course and recommendations for action. The interpretation of findings from this study provide strong evidence that experiential learning through simulation in a virtual environment is highly effective and transformative. The multiple research datasets from the perspective of students and mentors offer an in-depth understanding of
its positive impact on the development of the leadership soft skills of teamwork, communication, and negotiation techniques in a virtual learning environment. The importance of reflection in learning and facilitator competencies was noted as a key element contributing to effectiveness.

This case study began unexpectedly due to a global health pandemic that forced a face-to-face course to an online virtual environment. A strategic leadership center from a senior military service college collaborated with an elite law school to provide leadership development to senior law school students. The sudden change from a face-to-face to a virtual learning environment was the impetus for the senior leadership center team to gather data to determine how experiential learning through simulation worked in a virtual environment. This created an opportunity to conduct program evaluation research through a case study methodology using archival datasets.

The results from this case study are highly significant and offer vast possibilities to understand, improve, and apply experiential learning through simulation in a virtual environment for leadership development. The potential benefits of this study include the fields of leadership development, legal education, and virtual learning. Findings and resultant themes from the analysis, synthesis, and interpretation of this data will likely contribute to the literature regarding leadership development in a virtual environment, enhancing legal education using experiential learning through simulation in a virtual environment, and improving educational policies to incorporate experiential learning as a central practice in adult education.
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