![AAACE logo — American Association for Adult and Continuing Education. Transforming Lives and Communities]

American Association for Adult and Continuing Education

2024 Conference Proceedings

October 28 - November 1
Peppermill Resort Spa Casino
Reno, Nevada

Editors
Dr. Laura B. Holyoke, **Chair**
Dr. Audrey Ayers
Dr. Trenton Ferro
Dr. Adam L. McClain
Dr. Kyle Znamenak

American Association for Adult and Continuing Education

Vision Statement

The American Association for Adult and Continuing Education (AAACE) is dedicated to the belief that lifelong learning contributes to human fulfillment and positive social change. We envision a more humane world made possible by the diverse practice of our members in helping adults acquire the knowledge, skills, and values needed to lead productive and satisfying lives.

Mission Statement

The mission of the American Association for Adult and Continuing Education (AAACE) is to provide leadership for the field of adult and continuing education by expanding opportunities for adult growth and development, unifying adult educators; fostering the development and dissemination of theory, research, information, and best practices; promoting identity and standards for the profession; and advocating relevant public policy and social change initiatives.

2023-2024 Board of Directors

President	Steve Frye
President-Elect	Tricia Berry
Immediate Past President	Paulette Issac-Savage
Secretary	Michelle Glowacki-Dudka
Treasurer	Lilian Hill

2024 Conference Leadership

2024 Conference Chair	Shelly Walters
2024 Conference Vice Chair	Corina Caraccioli

2023-2024 Commissions Directors

Adult Basic Education and Literacy (CABEL)	Sam May-Varas
Community, Minority and Non-Formal Education (CCMNFE)	Mattyna Stephens
Distance Learning and Technology (CDLT)	Kayon Murray-Johnson
Graduate Students (CGS)	Lauren Vilen
International Adult Education (CIAE)	Wendy Griswold
Labor, Unions, and Workers (CLUW)	Ramo Lordeni
Professors of Adult Education (CPAE)	Davin Carr-Chellman
Workforce and Professional Development (CWPD)	Yvonne Hunter-Johnson

Message From Steve Frye
Past President 2024-2025

Publication of the American Association for Adult and Continuing Education Conference Proceedings

The American Association for Adult and Continuing Education (AAACE) is continuing the important practice of building its publication library by disseminating conference proceedings. The 2024 Annual Conference was held in Reno, NV, with a virtual conference held two weeks before the in-person conference. These proceedings represent papers from both venues.

This year's conference theme, "Creating New Trajectories for Adult Education," provided opportunities for presenters to peruse many avenues available for investigating and engaging the field and practice of adult learning. The following proceedings contain valuable information and tools to equip us further as we reach for new avenues in a rapidly changing educational space. You will find research findings, practitioner reports, literature reviews, theoretical explorations, and descriptions of the creation and application of new tools. These documents allow our presentations to live on beyond the conference sessions.

These proceedings would not be possible without the hard work and dedication of the AAACE Proceedings Committee. I want to thank Laura B. Holyoke (Chair), Audrey Ayers, Trenton Ferro, Adam McClain, and Kyle Znamenak for their hard work in providing us with a quality product that will be useful for years.

On behalf of the Board of Directors, I hope you enjoy reading about the various topics. As you reflect on the vital role of adult education in challenging times, we hope that the topics within these pages will help create new trajectories in our work in adult education.

Sincerely,

Steve Frye

Steve Frye, PhD
AAACE, Immediate Past President (2024-2025)

Editors' Notes

Dear Reader,

We appreciate your interest in the fifth conference proceedings for the American Association for Adult and Continuing Education 2024 conference. These proceedings showcase the valuable presentations delivered at the conference and are now available in ERIC. They provide both research and practical insights into adult and continuing education.

We thank the board of directors for their support in making these proceedings possible. Your vision and commitment to the association have been instrumental in this effort.

We also sincerely thank the contributors for their careful work and dedication. Your expertise and attention to detail have created a resource that will benefit scholars and practitioners.

Finally, we are grateful to all members who shared their knowledge at the 2024 conference. Your participation and willingness to contribute continue to advance our field.

We hope you find these proceedings informative and beneficial.

Thank you,

Laura B. Holyoke, Ph.D.
Conference Proceedings Chair, 2024-2025

Conference Proceedings Committee:
Dr. Audrey Ayers
Dr. Trenton Ferro
Dr. Adam L. McClain
Dr. Kyle Znamenak

Table of Contents

Discovering new trajectories in history: A 19th-century woman's practice of Adult Education

Gina R. M. Armer
Saint Martin's University

Abstract: A new trajectory recently embraced by society involves efforts to redress omissions in the past to historical contributions made by marginalized communities – such as women and people of color. The purpose of this study was to illuminate the contribution of women scholars to the field of adult education by focusing on one particular Victorian-era woman's contribution as an educator of adults in late 19th century America, Mary Baker Eddy. The research question was, "What is Mary Baker Eddy's contribution to adult education." In 1881, Eddy established a co-ed college that included many features found in modern Adult Education programs, decades before the field of Adult Education was identified in 1926. Eddy's system of education continues to be practiced today.

Keywords: 19th-century women, history and foundations of adult education, redress historical omissions, adult learners, nontraditional student success

Background

Mary Baker Eddy (1821-1910) was an influential American author, teacher, and founding religious leader, noted for her groundbreaking ideas about spirituality and health, which she named Christian Science. Eddy articulated those ideas in her major work, *Science and Health with Key to the Scriptures*, first published in 1875, and used as the textbook at her college (The life of Mary Baker Eddy, 2024).

In January 1881, Eddy chartered the Massachusetts Metaphysical College (see Figure 1) "…to give instruction in scientific methods of mental healing…" (Peel, 1971, p. 82). At a time when only 30 percent of American colleges were admitting women (Rudolph, 1962), Eddy's college was co-educational, admitting adults with prior life experiences. Upon completion of their program of study, Eddy expressly encouraged graduates of both genders to pursue the entrepreneurial opportunities available to them by opening their own professional businesses as Christian Science healers and teachers, a practice that continues to the present day (Armer, 2009).

Significantly, findings from this research documented 37 Christian Science Institutes (CSIs) opened by Eddy's graduates by December 1888 expressly to teach adults (Armer, 2009). These CSIs were located across the US in 14 states, plus the District of Columbia, as well as in Toronto, Canada. Surprisingly, 73 percent of these CSIs were started by women entrepreneurs, changing the trajectories of their lives. In all the literature reviewed for this research, no other school, college, university, or instructor was found to produce so great a response in its female students as to have them change the course of their lives by going into business for themselves as educators of adults. This is a major contribution to the fields of women's studies and business, as well as to the field of adult education. (Armer, 2009).

After closing her college, Eddy reorganized The First Church of Christ, Scientist, in Boston, Massachusetts, in 1892, which was established 13 years earlier "to commemorate the word and works of our Master, which should reinstate primitive Christianity and its lost element of healing." Today there are branch churches and societies, reading rooms, practitioners, and teachers of Christian Science located throughout the world (Christian Science Practitioners, 2024). The Christian Science Church Headquarters continues at its original location in Boston, Massachusetts (Visit The Mother Church, 2024). Eventually, the function of religious education in Christian Science transitioned to the church's Board of Education, where it continues today.

Figure 1 The Massachusetts Metaphysical College

Figure 1 The Massachusetts Metaphysical College, photograph
Located on Columbus Avenue in Boston, Massachusetts
Image used courtesy of the Mary Baker Eddy Collection at the Mary Baker Eddy Library

Finally, it is of note that Mary Baker Eddy made her discovery of Christian Science mid-way through her long life, at a time when women could neither vote nor own property and were generally barred from pulpits, seminaries, and the medical profession. In 1908, at age 87, responding to "yellow" journalism (the tabloid news of her day), Eddy started *The Christian Science Monitor* newspaper, designed "to injure no man, but to bless all mankind" (The life of Mary Baker Eddy, 2024). *The Christian Science Monitor* is a leading international news outlet, the recipient, to date, of seven Pulitzer Prizes. It is not a religious newspaper and is recognized for its unbiased reporting (AllSides Media Bias Chart, 2024). This article began with a background of Mary Baker Eddy, followed by a literature review and overview of the research methodology, with conclusions and recommendations drawn from the research and discussion.

Literature Review

This research presented an overview of the literature applicable to the many dimensions of this study, including the historical, social, and educational contexts for both Mary Baker Eddy and the Massachusetts Metaphysical College she established.

The study documented the enormous gap in existing literature concerning every aspect of Eddy's contribution to adult education (Armer, 2009). There is no reference in any current literature from the broader field of education, or even the narrower field of adult education, in which there exists any acknowledgment of Eddy's contribution. There is no mention of the existence of the Massachusetts Metaphysical College in any historical or contemporary coverage of 19th-century colleges, academies, or institutes. There is no mention of the existence of any Institutes started

by Eddy's graduates from her Massachusetts Metaphysical College. There is no mention of Eddy as a teacher, professor, or instructor of adults. There is no acknowledgment of the continuing, contemporary contribution from the Board of Education of the Church of Christ, Scientist to the field of adult education.

Looking at Eddy's own biographers, we see much broader and more inclusive coverage of the existence of the Massachusetts Metaphysical College, as well as explanations of the continuing contribution from the Board of Education of the Church of Christ, Scientist. However, as these are general biographies covering the broad sweep of Eddy's long and noteworthy life, none of Eddy's biographers have broached the subject of the Massachusetts Metaphysical College or Eddy's system of instruction from the standpoint of adult education. Until now, no one has documented the significance of Eddy's contribution to adult education (Armer, 2009).

Methodology

As this research concerns one particular individual, it is, by definition, a *biography* (Creswell, 1998). Using the qualitative tradition of biography allowed a tight focus on the events and circumstances in Eddy's life surrounding her decision to establish a college. Denzin (1989) acknowledges that a *comprehensive biography* covering "the full sweep of a person's experiences" (p. 29) may not be required, noting that the author may choose instead to focus "only on a particular set of experiences deemed to be of importance" (p. 29).

Creswell (1998) elaborates further on the distinctions of *classical biography*, "the researcher uses statements about theory, concerns with validity and criticism of documents and materials, and the formulation of distinct hypotheses, all drawn from the perspective of the researcher" (p. 50). However, as I was not going to be forming any "distinct hypotheses" in my process, this research employed the *interpretative biographical approach* introduced by Denzin (1989) when he states that interpretive approaches reject the norms of evaluation and regard biographical materials from within a literary, fictional framework. Denzin (1989) then goes on to explain that the researcher as author writes him or herself into the story he or she tells in the same way that a reader reads a biographical text through the lens of the life of that reader. This study documents *my own interpretation* of Eddy's life events. Lincoln and Guba (1985) allow qualitative research to include and embrace *researcher interpretation*. Any other human being reviewing this same material could arrive at different conclusions, emphasize different details, and ultimately compose a different narrative.

Further, Creswell notes the use of *feminist approaches* in ideological perspectives as a factor bearing on the appropriateness of this approach when researchers may have "a heartfelt need to…lift the voices of marginalized or oppressed people, to explore gender issues that have served to dominate and repress women, or to bring about general change in our society" (1998, p. 78).

As explained by Lather (1991) part of the aim of this research was "to correct both the invisibility and distortion of female experience in ways relevant to ending women's unequal social position" (p. 71). Applying this, the primary aim of this research was to correct the invisibility of Mary Baker Eddy's experience in establishing her 19th century college such that its history becomes relevant to 21st century adult education, thus ending this woman's unequal social position by finally reporting and recognizing her achievement (Armer, 2009).

Eddy's life has been widely documented in numerous published biographies; some of these books deify her, others demonize her, and a rare few are sweeping, objective, scholarly tomes. But none focuses specifically on the college Eddy established or her contribution to the field of adult education. That is the biography this research documented; the story this research tells (Armer, 2009).

Conclusions

Eddy established in the 19th century a broad system of education and instruction for her followers that incorporated many aspects of the modern adult education movement: lifelong learning, continuing education, service learning, independent self-directed learning, and vocational training, which for many of Eddy's students lead them into new careers in adult education as the founders of their own Institutes of instruction in Christian Science healing methods. Eddy's system of education has directly resulted in entrepreneurial opportunities for teachers and practitioners of Christian Science of both genders to this day. These entrepreneurial ventures offer an additional boost to both a teacher's professional development and visibility when they are called to serve on the Church's Board of Lectureship and/or when a teacher writes articles for publication in the various Christian Science Publishing Society podcasts (Broadcasts and Podcasts, 2024) and periodicals (Explore Current Issues, 2024).

Eddy's contribution to adult education far exceeds the eight-year period outlining the brief tenure of the Massachusetts Metaphysical College. Eddy's own learning and practice of Christian Science, throughout its various stages of development over more than half her long 90-year life, enabled Eddy to establish a system of education which led the field of adult education and has continued beyond the 20th into the 21st century.

That over 100 years following Eddy's closing of the Massachusetts Metaphysical College, teachers of her religion, who are contemporary graduates of her College, would reach the remotest bounds of the globe is perhaps the greatest, inarguable testament to Eddy's educational legacy. The fact that there are now teachers of Christian Science established in lands as far from Boston as Cameroon, Uruguay, Japan, and India – to note just a few from among about 35 countries worldwide – declares the significance of Eddy's continuing impact on adult education to this very day. This is not simply a historical event; it is also a current event- a living history, a living legacy of a 19th-century American woman (Armer, 2009).

Recommendations

The major significance of this study is that it begins to fill the gaps in literature and research by identifying and exploring in-depth one female historical figure who made important contributions to the field of adult education but has been overlooked and under reported for more than 100 years (Armer, 2009). "Poets and novelists rarely overlook women. Historians almost always do" (Scott, 1971, p. book jacket).

Eddy's contribution to the field of adult education is both significant and sustained. A Victorian-era woman relying on her own financial resources, establishing a college designed to teach adults, specifically women, even in the nation's collegiate capital (Hoffman, 2007) in the intellectual heart of New England—Boston—was a rare event indeed. These findings need to be shared. Eddy's contribution to the field of adult education deserves to be incorporated into

Education and Adult Education literature. Textbooks in other disciplines, such as Business and Women's Studies, should be updated as well (Armer, 2009).

In summary, these are the unique features of Eddy's *historical* system of education through the Massachusetts Metaphysical College and their application to the field of adult education (Armer, 2009):

- College established by a woman, Mary Baker Eddy (see Figure 2), chartered in 1881.
- Eddy relied on her own financial resources to establish and operate the Massachusetts Metaphysical College in Boston.
- The Massachusetts Metaphysical College welcomed adults, both men and women, non-traditional aged students with prior life experiences.
- Eddy taught both Primary and Normal classes.
- Students were required to demonstrate competency-based learning fulfilling a vocational level of practice (Knowles, Holton, III, & Swanson, 1998).
- Many graduates of this college changed their life trajectory through entrepreneurial ventures, entering new careers in Adult Education as the founders of their own Institutes of instruction in Christian Science.
- Commitment to lifelong learning present through:
  a. Permanent lifelong mentoring relationship between teacher and pupil (Knowles M. S., 1980).
  b. Continuing education, through independent self-directed study of the weekly Bible Lesson-Sermon (Merriam & Cunningham, 1990).
  c. Continuing education, by returning for their Christian Science Teacher's Annual Association Day meetings (Merriam & Cunningham, 1990).

Figure 2: Mary Baker Eddy, photograph

Mary Baker Eddy, 1887-1889, Boston, about the time of the closing of the Massachusetts Metaphysical College
Image used courtesy of the Mary Baker Eddy Collection at the Mary Baker Eddy Library

Following is a summary of the additional unique features of Eddy's *contemporary* system of education through the Board of Education auxiliary to the Massachusetts Metaphysical College (Armer, 2009):

- Eddy's unique system of education ensures the student's relationship is linked to their teacher, not a physical institution, expanding the reach of Christian Science Primary class instruction through authorized Christian Science teachers, wherever they are located, rather than through established collegiate institutions.

- With the closing of the Massachusetts Metaphysical College and later, her students' Christian Science Institutes, Eddy seemed to grasp that, following Jesus' model of instruction with his disciples, adult education existed in sharing, teaching, and conveying *ideas* and was therefore not confined to physical buildings and structures prefiguring the advent of new delivery systems (Knowles M. S., 1980) such as distance education programs.
- Each teacher's healing practice and instruction of pupils in Christian Science constitutes their own private business, thus creating an entrepreneurial element unique to Christian Science teaching and practice.

The organizations and methods of instruction Eddy established have endured more than 100 years since her death in 1910. By any standard, applied to any program in adult education, that represents an auspicious start. In light of the evidence presented in this study, it seems fair to say that perhaps we should be calling Mary Baker Eddy the Mother of Adult Education.

References

AllSides Media Bias Chart. (2024). Retrieved from AllSides: https://www.allsides.com/media-bias/media-bias-chart

Armer, G. R. (2009). *Mary Baker Eddy's contribution to adult education: An historical biography.* Ann Arbor: ProQuest.

Broadcasts and Podcasts. (2024). Retrieved from Christian Science in the Washington Metro Area: https://christiansciencedc.org/broadcasts-and-podcasts/

Christian Science Practitioners. (2024). Retrieved from Christian Science: https://www.christianscience.com/christian-healing-today/christian-science-practitioners

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage.

Denzin, N. K. (1989). *Interpretive biography (Vol. 17).* Thousand Oaks, CA: Sage.

Explore Current Issues. (2024). Retrieved from Christian Science JSH-Online: https://jsh.christianscience.com/?ICID=SEN%20Hamburger%20Menu

Hoffman, T. (2007, July). America's college town. *Campus Visit*. Retrieved July 21, 2007

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy.* Cambridge/Prentice Hall.

Knowles, M. S., Holton, III, E. F., & Swanson, R. A. (1998). *The adult learner: The definitive classic in adult education and human resource development* (5th ed.). Butterworth-Heinemann.

Lather, P. (1991). *Getting smart: Feminist research and pedagogy with/in the postmodern.* New York: Routledge.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Newbury Park, CA: Sage.

Merriam, S. B., & Cunningham, P. M. (Eds.). (1990). *Handbook of adult and continuing education* (1st ed.). San Francisco: Jossey Bass.

Peel, R. (1971). *Mary Baker Eddy: The years of trial 1876-1891* (Vol. 2). Holt, Rinehart, and Winston.

Rudolph, F. (1962). *The American college and university: A history.* New York: Alfred A. Knopf.

Scott, A. F. (1971). *The American woman - who was she?* (A. F. Scott, Ed.) Englewood Cliffs, NJ: Prentice-Hall.

The life of Mary Baker Eddy. (2024, November 17). Retrieved from Mary Baker Eddy Library: https://www.marybakereddylibrary.org/mary-baker-eddy/the-life-of-mary-baker-eddy/

Visit The Mother Church. (2024). Retrieved from christianscience.com: https://www.christianscience.com/find-us/visit-the-mother-church

Table of Figures

Advising Practices to Foster Sense of Belonging Among EdD Students Managing Multiple Roles

Lauren G. Bent[1], Kelly J. Brochu[2], Priscilla A. Boerger[1]
[1]Regis College, Department of Education
[2]Regis College, Office of the President

Abstract: Students in doctoral programs bring with them a wealth of non-academic experiences and responsibilities. They may be parents, caregivers, spouses, and employees, to name a few. Advisors play a key role in guiding and supporting doctoral students and creating environments that foster a sense of belonging so doctoral students can manage multiple roles and persist to graduation. When doing a literature search, there is a significant gap in research on best practices for advising students at the doctoral level. Using a theoretical framework that blends role conflict and a sense of belonging, this conceptual paper explores how the EdD program at Regis College has employed advising strategies. Examples include involvement from application to post-graduation, cultivating meaningful connections between advisor and student, and adopting practices informed by the Carnegie Project on the Education Doctorate (CPED).

Introduction

"There is no such thing as a single-issue struggle because we do not live single-issue lives." (Lorde, 1982)

Faculty advisors within doctoral programs demonstrate a substantial influence on students' ability to persist (Barnes et al., 2010; Gardner & Barnes, 2014; Roy et al., 2023). The relationship between advisor and advisee in doctoral programs can have a direct impact on a student's ability to socialize into their program and produce academic assignments of high quality (Roy et al., 2023). Through encouragement, accessibility, and dependability, doctoral students attribute their faculty advisors to the completion of their degrees (Roy et al., 2023). Faculty advisors, particularly in EdD programs, have provided influential support through fostering spaces for individualized care and understanding of students' specific needs and interests (Cranton & Carusetta, 2004). As the number of doctoral students increases in the United States, and as EdD programs are projected to enroll more diverse learners with dynamic roles and identities, faculty advisors can serve as a pivotal asset toward students' achievement and persistence through the demands of a doctoral degree (National Center for Education Statistics, 2023).

Students in doctoral programs have attributed their academic success to a sense of belonging; grounded in their connectedness with members of their program such as their peers and faculty advisors (Naidoo et al., 2023). Through bridging gaps between students and their academic program, faculty advisors have the influence and aptitude to cultivate a sense of belonging through their individualized relationships with advisees of EdD programs.

When incorporating the components of the sense of belonging theory into advising practice, the implication of roles occupied by doctoral students need to be considered (Kahn et al., 1964; Strayhorn, 2012). Students entering EdD programs hold several responsibilities based upon the gamut of personal and professional roles they occupy. These roles often include, but are not limited to, being a student, employee, partner, community member, and caretaker (Brochu et al., 2021). According to role conflict theory, each role an individual occupies also comes with responsibilities that either complement or conflict with the expectations of another role (Kahn et al., 1964). When an individual is unable to manage conflicting roles, there is a risk of burnout which has been deemed a contributing factor to the attrition of students and employees (Kent et al., 2020; Mullen et al., 2018). Fortunately, the role of the faculty advisor poses an opportunity to combat the upset experienced through role conflict. Serving as a mentor and creating spaces for peer support are a few methods for decreasing a sense of isolation while propelling students through role conflict (Brochu et al., 2021; Kent et al., 2020).

Faculty advisors can surmise the repercussions of isolation and the importance of connectedness with integral members of the doctoral program when reviewing the facets of belonging and role dynamics. The role of the faculty advisor within EdD programs holds substantial influence on students' capability to excel across their academic trajectory. Through a methodical understanding of belonging and role dynamics, EdD programs can effectively examine their advising practices in order to provide their faculty advisors the lens to elevate students' academic satisfaction and capability to persist.

Theoretical Framework

Role conflict

Role conflict theory explores the management of multiple roles, and how they conflict or complement one another. The development of this theory was led by Robert L. Kahn who extrapolated on the demands of an individual's role, a term to define membership within a particular group or organization that entails responsibilities, or expectations that need to be fulfilled (Kahn et al., 1964).

Role conflict can be summarized as an event in which pressure sent by one role opposes the pressure sent by another role (Kahn et al., 1964). There is a lack of agreement among role senders; demonstrating the sent roles are not considering the capabilities and needs of the individual who occupies these roles (Kahn et al., 1964). Kahn et al. (1964) outlined two prominent examples of role conflict: intra-role and inter-role conflicts. Intra-role conflict surfaces when responsibilities within one role pose a conflict. Inter-role conflict, on the other hand, is experienced when pressures from separate roles pose conflict (Kahn et al., 1964).

While role conflict as a construct suggests competing responsibilities either through inter-role or intra-role conflict, it is important to note for many graduate students, and particularly an EdD program designed to prepare Scholarly Practitioners, the various roles should also be understood as complementary and advantageous. This role complement is evident when students integrate professional experiences and coursework; they blend theory and practice, which deepens their learning.

Sense of belonging

Strayhorn's (2012) sense of belonging theory outlines the risks associated with students lacking connectedness; often resulting in isolation or marginality. Such experiences can result in the inability to persist through their academic pursuits and other negative long-term personal implications (Strayhorn, 2012). However, when faculty understand the various roles EdD students hold and provide a positive advising experience, thus fostering a positive sense of connectedness and belonging for the student, which is essential to their success (Strayhorn, 2012).

The Role of the Faculty Advisor

Whether it is called advising, mentoring, supervising, or directing, one common denominator is found: the relationship between the faculty member and the doctoral student (Gardner & Barnes, 2014). For the purpose of this paper, the term faculty advisor is used. Studies, such as the one done by Zhongying et al. (2018), have used the Canadian Graduate and Professional Survey (CGPSS) to gauge information regarding student satisfaction within graduate programs, including doctoral programs.

At Regis College, we approach advising based on the student life cycle, investing in each student from the application process to post-graduation (Campo et al., 2019). A faculty advisor is assigned to students upon admittance into the program, at the beginning of their doctoral journey. The faculty advisor services the students by acting as a coach and cheerleader, initially talking through the program expectations, ensuring they are registered for the appropriate courses, monitoring their progress and success, and actively listening to provide solution-oriented support. Positive feedback towards academic progress and success of advised students has been gathered through various means, including online survey instruments and data pertaining to retention and graduation. A report published by CPED (2023) revealed a 63% graduation rate for EdD students in hybrid programs. The Regis EdD program, offered in a hybrid model, currently has a graduation rate of 98% and has maintained an average graduation rate of 97% over the past 10 years.

The advising practices employed at Regis are one of the contributing factors to our high graduation rate (Roy, 2023). The faculty advisor is joined by a Dissertation in Practice (DiP) advisor (also known as a dissertation chair) as the two work together to support the student(s). This advisor is assigned to a student as they start their DiP research and writing and works with them to completion. They are committed to their student advisees and their research, making themselves available and accessible, which is key to relationship building. Conversely, when advising practices are prescriptive and lack an individualized approach, this creates a barrier to relationship building (Thompson & Patterson, 2024). Meanwhile, DiP advisors meet frequently to ensure the student has success at each step of the process. Whether it is on campus, in a local coffee shop, or via Zoom, advisors and students will connect to discuss research progress and problem solve collaboratively as a way to keep the DiP organized and flowing. These practices align with CPED's recommendations for doctoral student advising (cped.org).

As a member of the Carnegie Project on the Educational Doctorate (CPED), the advising practice at Regis College is grounded in the eight dimensions of the CPED Framework on mentoring and advising: 1) equity and justice, 2) mutual respect, 3) dynamic learning, 4) flexibility, 5) intellectual space, 6) supportive and safe learning environments, 7) cohort and individualized attention, 7) rigorous, and 8) integration (cped.org). Each of these strands is a part of the advising protocol at Regis College. While all are important, no strand is more important than the other as they work in tandem to create the best possible learning environment that will lead to success for each EdD student. The aim of this advising process is to create an environment where students are truly seen, understood, and valued within the academic process (Strayhorn, 2012; Thompson & Patterson, 2024).

At Regis College, faculty support and challenge EdD students in their journey to become Scholarly Practitioners. According to CPED:

> **S**cholarly Practitioners blend practical wisdom with professional skills and knowledge to name, frame, and solve problems of practice. They use practical research and applied theories as tools for change because they understand the importance of equity and social justice. They disseminate their work in multiple ways, and they have an obligation to resolve problems of practice by collaborating with key stakeholders, including the university, the educational institution, the community, and individuals. (cped.org)

To help EdD students develop into Scholarly Practitioners, faculty should approach advising through meaningful connection and intentionality. This should begin as early as the admission process, particularly during the interview, and continue through the various milestones of the EdD program. In fact, Campo Ringler et al. (2019) suggested mentoring and coaching EdD students is a marathon; it is important to sustain the connection and support throughout the student's experience in their EdD program.

Conclusion

Advising is the most basic form of guidance most doctoral programs intentionally provide their doctoral students (Gardner & Barnes, 2014). Advising as a process, at all stages, contributes to doctoral students' academic and social growth and career preparation, which subsequently impacts retention and graduation rates (Thompson & Patterson, 2024). Persistence toward program completion is, unfortunately, accomplished by a small percentage of doctoral students. With a current graduation rate of 98% of Regis College EdD students, we pride ourselves in having developed an advising system that supports our students both academically and personally as they travel through this journey with us. Regis attributes our high graduation rate to recognizing sense of belonging and the many roles doctoral students occupy as a vital component of their success and well-being (Thompson & Patterson, 2024). These individuals have put their trust in our EdD program, making it our responsibility to provide support through intentional advising to walk across the stage as the title, "Dr." is said before their name.

As we look toward future research, we intend to take a deeper dive into the two theories that have guided our work in this paper: 1) Kahn's (1964) role theory and 2) Strayhorn's (2012) sense of belonging. Specifically, we will investigate individualized advising for students of color and other identities through the lens of equity-oriented advising practices. We will continue to adopt

culturally responsive academic advising strategies which expand traditional academic advising practices; practices that authentically support the whole student (Thompson & Patterson, 2024). In an effort to expand this conversation with other CPED-influenced programs, we intend to share these strategies and facilitate further discourse around advising practices in a workshop format and future publications.

From application to post-graduation, we highly recommend doctoral student advisors invest services and resources into the lifespan of their students and cultivate meaningful relationships with their students. Advisors can deepen sense of belonging for their doctoral students through continuously innovating advising practices based on professional organizations and collaborative networks, such as CPED. In addition, we recommend doctoral programs evaluate their advising practices, examine what is or is not being done, and explore how they can better serve students by employing student-centered advising practices. After all, we are only as successful as our students. Each student has different needs which may demand flexibility in the advising process. Thompson and Patterson (2024) emphasized we must not operate from a generalist perspective when attempting to provide holistic support. We must continue to recognize and embrace students' intersectionality of identities (Krenshaw, 1989) and roles (Kahn et al., 1964) and employ research-based advising practices to cultivate a sense of belonging for graduate students to optimize outcomes.

References

Brochu, K. J., Bryant, T. R., Jensen, A. J., Desjardins, D. R., Robinson, R. M. M., & Bent, L. G. (2021). Redefining roles: Female scholars' reflections and recommendations for coping during the COVID-19 pandemic. *Impacting Education: Journal on Transforming Professional Practice*, *6*(2), 54–60. https://doi.org/10.5195/ie.2021.170

Campo Ringler, M., Puckett, H., & Lewis, T. (2019, June 10). Coaching and mentoring from the starting line through the first mile of an EdD program. *CPED Convening*. University of Lincoln, NE. https://resources.cped.org/wpcontent/uploads/2024/01/2019_june_cped_worshop_witho.pdf

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *The University of Chicago Legal Forum, 1989*(1).

Gardner, S.K. & Barnes, B.J. (2014). *Advising & mentoring doctoral students: A handbook.* Create Space Independent Publishing Platform.

Kahn R. L., Wolfe D., Quinn R., Snoek J., Rosenthal R. (1964). *Organizational stress: Studies in role conflict and ambiguity.* Wiley.

Kent, V., Runyan, H., Savinsky, D., & Knight, J. (2020). Mentoring Doctoral Student Mothers in Counselor Education: A Phenomenological Study. *Professional Counselor*, *10*(4), 532–547. https://doi.org/10.15241/vk.10.4.532

Lorde, A. (1982). *Learning from the '60s*. BLACKPAST. https://www.blackpast.org/african-american-history/1982-audre-lorde-learning-60s/.

Naidoo, K., Quaynor, L., & Shen, Y. (2023). Doctoral students' experiences, self-efficacy, and sense of belonging related to academic writing in an online program. *Education Sciences, 13*(11), 1097. https://doi.org/10.3390/educsci13111097

National Center for Education Statistics. (2023). *Postbaccalaureate Enrollment.* https://nces.ed.gov/programs/coe/indicator/chb/postbaccalaureate-enrollment

Roy, K., Mcgill, C. M., & Bloom. J. L., (2023). Doctoral student perceptions of faculty advisors: Four supportive behaviors to promote doctoral completion. *NACADA Review: Academic Advising Praxis and Perspectives, 4*(1), 27–38.

Strayhorn, T. L. (2012). *College students' sense of belonging: A key to educational success for all students (1st ed.)* Routledge.

The Carnegie Project on the Education Doctorate (CPED). (2023). CPED Member Report/Survey Preliminary

Findings.

The Carnegie Project on the Education Doctorate (CPED). www.cped.org.

Thompson, V.J. & Patterson, J.A. (2024). *Differentiated academic advising strategies for students beyond the margins.* Rowman & Littlefield.

Zhongying, Z., et.al. (2018). Identifying advisor-advisee relationships from co-author networks via a deep model. *Information Sciences, 466,* 258-269. https://doi.org/10.1016/j.ins.2018.07.064

Exploring how Generation Z Perceives Managerial Coaching in the Workplace

Anne Brown
Kansas State University

Abstract: This article presents the insights collected from an engaged, interactive round table session, where participants from multiple generations discussed how Generation Z interacts with and perceives managerial leadership styles in the workplace. Results from a pilot study exploring how Generation Z professionals describe their lived experiences of managerial coaching at a healthcare technology firm in the United States served as the foundation for the roundtable discussion. During the roundtable conversation, participants spanning four generations engaged in a lively discussion about their experiences with and perceptions of Generation Z in the workplace. This paper provides insights into intergenerational perspectives on the rationale, emotional responses, and outcomes associated with managerial coaching of Generation Z in the workplace that resulted from that discussion.

Keywords: Generation Z, managerial coaching, generations in the workplace

Generation Z, generally defined as being born between 1995-2010 (Bencsik et al., 2016; Leslie et al., 2021; Popaitoon, 2022; Seemiller & Grace, 2019), entered the United States workforce in 2017 and brought distinct values and behaviors that challenge traditional management approaches. Yet despite the growing presence of Generation Z in the U.S. workforce in the past eight years, not much is understood about how they perceive their professional workplace experiences. Specifically, a significant gap exists in understanding how Generation Z perceives managerial coaching. As Baby Boomers retire and Generation Z becomes the largest percentage of the U.S. workforce by 2030 (Kumar, 2023), it is crucial for managers and employers to understand their unique expectations and preferences of managerial coaching. Managerial coaching refers to "managers who coach their team members in a work context" (McCarthy & Milner, 2013, p. 769). This definition encompasses situations where managers are using coaching paradigms, techniques, skills, and behaviors to empower subordinates to improve performance, learn, grow their skills, change behaviors, improve attitudes, and/or find new possibilities in challenges. The purpose of this paper is to help professionals understand how Generation Z may experience managerial coaching differently from previous generations. It begins with an overview of the literature on Generation Z in the workplace, followed by results from a pilot study on Generation Z professionals' lived experiences of managerial coaching. Finally, it shares key themes from an interactive roundtable session attended by members of four different generations.

Background

This paper presents the key insights generated from a roundtable discussion about how Generation Z perceives managerial coaching in the workplace. The author's pilot study of two participants, conducted to inform her dissertation, was used as the main starting point for the

discussion.

Generation Z is the newest of the five generational cohorts working in organizations today (Elmore, 2022; Jiri, 2016; Twenge, 2023). According to researchers, this generation may be the most difficult for managers to lead because their attitudes about work are so different from those of previous generations (Arora, 2020; Bencsik et al., 2016). Therefore, understanding Generation Z is important to help managers determine effective techniques for leading this generation.

Despite the recognized benefits of managerial coaching, there is a significant gap in understanding its specific impact on Generation Z professionals. While existent literature has linked managerial coaching to improving employee satisfaction (Kim et al., 2013), performance (Kim et al., 2013; Park, Yang & McLean, 2008), and organizational commitment (Kim et al., 2013; Park, Yang & McLean, 2008) there is little research on the outcomes of managerial coaching for Generation Z professionals specifically. Research also exists about how organizations will need to adapt to retain Generation Z workers (Gomez et al., 2022). Still, there is a paucity of literature exploring how Generation Z professionals want to be coached by their managers. Further, research does not always distinguish between Millennials and Generation Z when selecting study participants, making it challenging to know how Generation Z indeed behaves and feels in the workplace (Chillakuri, 2020; Kirby et al., 2020; Posner, 2021).

The existing literature on Generation Z professionals is primarily based on data from students and lacks comprehensive insights into their professional experiences, particularly in the U.S. Most of the literature relies on data collected from undergraduates (Arora et al., 2020; Leslie et al., 2021; de Boer & Bordoloi, 2022; Grow & Yang, 2018), graduate students (Chillakuri, 2020) or a mixture of high school and university students (Mărginean, 2021). Much of the research about Generation Z professionals in the past five years has originated in Eastern Europe (Dobrowolski, 2022; Dolot, 2018; Graczyk-Kucharska & Erickson, 2020; Iorgulescu, 2016; Kutlák, 2021) and India (Aggarwal et al., 2022; Arora, 2020; Chillakuri, 2020) as India currently has the largest population of working Generation Z professionals.

Recent studies indicate Generation Z is quitting their jobs faster than previous generations (Bureau of Labor Statistics, 2022; PWC, 2023; ThoughtExchange, 2022). For Generation Z, their values must align with those of their employers. Many Generation Z individuals have rejected job offers or tasks that conflicted with their beliefs (Deloitte, 2022). In the U.S., a significant portion of this generation would avoid working for companies that do not share their values (Ernst & Young, 2021). Surveys indicate that most Generation Z professionals prioritize value alignment and would consider leaving their jobs if they felt undervalued or unheard (ThoughtExchange, 2022). Post-pandemic research also shows that Generation Z is less engaged at work and more likely to quietly disengage than other generations (Gallup, 2023).

Generation Z employees value work-life balance, opportunities for learning and development, and pay (Deloitte, 2024). They also value managers who demonstrate understanding and acknowledge their feelings, especially those related to stress in the workplace (Deloitte, 2024). Generation Z also seeks clear communication and regular feedback, appreciating managers who provide transparent expectations and frequent check-ins (Bredbenner, 2020; Maletin & Kuratchenko, 2021). They desire autonomy in their roles, valuing the freedom to complete tasks

in their way and on their own time (Deloitte, 2022). Additionally, Generation Z employees are eager for growth opportunities and mentorship, actively seeking guidance from managers and valuing training and development programs (Deloitte, 2024). Managers who adapt to these preferences and create a supportive, growth-oriented environment are more likely to successfully engage and retain Generation Z talent (Deloitte, 2022).

Discussion

The roundtable discussion began with welcoming everyone. However, roundtable discussion participants were welcomed using Generation Z lingo: "Welcome chat! This is bussin' for real, no cap. Not sure I'll mug chat with my yappin' sesh, but welcome again, let's get locked in." Only the Generation Z participants understood this, while others were puzzled. Interestingly, the roundtable revealed that such vernacular is primarily used online rather than in daily conversation, yet it remained exclusive to Generation Z comprehension.

Next, findings from a small pilot study conducted a year earlier were shared. The pilot study involved two female Generation Z professionals at a Midwest healthcare technology firm. The study revealed two key points about their perceptions of managerial coaching. First, they equated coaching with feedback. Second, they preferred in-person coaching for serious or clarity-requiring matters. Coaching topics mainly focused on role assimilation, clarifying expectations, and addressing knowledge gaps. These results suggested that personalized, face-to-face coaching might be particularly effective for young professionals in the healthcare technology sector.

The roundtable included six higher education professionals from four generations: Baby Boomers (1946-1964) (1), Generation X (1965-1980) (2), Millennials (1981-1996) (1), and Generation Z (1997-2012) (2). Contrary to the pilot study, both Generation Z roundtable participants had no preference between in-person or virtual coaching. Other participants speculated whether COVID-era college experiences or industry-specific preferences caused this difference since both Generation Z roundtable participants worked in Higher Education.

As the interactive discussion progressed, several generational differences in work approaches emerged between Generation Z and the older generations. A Generation X manager explained that working in their office with the door closed signaled to their team that they needed to focus and should not be disturbed, while an open door indicated it was fine to come in and ask questions or talk. Other Generation X, Baby Boomer, and Millennial participants agreed that using a closed or open door to indicate when it was appropriate to approach a manager for coaching was easily understood and made sense. However, Generation Z participants were surprised by this practice, stating that a closed door would not usually stop them from knocking to get an immediate answer if they had a question. They interpreted a closed door as a signal to knock before entering the office to get answers to questions.

Generation Z participants also shared that if they were contracted to work for 20 hours a week but finished their tasks in less time, they would expect to be able to leave once they completed their work while still being paid for the full 20 hours. Alternatively, the Baby Boomer at the table shared that if they were in that situation and finished their tasks early, they would ask the employer what else they could do. The Baby Boomers expected to work for a full 20 hours

regardless of completing the initial job or assigned task early. Notably, Generation Z participants had a different perception of autonomy in the workplace compared to participants from other generations. While everyone agreed that autonomy referred to the ability to make decisions independently, Generation Z participants expressed frustration with managers who seemed unable to handle their leadership roles effectively. These managers continuously asked Generation Z professionals to define their roles at work, create tasks, and figure out what to do each day independently. In contrast, the Generation Z roundtable discussion participants wanted clear instructions about their job responsibilities, daily requirements, and how their success would be evaluated and measured.

Participants from other generations shared that by allowing the younger generation to carve out their own roles at work, gave them the autonomy to tailor their positions to their strengths, potentially leading to greater success. However, while the Generation Z participants stated they appreciated autonomy at work and did not want to be micromanaged, they also expressed bemusement over why managers didn't feel responsible for clearly defining roles and tasks. This expectation divergence highlighted a generational gap in understanding workplace autonomy and management responsibilities.

Conclusion

This proceeding highlighted generational differences in workplace expectations, mainly focusing on how Generation Z interprets managerial coaching professionally. By synthesizing the perspectives of Generation X, Baby Boomer, Millennial, and Generation Z roundtable participants, we gained a deeper understanding of how different generations interpret manager behaviors. Managers could use these insights to adapt their coaching styles to generational preferences and to foster a culture where employees feel supported and heard, without being micromanaged. Training based on such insights as those presented in this paper could help managers and employees navigate these generational differences effectively, fostering a more cohesive and productive work environment.

References

Aggarwal, A., Sadhna, P., Gupta, S., Mittal, A., & Rastogi, S. (2022). Generation Z entering the workforce: Restructuring HR policies and practices for fostering the task performance and organizational commitment. *Journal of Public Affairs*, 22(3), e2535. https://doi.org/10.1002/pa.2535

Arora, S., Dubey, V., & Vyas, S. (2020). Study of work values of Generation Z students. *International Journal of Technology and Globalisation*, 8(3/4), 240. https://doi.org/10.1504/IJTG.2020.112179

Bencsik, A., Juhász, T., & Horváth-Csikós, G. (2016). Y and Z generations at workplaces. *Journal of Competitiveness*, 6(3), 90–106. https://doi.org/10.7441/joc.2016.03.06

Bredbenner, J. (2020). *Generation Z: A study of its workplace communication behaviors and future preferences*. Wichita State University. Retrieved from https://soar.wichita.edu/bitstreams/c3244e3e-710e-4476-a7f6-a7a06af9ff28/download

Bureau of Labor Statistics. (2022). *Employee tenure in 2022*. U.S. Department of Labor Statistics. https://www.bls.gov/news.release/pdf/tenure.pdf

Chillakuri, B. (2020). Understanding Generation Z expectations for effective onboarding. *Journal of Organizational Change Management*, *33*(7), 1277–1296. https://doi.org/10.1108/JOCM-02-2020-0058

Christensen, H. R., & Knezek, G. A. (2018). *A qualitative approach to understand Generation Z work motivation*. European Journal of Business and Social Sciences, 7(1), 1-12. Retrieved from https://www.dpublication.com/journal/EJBS/article/download/542/470

de Boer, P., & Bordoloi, P. (2022). Nationality differences in Generation Z work values: An exploratory study. *Journal of International Education in Business*, 15(2), 373–392. https://doi.org/10.1108/JIEB-09-2021-0088

Deloitte. (2022). *Striving for balance, advocating for change: The Deloitte global 2022 Generation Z and millennial survey.* https://www2.deloitte.com/content/dam/insights/articles/glob175227_global-millennial-and-gen-z-survey/Gen%20Z%20and%20Millennial%20Survey%202022_Final.pdf

Dobrowolski, Z., Drozdowski, G., & Panait, M. (2022). Understanding the impact of generation Z on risk management—A preliminary views on values, competencies, and ethics of the Generation Z in public administration. *International Journal of Environmental Research and Public Health*, 19(7), 3868. https://doi.org/10.3390/ijerph19073868

Dolot, A. (2018). The characteristics of Generation Z. *E-Mentor*, 74, 44–50. https://doi.org/10.15219/em74.1351

Elmore T., & McPeak, A. (2019). *Generation Z unfiltered: Facing nine hidden challenges of the most anxious population (1st ed.).* Poet Gardener Publishing.

Ernst & Young. (2021). *Is Gen Z the spark we need to see the light? 2021 Gen Z segmentation study insights report.* https://assets.ey.com/content/dam/ey-sites/ey-com/en_us/topics/consulting/ey-2021-genz-segmentation-report.pdf

Gallup, Inc. (2023). *State of the global workplace: 2023 report.* https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx#ite-506897

Gomez, K., Mawhinney, T., & Betts, K. (2022). *Welcome to Generation Z.* Deloitte & Network of Executive Women. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/consumer-business/welcome-to-gen-z.pdf

Graczyk-Kucharska, M., & Erickson, G. S. (2020). A person-organization fit model of generation Z: Preliminary studies. *Journal of Entrepreneurship, Management and Innovation*, 16(4), 149–176. https://doi.org/10.7341/20201645

Grow, J. M., & Yang, S. (2018). Generation-Z enters the advertising workplace: Expectations through a gendered lens. *Journal of Advertising Education*, 22(1), 7-22. https://doi.org/10.1177/1098048218768595

Iorgulescu, M.-C. (2016). Generation Z and its perception of work. *Cross-Cultural Management Journal*, *XVIII*(1), 47–54. https://www.seaopenresearch.eu/Journals/articles/CMJ2016_I1_6.pdf

Jiri, B. (2016). The employees of baby boomers generation, Generation X, Generation Y and Generation Z in selected Czech corporations as conceivers of development and competitiveness in their corporation. *Journal of Competitiveness*, *8*(4), 105–123. https://doi.org/10.7441/joc.2016.04.07

Kim, K. Y., Eisenberger, R., & Baik, K. (2016). Perceived organizational support and affective organizational commitment: Moderating influence of perceived organizational competence. *Journal of Organizational Behavior*, *37*(4), 558–583. https://doi.org/10.1002/job.2081

Kirby, S. L., Kirby, E. G., & Konopaske, R. (2020). The role of mentoring in the prediction of strategic independence. *Journal of Organizational Psychology*, 20(3), 39–48.

Kumar, V.B. (2023, April). *Generation Z in the workplace: How should companies adapt?* Johns Hopkins University. https://imagine.jhu.edu/blog/2023/04/18/gen-z-in-the-workplace-how-should-companies-adapt/

Kutlák, J. (2021). Individualism and self-reliance of Generations Y and Z and their impact on working environment: An empirical study across 5 European countries. *Problems and Perspectives in Management*, *19*(1), 39–52. https://doi.org/10.21511/ppm.19(1).2021.04

Leslie, B., Anderson, C., Cole, B., Horman, J., Overly, A., Gentry, C., Callahan, C., King, J., (2021). Generation Z perceptions of a positive workplace environment. *Employee Responsibilities and Rights Journal*, 33(3), 171–187. https://doi.org/10.1007/s10672-021-09366-2

Maletin, S., & Kuratchenko, M. (2021). *The communicative behavior of Generation Z in the educational environment.* European Proceedings. Retrieved from https://www.europeanproceedings.com/article/10.15405/epsbs.2021.05.02.193

Mărginean, A. E. (2021). Generation Z perceptions and expectations upon entering the workforce. *European Review of Applied Sociology*, *14*(22), 20–30. https://doi.org/10.1515/eras-2021-0003

McCarthy, G., & Milner, J. (2013). Managerial coaching: Challenges, opportunities and training. *The Journal of Management Development*, *32*(7), 768–779.

Park, S., Yang, B., & McLean, G. N. (2008). An examination of relationships between managerial coaching and employee development. Paper presented at the *Academy of Human Resource Development International Research Conference in the Americas*, Panama City, FL, United States

Popaitoon, P. (2022). Fostering work meaningfulness for sustainable human resources: A study of Generation Z. *Sustainability*, *14*(6), 3626. https://doi.org/10.3390/su14063626

Posner, B. Z. (2021). When learning how to lead, an exploratory look at role models. *Leadership & Organization Development Journal*, *42*(5), 802–818. https://doi.org/10.1108/LODJ-05-2020-0191

PWC. (2023). *PWC's global workforce hopes and fears survey 2023: Is your workforce reinvention ready?* PWC. https://www.pwc.com/gx/en/issues/workforce/hopes-and-fears.html

Seemiller, C., & Grace, M. (2016). *Generation Z goes to college*. Jose-Bass.

ThoughtExchange. (2022). *Gen Z at work: Defining workplace expectations of the world's most populous generation*. ThoughtExchange. https://thoughtexchange.com/wp-content/uploads/2024/05/guide-te-corp-gen-z-at-work-digital.pdf

Twenge, J. M. (2023). *Generations: The real differences between Generation Z, millennials, Gen X, and silents- and what they mean for America's future*. Atria Books.

Perceived Enablers and Barriers of Student Veterans in Higher Education

John Chick, Ed.D.
University of Bridgeport

Abstract: The scoping literature review examines the complex transition that military veterans undertake upon their discharge and subsequent pursuit of post-secondary educational opportunities. As an increased number of veterans transition to civilian life, the rise in the number of veterans pursuing postsecondary education underscores the importance of analyzing the barriers and enablers that student veterans encounter. This review underscores the importance of specialized support networks and resources that are attuned to the unique challenges and experiences of the individuals in question. To offer a comprehensive analysis of the academic careers of veterans, this review examines in depth more than 55 scholarly articles, reports, conferences, and gray literature that have been peer-reviewed.

Keywords: student veterans, adult learning, higher education, enablers, barriers, military transition

The transition from military life to the academic arena can be a profound transformation, one that many veterans experience annually. According to a 2019 report by the U.S. Government Accountability Office (GAO), approximately 200,000 military personnel transition to life each year. In the U.S. Department of Veteran Affairs (VA) 2023 Annual Report, it was noted that 647,816 veterans took part in VA-sponsored education programs aimed at pursuing college degrees. However, only 114,515 of them began receiving benefits in that year, while others continued with their existing programs. It is worth noting that not all of the 114,515 veterans who started receiving benefits are part of the group transitioning from military to civilian life. This implies there could be hundreds of thousands or millions of eligible veterans who are not utilizing their VA education benefits. This forms the basis for a literature review analyzing over 55 peer-reviewed articles, reports, conferences, and texts.

The purpose of this study is to enlighten secondary institutions and policymakers about what can be better done to address the challenges and opportunities faced by veterans in their pursuit of higher education. Although the barriers to success and its enablers are known vis-à-vis student veterans, it is a complex problem where solutions are variable. A qualitative study by Ackerman et al. (2009) involved the interview of a sample that comprised Iraq War or Afghanistan War student veterans (n=12) on their needs in school. Ackerman et al. (2009) stress the significance of grasping this concept, pointing out that higher education institutions may contribute to the smooth transition of veterans to student life. By pinpointing the factors that promote success and those that hinder its stakeholders, post-secondary institutions can devise plans to aid this distinct group of students.

Literature Review

The methodology for this literature review was methodically designed to encapsulate a

comprehensive array of scholarly works pertinent to the academic integration of student veterans. The literature review is modeled after Klaw et al. (2021), where researchers conducted a scoping literature review on the best practices to serve student veterans in higher education. Scoping literature reviews are used to present a broad overview of literature regarding a certain study topic (Klaw et al., 2021). In the context of the proposed study, this entails a scoping review of the literature focused on the success factors, enablers, and barriers to student veterans' success.

The research aims to examine the perspective of student veterans during their post-secondary education experience, specifically the enablers and barriers encountered, where there is still limited available research regarding student veterans' first-hand experiences with potential enablers and barriers faced and feedback regarding strategies and services offered by institutions to aid in their post-secondary pursuits. The following research questions were posited that serve as the impetus of the current literature review and subsequently aim to influence program evaluation for student services at higher education institutions:

RQ1: *What are the enablers experienced by student veterans in their post-secondary education experiences?*
RQ2: *What are the barriers experienced by student veterans in their post-secondary education experiences?*

Online databases were searched to gather a broad range of available primary and secondary research. The respective references of initially identified relevant research were inspected to ascertain further relevance. Relevant data was extracted from government websites (e.g., the Department of Veterans Affairs and the Census). The decision to include or exclude specific pieces of literature was based on whether veteran servicemembers involved in included studies were enrolled in or planning to enroll in post-secondary educational opportunities. The literature identified and selected for this review was published from 2008 to 2023, except seminal research involving adult learning and andragogy, which dates back to 1983. The date range of 2008 to 2023 was chosen to investigate how this field of study has progressed over the past 15 years.

Results and Findings

The research findings show the enabling conditions that support student veterans' academic achievement in postsecondary institutions, as well as the barriers to their success. It is crucial to be mindful of these elements in order to assist student veterans and their higher education institutions to better support them and their academic experiences.

Enablers for Student Veteran Academic Success in Post-Secondary Education
There are several factors that lead to the success of student veterans in higher education. These enablers cover various aspects, from institutional support systems to policies that honor military training and experience. Moreover, the theory of adult learning can also be applied to the educational process of student veterans as it takes into account their previous experience and learning style.

Support Services

Support systems tailored to veterans and campus resources play a significant role in facilitating veterans' successful transition to civilian life. These services range from writing workshops to resource centers specifically designed to address the needs of veteran students. The way in which education or instruction is delivered also impacts the achievements of veterans. In a study by Crissman (2018), researchers compared online and traditional learning environments for veterans. It was noted that online formats provide the flexibility needed by individuals managing varying responsibilities, like those of student veterans. These formats offer a way for student veterans to engage with education and the academic community in a manner that suits their situations, such as service duties or family commitments. The effectiveness of services tailored for veterans hinges not on their availability but on their ability to meet the diverse needs of this group. In other words, it is not enough to simply have programs and resources available, but they must be applicable and relevant to the student veteran community. Ackerman et al. (2009) advocate for creating veteran campuses that are not just physically accessible but also culturally sensitive. They stress the importance of establishing a "community" by acknowledging veterans' unique life experiences and offering resources that align with their perspectives.

Recognition of Military Training and Experience
Acknowledging the valuable training and experience gained in the military can simplify transitioning from military service to academic pursuits. Researchers such as Vonkdarunee et al. (2011) emphasize the importance of tailor-made education programs that advocate for pathways that convert military skills into academic credits. This recognition further validates student veterans' prior knowledge and expertise and offers them a sense of progress and continuity in their educational endeavors. Armstrong (2020) also underscores the benefits of recognizing training and experiences within military environments. By acknowledging the skills acquired through military service, institutions of higher education further validate military professionals' abilities, thereby supporting a smoother transition to academic life and expedited degree completion. Institutions that effectively incorporate these factors into their operations are likely to experience increased success and satisfaction among their students. Converting training into credits is crucial for veterans, but how it is done varies widely across institutions in academia. Cook and Kim (2009) point out that inconsistencies in recognizing training as credit can lead to frustration and undervaluation among veterans. Having fair policies for evaluating and granting credit for experiences is essential for acknowledging veterans' prior learning.

Application of Adult Learning Theories
The use of adult learning theories plays a role in supporting veterans who often bring a wealth of life experiences to their education, influencing how they learn. Andragogical theories (Knowles et al., 2020) highlight the significance of self-directed learning and the value of students' experiences as learning assets (Merriam, 2001). Student veterans benefit from methods that are adaptable, meaningful, and respectful of their maturity and life experiences (Aslanian, 1983). Furthermore, Knowles et al. (2020) research of andragogy is especially relevant for veterans in education, as discussed by Merriam (2001), through emphasis on learning problem-solving orientation and relevance. This aligns with the strengths and needs of veteran students and suggests that educational practices be adjusted to incorporate hands-on approaches to enable veterans to apply their past experiences in new learning contexts (Chen, 2014). This could involve incorporating project-based learning opportunities for peer-teaching and recognizing experiential learning, for academic credit.

Barriers to Post-Secondary Education

Although there are support services available, there are still some problems in student veterans' transition to higher education institutions. These barriers can hinder their ability to fully participate in academic activities and achieve their academic goals. It is important to know these obstacles so as to effectively come up with strategies that can be used to tackle the challenges that student veterans encounter.

Cultural and Social Integration Challenges

Transitioning from a military to civilian lifestyle can be quite challenging for veterans due to the shift involved. Another theme that emerged from the literature is the perceived cultural clash between the structured and hierarchical environment of the military, which greatly influenced the participants in this study, and the more decentralized and self-directed learning environment of higher education. While both universities and the military have hierarchical structures, student veterans may experience a discrepancy with the expectations of independent decision-making and open discourse with less rigid authority (Messina, 2015; Kirchner, 2020). This shift could be a challenge to academic life, for instance, in learning to participate in discussions where class discussions are less structured, and students are expected to learn on their own. According to Kirchner et al. (2014), veterans often feel like outsiders in academia, facing barriers related to social integration. These feelings of alienation stem from the language norms and behaviors prevalent in military versus environments. In a study by Brawner et al. (2015) focusing on student veterans in engineering programs, the difficulties of integrating into communities are the focal point. The research emphasizes the need for faculty and staff to undergo training to create an environment that values the backgrounds of student veterans. The difficulties in integration are further complicated by the lack of comprehension or misconceptions held by faculty and veteran students regarding military and veteran experiences.

Psychological and Physical Health Concerns

Apart from facing challenges in fitting into cultures and social circles, many veterans struggle with physical health issues that can affect their academic journey. The psychological impact of service conditions like PTSD poses a significant hurdle for numerous veterans in academic environments (Flink, 2017). The stigma surrounding disabilities such as health problems may deter veterans from seeking the help they need due to concerns about appearing weak or incapable (Zinger & Cohen 2010). Flink (2017) talks about the stigma related to disabilities and highlights how "veterans with disabilities often choose not to reveal their conditions to avoid negative judgments." This secrecy can hinder them from accessing accommodations and support services that could lessen the impact of their disabilities on their performance. The struggle between asking for assistance and appearing strong can be overwhelming, impacting both achievement and veterans' overall health.

Administrative and Institutional Hurdles

Transitioning from service to education can be challenging for veterans due to the intricate nature of navigating academic bureaucracy. The structured and straightforward administrative processes in the military can starkly contrast with the nuanced systems in colleges and universities. This shift may pose difficulties for veterans, particularly when dealing with tasks like managing aid, transferring credits, and enrolling in courses while also adapting to life. Prior

research underscores the obstacles that veterans encounter as they enter higher education. Elliott et al. (2011) emphasize how veterans often face a web of policies and procedures that is both unfamiliar and frustrating. Negotiating this maze can result in delays, communication breakdowns, and a growing sense of disillusionment with the journey.

Policy & Practical Implications

Barry (2015) discusses how institutional policies can affect the success rates of veterans, suggesting that clear and consistent policies for credit transfer and admissions are crucial. Callahan and Jarrat (2014) also point out the importance of targeted support mechanisms beyond general student services. Barry et al. (2014) emphasize that effective policymaking should consider students' characteristics and the challenges they encounter. Policies should be based on data and research to ensure they meet veterans' specific needs and promote fairness. Machuca et al. (2014) highlight the need for targeted policies that integrate veterans into the student community without creating a class of students.

The practical implications of this review of literature, based on the research and experiences of student veterans, emphasize the importance of efforts from higher education institutions, policymakers, and service providers. Recognizing the challenges faced by veterans can help stakeholders support transitions into academic communities. "Institutions must find a balance between offering services and not segregating students" (Machuca et al., 2014). Policies tailored to veterans should acknowledge their learning and experiences, allowing for credits and simplified admission procedures. Schiavone and Gentry (2014) highlight the significance of initiatives that cater to veterans, such as priority class registration, specialized academic guidance, and orientation programs. Institutions need to establish support systems that address all aspects of student's needs.

Discussion & Conclusion

This scoping review of the literature highlights a point: the path of veterans in higher education goes beyond just change—it's a process of growth that can bring significant personal and academic development. By recognizing veterans' strengths and tackling their obstacles, we can make sure that their journey through college is fulfilling and fruitful, showing appreciation for their service and the contributions they make to the world and society as a whole. That being stated, this can only be accomplished with fidelity when there is an ongoing effort by educators, administrators, and policymakers alike to elicit feedback and data from institutions of higher education and, most importantly, student veterans themselves on what continues to contribute to their academic adjustment and success, and what should be included and used in the future.

References

Armstrong, Chris, "A Male Veteran Student Postsecondary Education Experience" (2020). *Dissertations*. 353. https://digitalcommons.umassglobal.edu/edd_dissertations/353\

Ackerman, R. DiRamio, D., & Mitchell, R. (2009). *Transitions: Combat veterans as college students*. In R. Ackerman & D. DiRamio (Eds.), Creating a veteran friendly campus: Strategies for transition and success (pp. 5–14). San Francisco, CA: Jossey-Bass. https://doi.org/10.1002/ss.311

Aslanian, C. B. (1983). Adults as Learners: Increasing Participation and Facilitating Learning, by K. Patricia Cross]. *The Journal of Higher Education*, 54(5), 587-589. https://doi.org/10.1080/00221546.1983.11780181

Barry, A. E. (2015). Student Service Members/Veterans Participating in Higher Education: What we know to date. *Journal of American College Health*,63(7), 415-417.

https://doi.org/10.1080/07448481.2015.1072777

Barry, A. E., Whiteman, S. D., & Wadsworth, S. M. (2014). Student service members/veterans in higher education: A systematic review. *Journal of Student Affairs Research and Practice*, 51(1). https://doi.org/10.1080/07448481.2015.1072777

Brawner, C. E., Main, J., Mobley, C., Lord, S. M., & Camacho, M. M. (2015). The institutional environment for student veterans in engineering. In *2015 IEEE Frontiers in Education Conference (FIE), Frontiers in Education Conference (FIE), 2015 IEEE* (pp. 1-5): IEEE. https://doi.org/10.1080/09518398.2019.1659440

Callahan, R., & Jarrat, D. (2014). Helping student servicemembers and veterans succeed. *Change: The Magazine of Higher Learning*,46(2), 36-41. https://doi.org/10.1080/00091383.2014.897189

Chen, J. C. (2014). Teaching non-traditional adult students: Adult learning theories in practice. *Teaching in Higher Education*, 19(4), 406-418. https://doi.org/10.1080/13562517.2013.860101

Cook, B. J., & Kim, Y. (2009). From soldier to student: Easing the transition of service members on campus. *American Association of State Colleges and Universities*. Retrieved from https://eric.ed.gov/?id=ED505982

Elliott, M., Gonzalez, C., & Larsen. B. (2011). US military veterans transition to college: Combat, PTSD, and alienation on campus. *Journal of Student Affairs Research and Practice*, 48(3), 279–296. https://doi.org/10.2202/1949-6605.6293

Flink, P.J., (2017). Invisible disabilities, stigma, and student veterans: Contextualizing the transition to higher education. *Journal of Veterans Studies*, 2(2) 110–120. DOI: 10.21061/jvs.v2i2.20

Kirchner, M., Coryell, L., & Yelich Biniecki, S. (2014). Promising practices for engaging student veterans. *Quality Approaches in Higher Education*, 5(1), 12–18. https://www.researchgate.net/publication/273458498_Promising_practices_for_engaging_student_veterans

Kirchner, M. J., Stull, F., & Herd, A. (2020). Learning challenges faced by transitioning military service members. *Journal of Military Learning*, 4(1), 36–56. https://www.armyupress.army.mil/Portals/7/journal-of-military-learning/Archives/April-2020/Kirchner-Transition-Military-1.pdf

Klaw, E., Young, B., Li, K., & O'Rourke, P. (2021). Best practices in serving college student Veterans: A scoping review. *Journal of Military, Veteran and Family Health*, 7(1), 76-86. https://doi.org/10.3138/jmvfh-2020-0024

Knowles, M. S., Holton, E. F. III, Swanson, R. A., & Robinson, P. A. (2020). *The adult learner: The definitive classic in adult education and human resource development* (9th ed.). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9780429299612

Machuca, A., Torres, K., Morris, P. & Whitley, W. (2014). Challenges faced by undergraduate military students at American public university system. *International Journal on ELearning*, 13(4), 441. https://www.learntechlib.org/primary/p/39464/

Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, (89), 3-13. https://doi.org/10.1002/ace.3

Messina, V. (2014). *In and out of uniform: The transition of Iraq and Afghanistan war veterans into higher education* (Doctoral dissertation, The Graduate Center, City University of New York). CUNY Academic Works. https://academicworks.cuny.edu/gc_etds/74/

Schiavone, V. & Gentry, D. (2014) Veteran-Students in transition at a Midwestern university, *The Journal of Continuing Higher Education*, 62:1, 29-38, https://doi.org/10.1080/07377363.2014.872007

Vonkdarunee, M., Chandarasupsang, T., & Chakpitak, N. (2011). Continuing education for new generation of higher military education. 2011 5th International Conference on Software, Knowledge Information, Industrial Management and Applications (SKIMA) Proceedings, 1–6. https://doi.org/10.1109/SKIMA.2011.6090021

Zinger, L., & Cohen, A. (2010). Veterans returning from war into the classroom: How can colleges be better prepared to meet their needs. *Contemporary Issues in Education Research*, 3(1), 39–51. https://www.researchgate.net/publication/266565767_Veterans_Returning_From_War_Into_The_Classroom_How_Can_Colleges_Be_Better_Prepared_To_Meet_Their_Needs

Librarian as Adult Educator: A New Career Trajectory

Justin A. Crossfox
SUNY Buffalo State University

Abstract: A mid-career transition from public children's librarian to academic librarian revealed new pedagogical challenges that emerged when engaging adult learners. Initially feeling unprepared to teach credit-bearing courses, the author enrolled in a graduate program in Adult Education to gain the theoretical and practical tools needed for effective instructional design. I identified meaningful connections between librarianship and adult education through coursework, reflection, and classroom application—particularly in andragogy, accessibility, and Universal Design for Learning (UDL). This reflection highlights a growing recognition that librarians, regardless of their specialization area, are in the broader adult education community of practice. The article offers practical strategies used in course design and delivery that other librarian-educators can adopt, emphasizing the relevance of adult learning theory for instructional roles in higher education and beyond.

Keywords: librarian, career change, instructional design, adult education

In 2022, I underwent a significant professional shift—from a public librarian serving primarily children to an academic librarian at SUNY Buffalo State University. The vast majority of my nearly two decades in public libraries were spent as a children's librarian. I was well-versed in childhood development and early literacy, but I felt unprepared and insecure when teaching and working with adult learners in a university setting.

To address this knowledge gap, I enrolled in courses offered by my institution's Adult Education department. I aimed to gain the theoretical frameworks and practical tools to design meaningful, inclusive learning experiences for college students. Through coursework, reflection, and instructional application, I began to see librarianship and adult education as intrinsically linked fields united in their goal of supporting lifelong learning and educational empowerment.

Background and Challenge

By the time I transitioned into academic librarianship, I was intentionally seeking a new professional direction. While I remained deeply committed to the values of public librarianship, I began to feel a sense of restlessness and concern about long-term burnout. I was looking for a way to remain within a public-serving institution while engaging with new challenges that would allow for continued personal and professional growth. Accepting a User Experience and Outreach Librarian position at a public, urban university provided that opportunity.

The prospect of working with college students and drawing on my background in programming for diverse audiences was invigorating. However, within my first semester, I was assigned to teach a fully asynchronous, credit-bearing course, an experience for which I felt unprepared. Although I had previously co-facilitated workshops and designed library programming, I had

never led a formal academic course, particularly in an online setting. While I collaborated with a more experienced colleague and consulted with our campus instructional design team, I soon realized that I lacked the theoretical grounding and professional vocabulary to fully understand or justify the pedagogical choices I was making.

During this period of professional uncertainty, I discovered my institution's Adult Education program. Enrolling in graduate coursework provided a structured, intentional space to explore adult learning theory, instructional design, and reflective teaching practices. What began as a professional development effort quickly evolved into a deeper transformation, reshaping how I understood my role not just as a librarian but as an adult educator.

Approach

To address the instructional challenges I faced, I enrolled in graduate-level courses in the Adult Education department at my institution. My primary goal was to understand how adults learn and how to apply instructional design strategies that could improve the quality of my teaching. These courses emphasized theories of adult learning, such as andragogy, transformational learning, and Universal Design for Learning (UDL), which I began integrating into my course planning.

I reflected on my prior experiences and teaching practices as I engaged with the material. Assignments such as the educational biography encouraged deep reflection and helped me identify moments of transformation in my own learning journey. These moments shaped how I approached the design and delivery of my instruction and influenced how I related to adult students in my classroom. The idea that librarians play an essential—though often unacknowledged—role in adult education is echoed in Bordonaro's (2018) work, which highlights the natural alignment between adult education principles and academic library practice.

What emerged was a deeper recognition that librarianship and adult education are not separate but fundamentally connected. A pivotal moment came when I encountered Merriam and Brockett's (2007) assertion that many people educating adults do not identify as adult educators but rather as professionals working within a specific content domain—such as librarians, health educators, or workplace trainers. This perspective reframed my own understanding of librarianship and gave me the language to better articulate the educational dimensions of my work.

Applying Adult Learning Principles in Academic Librarianship

One of the most impactful frameworks I adopted was Universal Design for Learning (UDL). UDL emphasizes providing multiple means of representation, engagement, and expression (Bernacchio & Mullen, 2007; CAST, 2024). While I had previously accommodated children's sensory needs, UDL encouraged me to think more holistically about accessibility for adult learners.

To implement UDL in my instruction, I redesigned course content using high-contrast visuals and accessible font choices. I ensured that transcripts and audio-only versions accompanied

video lectures. Additionally, I allowed students to submit assignments in a range of formats, such as video reflections, podcasts, or traditional essays. These changes made learning more inclusive and flexible, especially for students managing work, family, and academic responsibilities.

Inspired by adult learning theory's emphasis on reflection and self-direction, I incorporated reflective journals into each module. These low-stakes assignments encouraged students to process course content and relate it to their lived experiences. I introduced playful elements, such as trivia games during synchronous sessions, to reinforce key concepts and create opportunities for informal peer interaction. These innovations led to noticeable improvements in student engagement. Course feedback highlighted that students felt more comfortable interacting with the material, and learning analytics showed increased participation in discussion forums and higher rates of assignment completion compared to previous semesters.

As I progressed through my coursework, I found myself developing a stronger vocabulary around instructional design. Terms like scaffolding, constructive alignment, and formative assessment helped me think more clearly about the structure of my courses. They allowed me more meaningful conversations with our campus instructional design team. I started making more intentional choices in how I designed learning activities, always trying to keep adult learning principles at the center.

I began organizing modules around real-world problems to make the material feel more relevant. I offered students choices in how they engaged with the content, whether through different project formats or optional activities, and used prompts that encouraged them to draw on their own experiences. These small shifts helped create learning environments that felt more connected, flexible, and supportive for the adult learners in my classroom.

Discussion

The integration of adult education theory into my work as a librarian has prompted a larger reflection on the evolving role of academic librarianship. Librarians today are expected to be educators, program designers, and facilitators of learning, roles that benefit immensely from a grounding in adult learning theory. My experience has shown that applying principles like andragogy, learner autonomy, and accessibility can dramatically improve both teaching effectiveness and student engagement.

This experience also highlighted the need for intentional professional development in adult learning for librarians, especially those in instructional roles. Few library science programs include coursework in adult education, even though librarians are frequently called upon to teach or guide learning in one-on-one and group settings. Elmborg (2016) reinforces this need by emphasizing that lifelong learning is more than a library slogan; it is a fundamental value that shapes how we design and deliver services. He writes that lifelong learning "serves a major purpose in our rhetoric about libraries, and indeed about how we should live our lives" (Elmborg, 2016, p. 535), a sentiment that resonates deeply with my evolving professional philosophy.

In the broader discourse of librarianship, the concept of lifelong learning appears frequently yet

is rarely discussed in connection with adult education theory. Mahoney (2017), in her survey of library literature, notes that while lifelong learning is a prominent theme, it is often divorced from its adult education context. Making these connections more explicit can enhance both professional practice and learner outcomes.

Recognizing librarians as part of the adult education community of practice opens the door for more collaboration between disciplines and more responsive instruction for diverse learners. As I continue to develop an elective course titled *Adult Education for Librarians*, I hope to contribute to this growing intersection and help prepare future librarians to meet the educational needs of their communities with skill and confidence.

Conclusion and Implications for Practice

Librarians and adult educators share a mission: to empower individuals through access to knowledge, resources, and learning experiences. Yet, the two professions rarely intersect in training and discourse. For librarians who find themselves in instructional roles—especially in academic or community settings—the principles of adult education can provide a vital foundation for more inclusive, relevant, and effective teaching.

I propose that Library and Information Science (LIS) programs consider integrating coursework into adult education, particularly for students interested in teaching roles or program coordination. As a next step, I am working to develop an elective course titled *Adult Education for Librarians*, designed to help future professionals apply the core principles of adult learning to library instruction and outreach. By bridging these two disciplines, we can prepare librarians to curate and deliver information and serve as transformative educators in the lifelong learning journeys of the communities they serve.

References

Bernacchio, C., & Mullen, M. (2007). Universal Design for Learning. *Psychiatric Rehabilitation Journal*, *31*(2), 167–169. https://doi.org/10.2975/31.2.2007.167.169

Bordonaro, K. (2018). Adult education and academic libraries. *Information and Learning Sciences*, *119* (7/8), 422-431. https://doi.org/10.1108/ILS-04-2018-0030

CAST (2024). Universal Design for Learning Guidelines version 3.0. Retrieved from https://udlguidelines.cast.org

Elmborg, J. (2016), Tending the garden of learning: Lifelong learning as core library value. *Library Trends*, *64* (3), 533-556. https://doi.org/10.1353/lib.2016.0009

Merriam, S. B., & Brockett, R. G. (2007). *The Profession and practice of adult education: An introduction.* Jossey-Bass.

Mahoney, M. H. (2017). An academic librarian's search for meaning: A survey of lifelong learning in library literature. *The Journal of Academic Librarianship*, *43* (6), 540-547. https://doi.org/10.1016/j.acalib.2017.05.004

Adult Learning and Patient Engagement

Maryjan Fiala, M.S.[1,2], Susan Yelich Biniecki, Ph.D.[1], and Jessica Gormley, Ph.D., CCC-SLP[2]
[1]Kansas State University
[2]University of Nebraska Medical Center

Abstract: The prevalence of chronic illnesses has resulted in calls in some parts of the world for a shift in the patient-provider dynamic, namely patient participation in chronic disease management. Patient and family engagement represents a widely discussed issue, underscoring the interconnectedness of health policy, practice, and individual health management. In pediatric healthcare settings, parents and caregivers are often positioned as passive recipients of healthcare information. Conceptualizing parents as adult learners acknowledges each parent's involvement in co-constructing an understanding of, and engagement with, their child's treatment plan and the health care system. This paper presents experiential learning theory as a lens to examine parents' learning experiences across the health care system. Further investigation of parents' learning experiences may inform organizational strategies for advancing health literacy and parent engagement.

Keywords: parent engagement, experiential learning, health literacy, adult learning

Estimates suggest that 129 million Americans (Benavidez et al., 2024), including more than 40% of school-aged children, live with one or more chronic diseases (Centers for Disease Control [CDC], 2024). The prevalence of chronic illnesses like obesity, heart disease, cancer, and diabetes has resulted in calls in some parts of the world for a shift in the patient-provider dynamic, namely patient participation in managing their disease (Karazivan, 2015). Chronic disease management can involve understanding personal health information, making informed decisions with health care professionals, and implementing treatment regimens into one's daily routine. For the parent or caregiver of a child experiencing special health care needs or disability, such as asthma, epilepsy, anxiety, cerebral palsy, and autism (Health Resources & Service Administration [HRSA], 2024), this may involve making informed decisions on behalf of or in collaboration with the child and health care professionals, providing high-level care for the child in-home, or both. Unfortunately, health information can be unintelligible (CDC, 2024), impeding parents' involvement in their child's health care experiences. This paper presents experiential learning theory as a lens to examine parents' adult learning experiences and potential implications for parent engagement across the health care system.

Background

Public Health Perspectives on Patient Engagement and Health Literacy

Patient and family engagement can be defined as "patients, families or their representatives, and health professionals working in active partnership at various levels across the health-care

system—individual care, organizational design and governance, and system-level policy-making—to improve health and health care" (Carman et al., 2013, p. 224). The World Health Organization's ([WHO]; 2024) Patients for Patient Safety (PFPS) initiative advocates for patient, family, and community engagement at all levels of health care, acknowledging the importance of collaboration among patients and professionals to improve patient safety. Patients, and their parents in the context of pediatric health care, remain constants across the health care journey, offering perspectives critical to the delivery of people-centered care (WHO, 2024). As a result, patient, family, and community engagement in health systems contributes to a more holistic understanding of the conditions influencing health disparities and supports the development of authentic strategies for promoting individual and population health (Rhodes et al., 2021).

Achieving health equity and attaining health literacy represents an overarching focus of Healthy People 2030, the U.S. government's ten-year plan for addressing pressing public health issues (Office of Disease Prevention and Health Promotion, n.d.). Health literacy represents a critical skill for engaging and empowering patients and families across health systems. Healthy People 2030 defines health literacy as "the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others," (Office of Disease Prevention and Health Promotion, n.d., How Does Healthy People Define Health Literacy? section) expanding the definition to include organizations' responsibility for equitably enabling consumers' participation in health-related decisions. Historically, navigating the health system was viewed as an individual responsibility. The new definition has resulted in greater emphasis on organizations' efforts "to address the skills that help people move from understanding to action and from a focus on their own health to a focus on the health of their communities" (Office of Disease Prevention and Health Promotion, n.d., How Does Healthy People Define Health Literacy? section).

Community and Individual Patient Engagement Strategies

Recent decades have seen increased interest in community-engaged scholarship, where academics partner with community members to address real-world issues (Ojeh et al., 2024) including health disparities. On an individual care level, professional organizations like the American Academy of Pediatrics (AAP) recommend integrating patient- and family-centered principles across the care continuum (Sterni et al., 2016). Patient- and family-centered care denotes a "partnership approach to decision-making between health professionals and the [patient and] family in all aspects of care" (p. e19). Family-centered care acknowledges each patient and family as unique from others, integrates the patient and family's values and choices into care planning, and promotes collaboration among all members of the care team (Kuo et al., 2011). Barriers to implementing patient- and family-centered care can include the individualized needs of each patient and family related to mutual information sharing, the complexity of information related to complex critical illnesses, and the number and inconsistency of health care professionals caring for an individual (Laudato et al., 2019).

Patient education is defined "as the process of influencing patient behavior and producing the changes in knowledge, attitudes, and skills necessary to maintain or improve health" (American Academy of Family Physicians, 2000, para. 1), focuses on ensuring patients understand what they are told to increase adherence to recommended treatments and reduce follow-up phone calls

(Agency for Healthcare Research and Quality [AHRQ], 2023). Some in health care maintain that patient education equates to knowledge transfer, where healthcare providers bear responsibility for informing patients, and patients are expected to act on the received guidance (Paterick et al., 2017). In pediatric health care settings, this approach positions parents as primarily passive recipients restating health care information, whereas conceptualizing parents as adult learners acknowledges each parent's involvement in co-constructing an understanding of, and engagement with, their child's treatment plan and the health care system. Advancing patient and family engagement across the health care system, including health literacy, calls for an examination of the rich contexts in which adults learn.

Theorizing From the Literature

Parents Construct Meaning in the Context of Society

The complex, contradictory, and unpredictable nature of human beings supports the consideration of knowledge construction from a constructivist perspective (MacLeod et al., 2023). Constructivists would posit that each individual makes meaning from new healthcare information and experiences by integrating them into their existing biography, which acts "as a kind of a filter and [the individual] creates new knowledge by relating a present learning experience to past learning experiences" (Yelich Biniecki, 2015, p. 120). Jarvis (2009) suggested that knowledge construction occurs within and is influenced by the social context, defining learning as:

> The combination of processes throughout a lifetime whereby the whole person – body (genetic, physical and biological) and mind (knowledge, skills, attitudes, values, emotions, meaning, beliefs and senses) – experiences social situations, the content of which is then transformed cognitively, emotively or practically (or through any combination) and integrated into the individual person's biography resulting in a continually changing (or more experienced) person (p. 26).

Individuals living with a chronic illness or disability and their families represent a diverse subset of the population, each with unique perspectives and histories with the health care system, possibly with the specific organization or provider, and managing their illness, experiences that contribute to their developing biography. In previous research, for example, parent participants highlighted their 'back stories', organizational-level influences, and the sociopolitical environment as influencing their perceptions of the caregiving experience (Hall et al., 2023).

Learning is an Ongoing Process Catalyzed by Periods of Disjuncture

Jarvis' (2009) experiential learning theory suggests an ongoing process through which people transform, suggesting that learning occurs across the lifespan through primary experiences (i.e., mediated through a learner's senses) and secondary experiences (i.e., mediated by others). These experiences can reinforce one's understanding of the world or lead to disjuncture, disharmony between the world as one knows it and the world they are facing. For example, a parent's expectations for their 18-month-old child's speech development might be influenced by previous primary experiences with the child's older sibling and secondary experiences, such as information shared by their child's pediatrician or online resources. Disjuncture occurs when the

parent's life experience (e.g., the 18-month-old not meeting the same milestones as their sibling) differs from life as they know it (e.g., expectation for children to talk early). This mismatch can result in feelings of unknowing and possibly explicit questions, such as "What should I do now?" (Jarvis, 2009).

In some situations, a small gap between what one knows, and their biography may result in a minor shift in understanding (Jarvis, 2009). For example, soliciting advice from a pediatrician might help a parent reframe their expectations for the child's speech development. Responding to the disjuncture may also result in more significant changes to the parent's knowledge or beliefs (cognitive transformation), feelings about the situation, self, or others (emotive transformation), or actions, habits, or skills (practical transformation; Jarvis, 2009). Following the example, the parent may seek information online, contact the child's pediatrician for guidance, or be referred to a child psychologist and speech-language pathologist for further assessment and intervention but still not have resolved the disjuncture. The parent may be engaged in episodic learning and growth as they seek to make meaning of the new experiences. Returning to a state of harmony may take significant time and typically requires practice of the resolution (Jarvis, 2009). For example, should the child be diagnosed with a communication disorder, the parent may need significant practice with an intervention for it to become part of their updated biography. Based on Jarvis' (2009) theory, a parent who interprets the gap as too large, the learning as a burden, or faces multiple points of disjuncture may reject interventions and expert advice, relying instead on their prior understanding of the world.

Prior studies exploring parent experiences in pediatric health settings reveal themes aligning with Jarvis' (2009) experiential learning theory, necessitating a combination of self-directed and provider-facilitated learning. A systematic review identified 6 antecedents of parent empowerment (e.g., engagement and influence in their child's health care encounters), one of which included parents' development of a new narrative (Ashcroft et al., 2009). Studies described parents finding a new normal, reimagining parenthood, and developing an advocate identity as part of their journey toward empowerment. For some, the process explicitly involved self-reflection, and for others, it appeared to be anchored in their participation on the care team. Related studies in the review illustrated the importance of the parent-provider relationship, care processes such as the development of shared goals and shared decision-making, and support from providers targeting parents' cognitive, practical, and emotive needs (Ashcroft et al., 2019).

Learning Leads to Engagement and Engagement Leads to Learning

Parents may not have years of academic medical education or experience to draw from. Instead, they may learn about the experience by memorizing terms, reflecting on conversations, interpreting their feelings, taking action, or through any combination of these or other processes (Jarvis, 2009). Still looking through the lens of their individual biography and social context, a parent of a child with a communication disorder may internalize condition- and intervention-specific terminology, replay discussions with the speech-language pathologist or pediatrician, tune into their feelings of fear regarding the child's future, or experiment with the recommended intervention as they make meaning from the situation. Another parent may rely on insights from other parents on social media as they make meaning of the situation. Jarvis (2009) clarified that responding to disjuncture does not require "accurate" input.

Jarvis (2009) also emphasized the difference between knowing about something and knowing how to do something. Taking on the role of parent of a child with complex medical needs or a disability goes beyond learning steps or techniques. For example, a parent may be able to explain the steps for a specific intervention, but the actual implementation creates a new, primary learning experience through which the parent may develop their own words or processes. Over time, these tasks may become routine, and the parent may internalize the role as part of their identity (Jarvis, 2009). For example, parents have described learning to continually assess their children's condition to guide decision-making, relying on previous care experience to help guide current care decisions (Rennick et al., 2019). Additional research further illustrates the phenomenon of "becoming" in this context:

> Normalization and normalcy have been redefined by the parent caregivers of children with chronic illness. Parents come to know the child's needs and how to care for the child by engagement and involvement in the child's care on a day-to-day basis. (Balling & McCubbin, 2001, p. 111)

Discussion

Applying an experiential learning lens helps illustrate parents' individual and dynamic journeys learning to care for a child with a chronic illness or disability. Understanding these experiences can support parent-provider partnerships and inform future directions for parent education initiatives. Conceptualizing parents as adult learners shifts parent education from transactional in nature to ongoing, joint endeavors. Encouraging parents to draw on their existing biographies positions them as collaborators in developing care plans and related learning experiences. Healthcare professionals can consider opportunities for scaffolding parents' knowledge of their child's healthcare experiences and need in relation to others in their communities and existing policy and practice. Reframing patient and family education through this lens may support healthcare leaders in developing learning organizations poised to advance personal health literacy, supporting parents to take action on behalf of their children and others in their communities. More research regarding personal and organizational health literacy is needed to advance parent engagement across healthcare systems.

References

Agency for Healthcare Research and Quality. (February 2023). Guide to improving patient safety in primary care settings by engaging patients and families. https://www.ahrq.gov/patient-safety/reports/engage/teachback.html

American Academy of Family Physicians. (2000). Patient education. *American Family Physicians, 62*(7), 1712-1714. https://www.aafp.org/pubs/afp/issues/2000/1001/p1712.html

Ashcraft, L. E., Asato, M., Houtrow, A. J., Kavalieratos, D., Miller, E., & Ray, K. N. (2019). Parent empowerment in pediatric health care settings: A systematic review of observational studies. *The Patient*, *12*(2), 199–212. https://doi.org/10.1007/s40271-018-0336-2

Balling, K., & McCubbin, M. (2001). Hospitalized children with chronic illness: Parental caregiving needs and valuing parental expertise. *Journal of Pediatric Nursing*, *16*(2), 110–119. https://doi.org/10.1053/jpdn.2001.23157

Benavidez, G. A., Zahnd, W. E., Hung, P., & Eberth, J. M. (2024). Chronic disease prevalence in the US: Sociodemographic and geographic variations by zip code tabulation area. *Preventing Chronic Disease*, *21*, E14–E14. https://doi.org/10.5888/pcd21.230267

Brach, C. (Ed.). (2024). *AHRQ health literacy universal precautions tool kit* (3rd ed.). Agency for Healthcare

Research and Quality. https://www.ahrq.gov/health-literacy/improve/precautions/index.html

Carman, K. L., Dardess, P., Maurer, M., Sofaer, S., Adams, K., Bechtel, C., & Sweeney, J. (2013). Patient and family engagement: A framework for understanding the elements and developing interventions and policies. *Health affairs (Project Hope)*, *32*(2), 223–231. https://doi.org/10.1377/hlthaff.2012.1133

Centers for Disease Control and Prevention. (2024). *Managing health conditions in school*. School Health Conditions. https://www.cdc.gov/school-health-conditions/chronic-conditions/index.html

Centers for Disease Control and Prevention. (2024). *Understanding health literacy*. Health Literacy. https://www.cdc.gov/health-literacy/php/about/understanding.html

Hall, N., Rousseau, N., Hamilton, D. W., Simpson, A. J., Powell, S., Brodlie, M., & Powell, J. (2023). Providing care for children with tracheostomies: A qualitative interview study with parents and health professionals. *BMJ Open*, *13*(1), e065698. https://doi.org/10.1136/bmjopen-2022-065698

Health Resources & Services Administration. (2024). *Children and youth with special health care needs (CYSHCN)*. https://mchb.hrsa.gov/programs-impact/focus-areas/children-youth-special-health-care-needs-cyshcn

Jarvis, P. (2009). *Learning to be a person in society* (1st ed.). Routledge.

Kuo, D. Z., Houtrow, A. J., Arango, P., Kuhlthau, K. A., Simmons, J. M., & Neff, J. M. (2012). Family-centered care: Current applications and future directions in pediatric health care. *Maternal and Child Health Journal*, *16*(2), 297–305. https://doi.org/10.1007/s10995-011-0751-7

Laudato, N., Yagiela, L., Eggly, S., & Meert, K. L. (2020). Understanding parents' informational needs in the pediatric intensive care unit: A qualitative study. *Progress in Pediatric Cardiology*, *57*, 101172. https://doi.org/10.1016/j.ppedcard.2019.101172

MacLeod, A., Luong, V., Cameron, P., Burm, S., Field, S., Kits, O., Miller, S., & Stewart, W. A. (2023). Case-informed learning in medical education: A call for ontological fidelity. *Perspectives on Medical Education*, *2*(1), 120–128. https://doi.org/10.5334/pme.47

Office of Disease Promotion and Health Promotion. (n.d.). *Health literacy in Healthy People 2030.* https://odphp.health.gov/healthypeople/priority-areas/health-literacy-healthy-people-2030

Office of Disease Promotion and Health Promotion. (n.d.). *Social determinants of health.* https://odphp.health.gov/healthypeople/priority-areas/social-determinants-health

Ojeh, K., Mott, C., Poole, M., Rothe, L., & Snyder, C. (2024). The anti-racist origins of critical community-engaged scholarship. *Phylon*, *61*(1), 3–20.

Paterick, T. E., Patel, N., Tajik, A. J., & Chandrasekaran, K. (2017). Improving health outcomes through patient education and partnerships with patients. Proceedings (Baylor University. Medical Center), 30(1), 112–113. https://doi.org/10.1080/08998280.2017.11929552

Rennick, J. E., St-Sauveur, I., Knox, A. M., & Ruddy, M. (2019). Exploring the experiences of parent caregivers of children with chronic medical complexity during pediatric intensive care unit hospitalization: An interpretive descriptive study. *BMC Pediatrics, 19*(1), 272. https://doi.org/10.1186/s12887-019-1634-0

Rhodes, S., Daniel-Ulloa, J., Wright, S., Mann-Jackson, L., Johnson, D., Hayes, N. & Valentine, J. (2021). Critical elements of community engagement to address disparities and related social determinants of health: The Centers for Disease Control and Prevention Community approaches to reducing sexually transmitted disease initiative. *Sexually Transmitted Diseases, 48* (1), 49-55. https://journals.lww.com/stdjournal/fulltext/2021/01000/critical_elements_of_community_engagement_to.9.aspx

Sterni, L. M., Collaco, J. M., Baker, C. D., Carroll, J. L., Sharma, G. D., Brozek, J. L., Finder, J. D., Ackerman, V. L., Arens, R., Boroughs, D. S., Carter, J., Daigle, K. L., Dougherty, J., Gozal, D., Kevill, K., Kravitz, R. M., Kriseman, T., MacLusky, I., Rivera-Spoljaric, K., … Halbower, A. C. (2016). An official American Thoracic Society clinical practice guideline: Pediatric chronic home invasive ventilation. *American Journal of Respiratory and Critical Care Medicine*, *193*(8), e16–e35. https://doi.org/10.1164/rccm.201602-0276st

World Health Organization. (2024). *Patients for patient safety*. https://www.who.int/initiatives/patients-for-patient-safety

Yelich Biniecki, S. M. (2015). Adults' perceptions of knowledge construction as participants in nonformal world affairs programs: An interpretive study. *Adult Education Quarterly*, *65*(2), 116–132. https://doi.org/10.1177/0741713614568886

Beyond Tradition: Innovating Recruitment & Admission Strategies and Academic Policies for Nontraditional Students

Janine Nicole Guerra
Drexel University

Abstract: This paper explores recruiting nontraditional students in higher education. As traditional undergraduate populations decline, nontraditional students, including adult learners, veterans, and working professionals, represent untapped markets. This proceeding examines their evolution, motivations, and barriers. It emphasizes a need for tailored recruitment strategies, flexible policies, and dedicated support services to enhance accessibility and retention. Specific recommendations include engaging and encouraging leaders to implement opportunities to leverage prior learning for credit, offer flexible class schedules, and provide targeted financial aid programs that can enhance the attractiveness of institutions to nontraditional students. By implementing innovative admissions frameworks informed by the unique needs of nontraditional learners, colleges and universities can foster a diverse and resilient educational landscape.

Keywords: nontraditional students, admissions, student recruitment, academic policies, higher education

Colleges face enrollment challenges due to declining traditional undergraduate student populations (Schroeder, 2021). However, nontraditional students, such as adult learners, veterans, and working professionals, are increasingly interested in obtaining degrees (National Adult Learner Coalition, 2017; Postsecondary National Policy Institute, 2023). This shift necessitates effective recruitment strategies and policies targeting nontraditional students. This paper explores enrolling nontraditional students through tailored recruitment tactics. By understanding unique student backgrounds and motivations, institutions can implement targeted recruitment strategies. Flexible admissions criteria and support services can enhance accessibility and retention. Ultimately, innovative admissions and policy frameworks empower nontraditional students, fostering a diverse, inclusive, and resilient educational landscape.

Background

College admissions professionals have warned about the "demographic cliff," a projected decline in traditional-age first-time college students due to decreasing birth rates (Schroeder, 2021). Colleges have struggled to mitigate this decline while maintaining academic profiles and generating revenue. However, nontraditional students are increasingly interested in obtaining degrees (Bussey et al., 2021; Chen, 2017). Addressing their needs in admissions and recruitment policies can lead to increased enrollment, campus diversity, and accessibility (EAB, 2019). The application of Knowles' (1968) andragogy theory, which emphasizes self-directed learning and the need for adult learners to understand the relevance and applicability of their education, can inform recruitment strategies that highlight flexible learning options and career relevance.

The terms "adult student" and "nontraditional student" are often used interchangeably but are not

the same. Nontraditional students are generally defined as those 25 years or older (Strukel et al., 2023). This definition misclassifies all nontraditional students as adults. Beyond age, other attributes of nontraditional students include part-time enrollment, employment, financial independence, marital status, responsibility for dependents, and ethnicity. Understanding these distinctions is crucial for developing targeted recruitment strategies that address their specific needs and barriers. For instance, recognizing nontraditional students often have responsibilities such as employment and dependents can help institutions create and market flexible class schedules and support systems that accommodate these commitments. The National Center for Education Statistics (NCES) recognizes age as an indicator of other characteristics but acknowledges traditional-age undergraduates increasingly possess seven nontraditional characteristics: delayed enrollment, part-time enrollment, full-time employment, financial independence, responsibility for dependents, single parenthood, and GED completion (Choy, 2002). Horn and Carroll (1996) classified students with one characteristic as "minimally nontraditional," two to three as "moderately traditional," and four or more as "highly nontraditional" (p. i). By understanding these classifications, institutions can tailor their recruitment and support strategies to meet the diverse needs of nontraditional students, enhancing program attractiveness and marketability.

Current Nontraditional Student Population Statistics

Although age alone does not define nontraditional students, it remains the most prevalent statistic. In 2013, about 29.4 million students aged 25 or older had started their degrees (EAB, 2021). Between 2014 and 2018, only 3.8 million (12.9%) re-enrolled, and just 940,000 (3.2%) graduated (EAB, 2021). The Institute of Education Sciences reported a decline in immediate postsecondary enrollment from 68% in 2010 to 62% percent in 2021 (Irwin et al., 2023). Despite overall declines, nontraditional students make up approximately 33.4% of current postsecondary enrollment (Postsecondary National Policy Institute, 2023). There is significant potential to attract students aged 25 and older, with 27.9% having completed high school and no college, and 14.9% having some college experience (United States Census Bureau, 2022). Between 2021 and 2022, the number of college students working while enrolled increased from 56% to 65%, with nearly half working over 30 hours a week (Simpson Scarborough, 2022). The Postsecondary National Policy Institute found that more than a third of nontraditional students had dependent children, worked full-time, or required financial assistance (2023). These statistics underscore the importance of recruitment strategies that consider the diverse backgrounds and needs of nontraditional students, as highlighted by the theory of planned behavior, which can guide in addressing perceived student intentions to enhance enrollment (Ingram et al., 2000).

Nontraditional Student Educational Motivations and Needs

Understanding why nontraditional students pursue higher education is crucial for attracting and retaining them (Broek et al., 2023). The most prevalent motivation over the past decades has been increased economic status. In 1959, 33% of respondents cited economic advancement as their motivation for returning to school (Chapman, 1959). In 2023, career development opportunities, especially when supported by employers, remains the top reason (Bellare et al., 2023). As industries demand skilled workers with higher education credentials, these students become more desirable (Bowers & Bergman, 2016). Personal achievement and a desire for

accomplishment also motivate nontraditional students. Feelings of self-worth are inherently motivating; students who left school due to poor performance often seek to prove themselves (Ross-Gordon, 2003). Applying Maslow's hierarchy of needs, institutions can develop recruitment strategies that address both the economic and fulfillment aspects, ensuring that nontraditional students see the value in completing their education (Prescott & Simpson, 2004).

Approach

Colleges and universities have varied approaches to nontraditional students, with no single model emerging. A lack of understanding of nontraditional students' needs results in subpar recruitment and retention rates (MacDonald, 2018). Nontraditional students are often isolated in evening and weekend classes (Schulte, 2015). Recruitment policies should position universities attractively to nontraditional students as a specific consumer block (Bussey et al., 2021).

Higher education institutions have historically focused on traditional students, with policies and support systems tailored to them exclusively (Stamats, 2019). Successful schools foster support systems, credit motivations, and value connections with nontraditional students. Adapting recruitment tactics is not insufficient; the nontraditional population must be embraced widely with tailored classes, services, and policies (Zack, 2020).

Best Practices

Traditional students start looking at colleges in high school, while nontraditional students may debate for years before applying, requiring admissions personnel to play a long game. Nontraditional students may have credits from various schools spanning several years and often face red tape regarding receiving credit (Gill, 2021). Schools offering credits through prior learning assessment (PLA) see higher graduation rates and student appreciation for saving time and money, incentivizing enrollment (Bergman, 2019; Hanover Research, 2018). Understanding student motivations, such as career advancement and personal achievement, can help institutions design recruitment strategies that resonate with nontraditional students' goals.

Empirical studies have shown that recruitment methods significantly impact recruitment outcomes. One study found that social media recruitment significantly relates to both pre- and post-hiring outcomes in business, including the number of applications received and candidate quality (Muduli & Trivedi, 2020). This correlation suggests that leveraging modern recruitment methods may also effectively attract nontraditional students to university programs.

Targeted Recruitment and Program Initiatives

Attracting nontraditional students requires methods aligned with their unique circumstances. Cultivating the prospect pool is challenging, as these students take longer to explore options and commit to enrollment. Few prospect lists are available for purchase so schools must generate prospective student leads before marketing and delivering resonant messages (Campbell & Narduzzi, 2015; Lindsey & West, 2022). Messaging should address nontraditional students' specific motivations, hesitations, and experiences (Lindsey & West, 2022). Approximately 21% of adults aged 25-34 in the US began college but stopped out, making universal interest degree

completion unrealistic and a segmented approach targeting those likely to re-enroll effective (Schatzel et al., 2011). Positive outcomes are observed with recruitment microsites specifically designed for nontraditional students (Sevier & Morehouse, n.d.).

Nontraditional students face external pressures which can deter enrollment (EAB, 2019). Flexible policies and procedures are crucial, as are supportive staff members who transparently answer questions and provide encouragement (Gill, 2021). Financial considerations must be addressed, as many nontraditional students may not qualify for the same merit aid as traditional students (Bellare et al., 2023; Strukel et al., 2023). Although universities often promise discounted tuition, nontraditional students do not often meet the conditions of these programs (Pappano, 2021). Nontraditional students want to understand their degree requirements, have flexible class options that fit their schedules, and have approachable academic advisors (EAB, 2019; Meyers et al., 2012). Recruitment practices should clearly market these program characteristics, be simple, and emphasize benefits like early registration, accelerated graduation options through transfer, work-credit, and GPA forgiveness policies.

Discussion

Nontraditional students have unique considerations for effective recruitment strategies. Admissions personnel cannot use the same tactics as for traditional students due to differences in socialization, maturity, and motivation (Birdsong et al., 2022). Research supports different prospective student groups have different priorities and should be approached uniquely (Story, 2021). Effective marketing requires studying and segmenting all students, addressing traditional and nontraditional students differently if advantageous.

Tailored recruitment strategies for nontraditional students should include flexible admissions and academic policies that account for their diverse backgrounds and experiences. Simplifying PLA processes and enhancing credit recognition are crucial. Marketing messages should resonate with nontraditional students, highlighting motivations such as career advancement and personal achievement, success stories, and accessible support services.

Potential Institutional Barriers

While the proposed recruitment strategies are promising, institutions may face several barriers in implementing them. Faculty resistance to change is a significant challenge, as faculty may be hesitant to adapt their teaching methods to accommodate nontraditional students. Additionally, funding limitations can hinder the development and implementation of new programs and support services tailored to nontraditional students (St. Amour, 2020). Institutions must address these barriers by fostering a culture of inclusivity and securing necessary resources to support these initiatives (Ross-Gordon, 2003). Engaging faculty in professional development opportunities and demonstrating the benefits of these strategies for both students and the institution can help mitigate resistance (Bystydzienski et al., 2017). Furthermore, seeking external funding sources, such as grants or industry partnerships, can provide financial support to implement these changes.

Conclusion

Attracting nontraditional students requires flexible policies, targeted messaging, and dedicated services. Future research should focus on longitudinal studies tracking recruitment and policy outcomes and analyzing successful institutions' results. By prioritizing these areas, universities can better attract and recruit nontraditional students, fostering a more resilient educational landscape.

References

Bellare, Y., Smith, A., Cochran, K., & Lopez, S. G. (2023). Motivations and barriers for adult learner achievement: Recommendations for institutions of higher education. *Adult Learning, 34*(1), 30-39. https://doi.org/10.1177/10451595211059574

Bergman, M. (2019). Advanced placement for adults: Using PLA to complement a relevant, rigorous, and research-based adult degree completion program. *The Journal of Continuing Higher Education, 67*(2-3), 123-128. https://doi.org/10.1080/07377363.2019.1663100

Birdsong, M., Morse, W., Steury, T., & Smith, M. (2022). Socialization and motivational pathways among different groups of non-traditional hunters in Alabama reveal unique recruitment and retention opportunities. *Human Dimensions of Wildlife, 27*(5), 407-421. https://doi.org/10.1080/10871209.2021.1954266

Bowers, A., & Bergman, M. (2016). Affordability and the return on investment of college completion: Unique challenges and opportunities for adult learners. *The Journal of Continuing Higher Education, 64*(3), 144-151. https://doi.org/10.1080/07377363.2016.1229102

Broek, S., van der Linden, J., Kuijpers, M. A. C. T., & Semeijn, J. H. (2023). What makes adults choose to learn: Factors that stimulate or prevent adults from learning. *Journal of Adult and Continuing Education, 29*(2), 620-642. http://doi.org/10.1177/14779714231169684

Bussey, K., Dancy, K., Parker, A. G., Peters, E. E., and Voight, M. (2021). *Realizing the mission of higher education through equitable admissions policies.* Institute for Higher Education Policy. https://www.ihep.org/wp-content/uploads/2021/06/IHEP_JOYCE_full_report_final_web_614.pdf

Bystydzienski, J., Thomas, N., Howe, S., & Desai, A. (2017). The leadership role of college deans and department chairs in academic culture change. *Studies in Higher Education, 42*(12), 2301-2315. http://doi.org/10.1080/03075079.2016.1152464

Campbell, J. D., & Narduzzi, J. L. (2015). The more things change: Reflections on the state of marketing in continuing higher education. In D. W. Shannon, & R. Wiltenburg (Eds.), *Centennial conversations: Essential essays in professional, continuing, and online education* (pp. 309-317). University Professional and Continuing Education Association.

Chapman, C. E. (1959). Some characteristics of adult part-time students. *Adult Education, 10*(1), 27-41. https://doi.org/10.1177/074171365901000105

Chen, J. C. (2017). Nontraditional adult learners: The neglected diversity in postsecondary education. *SAGE Open, 7*(1). http://doi.org/10.1177/2158244017697161

Choy, S. (2002). Findings from the condition of education 2002: Nontraditional undergraduates. *National Center for Education Statistics*. https://nces.ed.gov/pubs2002/2002012.pdf

EAB. (2019). *Is your college designed for post-traditional learners?* [Whitepaper]. https://attachment.eab.com/wp-content/uploads/2019/07/Post-Traditional-Learners-white-paper.pdf

EAB. (2021). *How to compete in the degree completion market* [Research report]. https://eab.com/resources/research-report/compete-degree-completion-market/

Gill, A. J. G. (2021). Difficulties and support in the transition to higher education for non-traditional students. *Research in Post-Compulsory Education, 26*(4), 410-441. https://doi.org/10.1080/13596748.2021.1980661

Hanover Research. (2018). *Strategies for attracting and supporting non-traditional students* [Research report]. https://highland.edu/wp-content/uploads/2018/12/Strategies-for-Attracting-and-Supporting-Non-Traditional-Students-1.pdf

Horn, L. J., & Carroll, C. D. (1996). *Nontraditional undergraduate: Trends in enrollment from 1986 to 1992 and persistence and attainment among 1989-90 beginning postsecondary students*. National Center for Education Statistics. https://nces.ed.gov/pubs/97578.pdf

Ingram, K. L., Cope, J. G., Harju, B. L., & Wuensch, K. L. (2000). Applying to graduate school: A test of the theory of planned behavior. *Journal of Social Behavior & Personality, 15*(2), 215-225.

Irwin, V., Wang, K., Tezil, T., Zhang, J., Filbey, A., Jung, J., Mann, F. B., Dilig, R., & Parker, S. (2023). *Report on the condition of education 2023*. Institute of Education Sciences. https://nces.ed.gov/pubs2023/2023144rev.pdf

Knowles, M. S. (1968). Andragogy, not pedagogy. *Adult Leadership, 16*(10), 350-352, 386. https://archive.org/details/sim_adult-leadership_1968-04_16_10/page/n3/mode/2up

Lindsey, J., & West, A. (2022, March 2). Finding and recruiting adult learners. *EAB*. https://eab.com/resources/blog/adult-education-blog/finding-and-recruiting-adult-learners/

MacDonald, K. (2018). A review of the literature: The needs of nontraditional students in postsecondary education. *Strategic Enrollment Management Quarterly, 5*(4), 159-164. https://doi.org/10.1002/sem3.20115

Meyers, D., Berling, V., & Corcoran, K. J. (2012). Creating a new future: Recruiting and retaining nontraditional students. *Creating Tomorrow's Future Today (2011 CUMU Annual Conference Issue, Indianapolis, IN), 23*(1), 41-58. https://journals.iupui.edu/index.php/muj/article/view/20503/20101

Muduli, A., & Trivedi, J. J. (2020). Social media recruitment: The role of credibility and satisfaction. *Evidence-Based HRM, 8*(2), 237-251. http://doi.org/10.1108/EBHRM-08-2019-0069

National Adult Learner Coalition. (2017). *Strengthening America's economy by expanding educational opportunities for working adults.* https://onlinelearningconsortium.org/wp-content/uploads/2017/02/Strengthening-Americas-Economy-National-Adult-Learning-Coalition-White-Paper-Final.pdf

Pappano, L. (2021). *For adults returning to college, "free" tuition isn't enough.* The Hechinger Report. https://hechingerreport.org/for-adults-returning-to-college-free-tuition-isnt-enough/

Postsecondary National Policy Institute. (2023). *Post-traditional students in higher education* [Factsheet]. https://pnpi.org/wp-content/uploads/2023/03/PostTraditional_FactSheet_Mar2023.pdf

Prescott, A., & Simpson, E. (2004). Effective student motivation commences with resolving 'dissatisfiers'. *Journal of Further and Higher Education, 28*(3), 247-259. https://doi.org/10.1080/0309877042000241733

Ross-Gordon, J. M. (2003). Adult learners in the classroom. *New Directions for Student Services, 2003*(102), 43-52. https://doi.org/10.1002/ss.88

Schatzel, K., Callahan, T., Scott, C. J., & Davis, T. (2011). Reaching the non-traditional stopout population: A segmentation approach. *Journal of Marketing for Higher Education, 21*(1), 47-60. https://doi.org/10.1080/08841241.2011.569590

Schroeder, R. (2021). *A second demographic cliff adds to urgency for change*. Inside Higher Ed. https://www.insidehighered.com/digital-learning/blogs/online-trending-now/second-demographic-cliff-adds-urgency-change

Schulte, M. (2015). Stopout, swirl, double-dip, and dropout: Attempting to understand student enrollment patterns. *The Journal of Continuing Higher Education, 63*(2), 133-135. https://doi.org/10.1080/07377363.2015.1043001

Sevier, R. A., & Morehouse, B. L. (n.d.). *14 ways to reinvigorate your adult student recruiting strategies* [Whitepaper]. Stamats. https://www.stamats.com/wp-content/uploads/2019/09/Stamats_Recruiting_Adult_Strategies.pdf

Simpson Scarborough. (2022). *National prospective student survey: 2022 Wave V*. https://insights.simpsonscarborough.com/hubfs/2022%20NPSS%20Report%20-%20SimpsonScarborough.pdf

St. Amour, M. (2020). *As times and student change, can faculty change, too?* Inside Higher Ed. https://www.insidehighered.com/news/2020/04/03/faculty-face-uphill-battle-adapting-needs-todays-students

Stamats. (2019). *On all fronts: How high-performing schools recruit non-traditional students* [Primer]. https://www.stamats.com/wp-content/uploads/2019/09/Stamats_On_All_Fronts_eBook.pdf

Story, J. (2021). Unique challenges of segmentation and differentiation for higher education. *Journal of Marketing for Higher Ed, 33*(1), 20-39. https://doi.org/10.1080/08841241.2021.1874589

Strukel, D., White, L., & Alhabash, S. (2023). The good, the bad, the ugly: Predictors of positive and negative experiences of traditional and nontraditional graduate students. *Journal of Adult and Continuing Education, 29*(2), 464-484. http://doi.org/10.1177/14779714231151836

United States Census Bureau. (2022. February 24). *Census Bureau releases new educational attainment data* [Press release]. https://www.census.gov/newsroom/press-releases/2022/educational-attainment.html

Zack, L. (2020). Non-traditional students at public regional universities: A case study. *Teacher-Scholar: The Journal of the State Comprehensive University, 9*(1), Article 1. http://doi.org/10.58809/FXDX3287

Emotional Impact: Using Emotionally Resonant Videos to Optimize Virtual Reality Safety Training

Richard Hannah[1],

[1]*National Center for Construction Education and Research (NCCER)*
& Houston Christian University

Abstract: The purpose of this research was to investigate the effects of emotionally resonant videos on transfer of learning for adult learners who take virtual reality (VR) computer-based training (CBT) courses. The intent of this research was to determine if emotion could be used to optimize VR exercises used to support the energy industry. The experimental groups were exposed to CBTs augmented with VR exercises and work-relevant videos designed to arouse an emotional response or CBTs with VR exercises alone. The control group took the same CBT course without VR or videos. A quantitative analysis was performed on data collected from a follow-up quiz delivered three days after completing the course(s). Data from the follow-up quiz and course exams were analyzed to determine if there was greater knowledge retention and, therefore, increased potential for transfer of learning among the experimental groups than the control group. The results found a non-statistically significant relationship between the groups and provided insight into how experience and expertise play a part in memory schema development.

Keywords: virtual reality, safety, industry, emotion, computer-based training

Despite improvements in safety and health training for the energy industry, key safety indicators have remained level since 2015. In 2020, total recordable cases for the construction industry, a number that represents injuries per 100 full-time workers, reached a total recordable incidence rate (TRIR) of 2.5 (BLS, 2022a). Although a TRIR of 2.5 is lower than the national average, this number includes 1,034 fatalities, an overall increase from previous years. OSHA mandates that contractors who support the energy industry receive initial and annual refresher training on hazardous work scopes like confined spaces (OSHA, 2015). Most of this training is delivered through computer-based training (CBT). The strengths of CBTs are that they (a) scale easily to large populations, (b) provide consistency across the workforce, and (c) enable quick tracking and reporting of compliance. An additional advantage comes from integrating VR exercises into existing CBTs. Safety training using VR simulations has two main strengths: it allows learners to practice high-risk procedures in a safe, simulated, and realistic environment. Secondly, it can make complex and complicated training more accessible through practice and iteration. A study of petrochemical plants that included both VR and non-VR training showed that workers who completed training in a VR environment had more effective transfer of learning compared to those who did not (Colombo et al., 2014).

Literature Review

Ross-Gordon et al. (2017) identify two defining characteristics of adult learners this study utilized: (a) the wealth of experiences that adults bring allows them to connect new knowledge to

past experiences, and (b) a strong desire for learning to be applicable to real-life situations, emphasizing relevance. Brown (2014) explains that lasting memories are formed through (a) learners transferring knowledge from short-term to long-term memory and (b) reinforcement or multiple cueing techniques. These memories, essential for learners when applying knowledge in a context different from the training environment, are the essence of learning transfer.

Research has demonstrated the significant role prior experience has in memory formation (Bellana et al., 2021; Brod & Shing, 2022; Chen et al., 2018; Coleman et al., 2020; Dong et al., 2020; van Kesteren et al., 2018). Knowles (1970) points out that adults possess a larger reservoir of experiences, which aids them in shaping their learning. Additionally, Knowles et al. (2012) describe experience as one of three primary dimensions distinguishing individual learners. They highlight that adults benefit from crystallized intelligence—a blend of accumulated experience and education—which serves as a valuable asset in learning new concepts.

Tyng et al. (2017) examined the effect of emotions on memory, noting that engaging learners' emotions can enhance the encoding of emotional information in long-term memory. Brosch et al. (2013) further discovered that emotions not only affect learners' levels of attention and perception during the learning process but also create an emotionally impactful experience that fosters more concentrated memory formation.

Numerous studies demonstrate not only the effectiveness of simulation training but also VR's capacity to enhance the likelihood of learning transfer. Learning transfer refers to learners' ability to apply training-acquired knowledge in new settings (Haskell, 2004; Steiner, 2001). Research suggests that VR simulations within a safety training framework can facilitate this transfer. With advancements in VR technology making it more accessible, research on VR has increasingly explored how virtual simulations can be fine-tuned or optimized by enhancing presence, immersion, and embodiment (Jensen & Konradsen, 2018; Marín-Morales et al., 2020). Studies have also examined ways to enhance VR's effectiveness through multisensory cues, such as unique scents or tactile feedback (Cooper et al., 2021; Herz, 2021; Rinalducci, 1996).

Research Design

The research question that guided this investigation was whether there are differences between learner recall for participants who completed CBTs and recall for participants who completed the same training that included VR and emotionally resonant videos. This study followed an experimental research design using quantitative data analysis with an independent variable. The sample for this study included energy industry contractors who visited a safety council to take a confined space awareness course. Participants in the control group took the CBT course. Participants in the experimental groups took the same CBT course with VR exercises, or the CBT with VR exercises and emotionally resonant videos.

As learners registered for confined space training at a non-profit safety council in the Southern United States, the council's learning management system (LMS) randomly assigned them to one of the three groups. All groups received training to meet OSHA compliance standards. Three days after course completion, participants received a follow-up recall quiz via short-messaging service (SMS) to measure recall and potential learning transfer. The three-day delay aligns with

established research on VR knowledge retention (Bréchet et al., 2019; Kamińska et al., 2020; Karpicke & Roediger, 2008).

Data collection did not begin until the study was approved by the executive leadership team of the safety council and the Kansas State University (KSU) Institutional Review Board (IRB). There were no financial or other interests other than academic interests in collecting the participant's data or in the analysis and write-up of the results. Study participants, regardless of condition, took the courses at the safety council using one of the standard computer terminals used by the council and were always proctored during the delivery.

All the assets for this study were developed by the safety council learning development team and delivered with the safety council customer service and proctoring teams. The CBTs were developed using Articulate Storyline course development software and featured: (a) drag-and-drop interactions, (b) quizzes, (c) branching scenarios, (d) sound effects, (e) multiple narrators, (f) 26-unscored, in-course knowledge check questions with remediation for incorrect answers, and a (g) 25-question course final exam. Participants in the VR groups completed four distinct exercises, each lasting approximately five minutes. Participants took the VR exercises at the same workstation as the CBT course without changing positions. The VR exercises included: (a) audio narration, (b) four, timed exercises, and (c) a virtual space designed to simulate a jobsite. Seated modality, as opposed to room-scale, was used to best fit established safety council procedures. The emotionally resonant videos were developed by the safety council instructional designers and included: (a) a four-minute video story that reviewed an accident that occurred in an industrial setting, (b) publicly available news video clips of the victim's friends and family members' reactions to the accident, and (c) a discussion by a trainer of the importance of the training. The video footage utilized for this video was deliberately selected to inspire a sense of empathy for the learner by including testimonials from friends, relatives, and officials involved in the accident or who knew the victim. The video was shown within the VR headset immediately after the VR exercises. All participants were sent a follow-up quiz three days after the course completion. This quiz consisted of five multiple-choice questions designed to judge the study participant's knowledge retention of the learning objectives.

Results

During the study period, the safety council had 42,372 visitors for training across all sites and online. Of those, 1,131 were registered for one of the three groups and 634 consented to be a part of the study. Of these participants 181 completed the recall quiz. The results from these participants are shown in Table 1. To address the research question, this study tested the following null hypothesis: *there is no difference in knowledge retention between contractors who completed confined space training with VR and emotionally resonant videos, with VR alone, or without VR and emotionally resonant videos*. With regard to the research question, this study found that there was no statistically significant difference in knowledge retention for participants who completed courses with VR and emotionally resonant videos or participants who completed confined spaces courses with only VR, $F(2,178) = 1.77$, $p = .173$, $\eta^2 = 0.020$.

Although this study found no statistically significant difference in recall quiz scores among the three groups, mean scores on the recall quiz suggested that participants in the experimental

groups tended to retain more information. While course exam means were roughly equal across all groups, recall quiz means indicated a slight increase favoring the experimental groups, suggesting a potential trend favoring VR and emotionally resonant content, as shown in Table **1**

Means of Recall Quiz and Course Exam Excluding Youngest Participants

Group	n	Recall Quiz Score	
		M	SD
CS	50	70.40	21.47
CS-VR	60	76.67	18.83
CS-VR-V	71	76.90	21.02

Table 2. This suggests that the tools used in the experimental groups might provide a slight, though not statistically significant, benefit to participants' recall over time. Additionally, when the least experienced participants, with less than five years of experience, were not included in the analysis ($n = 85$), there was a statistically significant result $F(2,93) = 3.10$, $p = .050$, $\eta^2 = 0.063$.

Table 1

Means of Recall Quiz and Course Exam Excluding Youngest Participants

Group	n	Recall Quiz Score	
		M	SD
CS	50	70.40	21.47
CS-VR	60	76.67	18.83
CS-VR-V	71	76.90	21.02

Table 2

Means of Recall Quiz and Course Exam Excluding Youngest Participants

Measure	CS		CS-VR		CS-VR-V		$F(2,93)$	η^2
	M	SD	M	SD	M	SD		
Recall Quiz	71.88	20.23	78.52	20.70	83.78	18.76	3.102	0.063
Course Exam	92.38	6.91	93.33	6.08	93.95	6.16	0.520	0.011

Discussion

While the experimental groups did not produce statistically significant results, they did display higher mean recall scores than the control group. Although the null hypothesis—asserting no difference in knowledge retention across training formats—was not rejected, the experimental group's marginally higher recall scores suggest a potential trend favoring using these learning tools. Removing the least experienced participants from the analysis revealed a statistically significant relationship, indicating that learner experience influences learner's processing of VR exercises and emotionally resonant videos. This study posits that less experienced learners may encounter higher cognitive load, hindering learning transfer.

According to Knowles et al. (2012), crystallized intelligence and experience support learning,

aligning with cognitive constructivist theory, which holds that adults link new information to prior knowledge (Ross-Gordon et al., 2017; Taylor et al., 2000). Such integration enables learners to develop complex schemas (Sweller et al., 1998; Sweller et al., 2019). Cognitive load theory, emphasized in multimedia instructional design (Fisher et al., 2019; Mayer, 2020; Sweller et al., 1998, 2019; Um et al., 2012) and VR simulations (Albus et al., 2021; Breves & Stein, 2023; Makransky & Petersen, 2021), suggests that VR can overwhelm mental resources (Bailey et al., 2012; Fisher et al., 2019; Parong & Mayer, 2018) due to the Limited Capacity Model of Motivated Mediated Message Processing (LC4MP). The LC4MP holds that learners must selectively focus when presented with excessive information (Ahn et al., 2022; Fisher et al., 2019). Sweller et al. (1998) suggest that more experienced learners draw on complex schemas, conserving working memory resources. Consequently, less experienced learners may expend more cognitive resources to grasp new procedures, terms, and processes, as all three cognitive load aspects interrelate (Sweller et al., 2019).

This study suggests that VR as a tool for curriculum delivery especially when optimized with video and emotion can provide more effective learning transfer. These findings suggest that personalizing safety training through emotional engagement offers some benefits but may not be viable as a standalone approach, and may overwhelm younger, less experienced workers.

VR has shown potential to enhance learning through: (a) increased engagement and retention, (b) safe exposure to hazardous situations, and (c) improved visualization of complex procedures. A qualitative study might reveal whether emotionally resonant videos resonated with participants, as the CBT with VR and video course yielded nearly 10% more quiz responses than the VR-only course. This qualitative insight could further explain how emotional engagement motivates learners to engage with study tools and how younger, less experienced workers process information.

References

Bailey, J., Bailenson, J. N., Won, A. S., Flora, J., & Armel, K. C. (2012). Presence and memory: Immersive virtual reality effects on cued recall. *Proceedings of the International Society for Presence Research Annual Conference.* October 24-26, Philadelphia, Pennsylvania, USA. Retrieved from https://vhil.stanford.edu/pubs/2012/presence-and-memory-immersive-virtual-reality-effects-on-cued-recall/

Bellana, B., Mansour, R., Ladyka-Wojcik, N., Grady, C. L., & Moscovitch, M. (2021). The influence of prior knowledge on the formation of detailed and durable memories. *Journal of Memory and Language*, *121*(104264), 104264. https://doi.org/10.1016/j.jml.2021.104264

Bertram, J., Moskaliuk, J., & Cress, U. (2015). Virtual training: Making reality work? *Computers in Human Behavior, 43*, 284–292. https://doi.org/10.1016/j.chb.2014.10.032

Bréchet, L., Mange, R., Herbelin, B., Theillaud, Q., Gauthier, B., Serino, A., & Blanke, O. (2019). First-person view of one's body in immersive virtual reality: Influence on episodic memory. *PloS One, 14*(3), e0197763

Breves, P., & Stein, J.-P. (2023). Cognitive load in immersive media settings: the role of spatial presence and cybersickness. *Virtual Reality*, *27*(2), 1077–1089. https://doi.org/10.1007/s10055-022-00697-5

Brod, G., & Shing, Y. L. (2022). Are there age-related differences in the effects of prior knowledge on learning? Insights gained from the memory congruency effect. *Mind, Brain and Education: The Official Journal of the International Mind, Brain, and Education Society*, *16*(2), 89–98. https://doi.org/10.1111/mbe.12320

Brosch, T., Scherer, K., Grandjean, D., & Sander, D. (2013). The impact of emotion on perception, attention, memory, and decision-making. *Swiss Medical Weekly 143*(1920). https://doi.org/10.4414/smw.2013.13786

Brown, P. C. (2014). *Make it stick: The science of successful learning*. Belknap Press.

Colombo, S., Nazir, S., & Manca, D. (2014). Immersive virtual reality for training and decision making: Preliminary results of experiments performed with a plant simulator. *SPE Economics & Management, 6*(04), 165–172.

https://doi.org/10.2118/164993-PA

Coleman, B. M., Bunch, J. C., Thoren, A. C., & Roberts, T. G. (2020). Examining the effects of reflection type and abstraction order on content knowledge and content knowledge retention during experiential learning. *Journal of Agricultural Education*, *61*(3). https://doi.org/10.5032/jae.2020.03308

Cooper, N., Millela, F., Cant, I., White, M. D., & Meyer, G. (2021). Transfer of training: Virtual reality training with augmented multisensory cues improves user experience during training and task performance in the real world. *PloS One*, *16*(3), e0248225. https://doi.org/10.1371/journal.pone.0248225

Chen, H., Ning, X., Wang, L., & Yang, J. (2018). Acquiring new factual information: Effect of prior knowledge. *Frontiers in Psychology*, *9*, 1734. https://doi.org/10.3389/fpsyg.2018.01734

Dong, A., Jong, M. S.-Y., & King, R. B. (2020). How does prior knowledge influence learning engagement? The mediating roles of cognitive load and help-seeking. *Frontiers in Psychology*, *11*, 591203. https://doi.org/10.3389/fpsyg.2020.591203

Fisher, J. T., Hopp, F. R., & Weber, R. (2019). Modality-specific effects of perceptual load in multimedia processing. *Media and Communication, 7*(4), 149–165. https://doi.org/10.17645/mac.v7i4.2388

Haskell, R. E. (2004). Transfer of learning. In C. D. Spielberger (Ed.), *Encyclopedia of Applied Psychology*. 575–586. Elsevier.

Herz, R. (2021). Olfactory virtual reality: A new frontier in the treatment and prevention of posttraumatic stress disorder. *Brain Sciences, 11*(8), 1070. https://doi.org/10.3390/brainsci11081070

Jensen, L., & Konradsen, F. (2018). A review of the use of virtual reality head-mounted displays in education and training. *Education and Information Technologies, 23*(4), 1515–1529. https://doi.org/10.1007/s10639-017-9676-0

Kamińska, D., Zwoliński, G., Wiak, S., Petkovska, L., Cvetkovski, G., Barba, P. D., Mognaschi, M. E., Haamer, R. E., & Anbarjafari, G. (2020). Virtual reality-based training: Case study in mechatronics. *Technology, Knowledge and Learning*. https://doi.org/10.1007/s10758-020-09469-z

Karpicke, J. D., & Roediger, H. L., 3rd. (2008). The critical importance of retrieval for learning. *Science, 319*(5865), 966–968. https://doi.org/10.1126/science.1152408

Knowles, M. S. (1970). *The modern practice of adult education: From pedagogy to andragogy*. Association Press.

Knowles, M., Swanson, R., & Holton, E. (2012). *The adult learner* (7th ed.). Routledge.

Makransky, G., & Petersen, G. B. (2021). The cognitive affective model of immersive learning (CAMIL): A theoretical research-based model of learning in immersive virtual reality. *Educational Psychology Review, 33*(3), 937–958. https://doi.org/10.1007/s10648-020-09586-2

Marín-Morales, J., Llinares, C., Guixeres, J., & Alcañiz, M. (2020). Emotion recognition in immersive virtual reality: From statistics to affective computing. *Sensors, 20*(18), 5163.

Mayer, R. E. (2020). *Multimedia learning* (3rd ed.). Cambridge University Press.

Moskaliuk, J., Bertram, J., & Cress, U. (2013). Training in virtual environments: Putting theory into practice. *Ergonomics, 56*(2), 195–204. https://doi-org.er.lib.k-state.edu/10.1080/00140139.2012.745623

Occupational Safety and Health Administration [OSHA]. (2015). *Training Requirements in OSHA Standards*. OSHA.Gov. Retrieved July 9, 2022, from https://www.osha.gov/sites/default/files/publications/osha2254.pdf

Pantelidis, V. S. (2009). Reasons to use virtual reality in education and training courses and a model to determine when to use virtual reality. *Themes in Science and Technology Education, 2*(1-2), 59–70. http://files.eric.ed.gov/fulltext/EJ1131313.pdf

Parong, J., & Mayer, R. E. (2018). Learning science in immersive virtual reality. *Journal of Educational Psychology, 110*(6), 785–797. http://dx.doi.org.er.lib.k-state.edu/10.1037/edu0000241

Rinalducci, E. J. (1996). Characteristics of visual fidelity in the virtual environment. *Presence*, *5*(3), 330–345. https://doi.org/10.1162/pres.1996.5.3.330

Ross-Gordon, J. M., Rose, A. D., & Kasworm, C. E. (2017). *Foundations of adult and continuing education* (1st ed.). John Wiley & Sons.

Steiner, G. (2001). Transfer of learning, cognitive psychology of. In N. J. Smelser & P. B. Baltes (Eds.), *International Encyclopedia of the Social & Behavioral Sciences*. 15845–15851. https://doi.org/10.1016/B0-08-043076-7/01481-9

Sweller, J., van Merrienboer, J.J.G. & Paas, F.G.W.C. (1998). Cognitive architecture and instructional design. *Educational Psychology Review* 10, 251–296. https://doi.org/10.1023/A:1022193728205

Sweller, J., van Merriënboer, J. J. G., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. *Educational Psychology Review*, *31*(2), 261–292. https://doi.org/10.1007/s10648-019-09465-5

Taylor, K., Marienau, C., & Fiddler, M. (2000). *Developing adult learners: Strategies for teachers and trainers*.

Jossey-Bass.

Tyng, C. M., Amin, H. U., Saad, M. N. M., & Malik, A. S. (2017). The influences of emotion on learning and memory. *Frontiers in Psychology, 8*, 1454.

Um, E., Plass, J. L., Hayward, E. O., & Homer, B. D. (2012). Emotional design in multimedia learning. *Journal of Educational Psychology, 104*, 485–498.

U.S. Department of Labor, Bureau of Labor Statistics [BLS]. (2022a). *Employer-reported workplace injuries and illnesses*. Retrieved July 9, 2022, https://www.bls.gov/web/osh/summ1_00.htm

van Kesteren, M. T. R., Krabbendam, L., & Meeter, M. (2018). Integrating educational knowledge: reactivation of prior knowledge during educational learning enhances memory integration. *NPJ Science of Learning*, *3*(1), 11. https://doi.org/10.1038/s41539-018-0027-8

Exploring the Role of ChatGPT in English Learning among Adult Learners

Yankun He; Kenan Xiao
Auburn University

Abstract: ChatGPT is revolutionizing education by offering innovative learning methodologies and expanding accessibility to language learning. Existing studies stated that exposure to language-rich environments can help learners study a new language. ChatGPT can potentially increase language learning outcomes and performances by providing real-time dialogues and feedback. This proceeding used self-directed learning theory to explore how ChatGPT supports self-directed learning behaviors among adult English learners. The results showed that ChatGPT supports self-directed learning by managing the learning process and getting personalized practice and feedback. These benefits increase autonomy and motivation in English study.

AI-powered chatbots like ChatGPT possess some features that simplify and enhance the process of learning a second language; for example, these artificial intelligence tools allow learner to set their personalized study goals and practices, receive instant feedback, and provide rich second language acquisition contexts (Kuhnke et al., 2023). Research indicates that AI technologies can increase motivation and engagement in diverse educational contexts (Huang et al., 2023). Despite ChatGPT having attracted considerable attention and discussion in the field of education, there is a gap in understanding its impact on English learning for adult learners. This proceeding explores how adult learners use ChatGPT as a tool for English learning and its role in facilitating self-directed learning behaviors through quantitative research methodology.

As a pilot study, we collected 30 survey responses through Amazon Mechanical Turk (AMT) to explore preliminary motivation, planning, self-monitoring, and resource utilization. We adapted items from the Self-Directed Learning Instrument, which was developed by Cheng et al. (2010). Participants were asked to score their English learning experiences with ChatGPT. This survey response provided initial insights into how adult learners use ChatGPT as a tool to support their self-directed learning. The findings of this proceeding show that ChatGPT plays an important role in goal-setting, increasing motivation, and self-monitoring.

Literature Review

ChatGPT (Chat Generative Pre-trained Transformer) is a generative AI chatbot that can produce human-like text based on the input or prompts it receives and has a profound impact on the education area (OpenAI, 2023). ChatGPT has functions in both practice use and creative application for learning and the workplace (Cordie et al., 2024; Radford et al., 2023). For example, ChatGPT can brainstorm ideas, provide tutoring for various subjects, draft emails, write program code, and even serve as a psychology counselor to help users manage their negative emotions.

Existing research studies examine ChatGPT has a positive influence on the study outcomes (He & Cordie, 2024). For example, ChatGPT has been successfully implemented as a virtual mentor where it can manage questions and inquiries about various subjects at anywhere through the Internet (Kasneci et al., 2023). ChatGPT is also very helpful for students working independently or participating in online learning, as they might not have a chance to access an instructor immediately (McFadden, 2023). Also, assistance by ChatGPT may moderate the feeling of anxiety in students who are working on their assignments, especially for those who may struggle with the contents or are embarrassed to ask for help (Sullivan et al., 2023). Moreover, ChatGPT can explain complex concepts by using plain language, which provides educational support and helps students understand knowledge (Fuchs, 2023).

In the field of language learning, ChatGPT has the potential to increase learning outcomes. Engaging in active dialogue practice and being immersed in a language-rich environment are key factors in developing communication skills and language proficiency. AI chatbots can provide linguistic input and real-time conversation with learners (Huang et al., 2022). Kuhnke et al. (2023) stated that ChatGPT can facilitate language learning by simulating real-life communication and providing students with opportunities to refine their work. Also, ChatGPT is available to support learners 24/7. Students can use it anywhere to study a second language, which a human instructor cannot do. Besides, AI-powered chatbots can provide extra information and language knowledge, like a broad range of expression and vocabulary, surpassing what humans can provide (Huang et al., 2022). Additionally, ChatGPT can provide feedback on language study. For instance, learners can use ChatGPT to provide suggestions for their writing and check for grammatical mistakes (Kumar, 2023). In this way, ChatGPT, as a learning partner, may have the potential to help learners study a second language.

Self-directed learning (SDL) theory is an important theory concept in the field of adult education, introduced by Malcolm Knowles (1975). Language learning for adult learners often occurs outside the formal classroom, making self-directed learning an essential approach (Merriam, 2001). SDL theory stresses the responsibility in managing their own learning process. Through SDL, learners take the initiative to identify their language learning needs, set personal goals, and evaluate their progress. In this situation, understanding how SDL influences language learning can offer valuable insights into optimizing tools like ChatGPT for adult learners. This proceeding adapted Self-Directed Learning Instruments (Cheng, 2010) to measure self-directed learning behaviors.

Methodology

This proceeding employed quantitative research methodology to explore how adult learners use ChatGPT for self-directed English learning. We used self-directed learning theory as the theoretical framework. We adopt the Self-Directed Learning Instrument (SDLI) development by Cheng et al. (2010) to assess motivation, planning, self-monitoring, and resource utilization (Items see Appendix). Data were collected through Amazon Mechanical Turk, with 30 participants finishing the survey. The SDLI has demonstrated strong internal consistency with a Cronbach's alpha of 0.916 in the original study. The survey consisted of Likert-scare items, and participants rated their agreement with statements on a scale from 1 (Strongly Disagree) to 7

(Strongly Agree). The collected data were analyzed using descriptive analysis through SPSS 26.0. The demographic information is presented in Table 1.

Table 1
Demographic information

Variable	Category	Frequency (n)	Percentage (%)
Age	18-25	8	26.7%
	26-35	11	36.6%
	36-45	8	26.7%
	Above 46	3	10.0%
Gender	Male	7	23.3%
	Female	23	76.7%
Proficiency Level	Beginner	9	30%
	Intermediate	19	63.3%
	Advanced	2	6.7%

Findings

The findings from this pilot study showed participants had a high level of engagement in self-directed learning behaviors. The majority of participants agreed that ChatGPT helped them set clear goals for improving their English, with a mean score of 5.8 (SD = 0.9) on a 7-point scale. Participants reported that ChatGPT supported them in monitoring their progress, with a mean score of 6.0 (SD = 0.7). 75% of participants (n = 22) reported that ChatGPT motivated them to learn English consistently, with a mean score of 6.1 (SD = 0.8). 80% of participants (n = 24) rated ChatGPT as highly effective in helping them improve their vocabulary and grammar, with a mean score of 6.2 (SD = 0.8).

Discussion

The results of this pilot study highlight that ChatGPT is a useful tool to support self-directed English learning among adult learners. Participants showed a high level of engagement in self-directed learning behaviors. The results of this pilot study highlight that ChatGPT is a useful tool to support self-directed English learning among adult learners. Participants showed a high level of engagement in self-directed learning behaviors. Specifically, they reported that ChatGPT helped them set study goals, which aligns with the emphasis on learner autonomy in self-directed learning theory (Cheng et al., 2010). Furthermore, participants noted that ChatGPT supported them in monitoring their progress and evaluating their learning, reinforcing findings from McFadden (2023), who observed that ChatGPT is especially beneficial for independent learners in online environments. Additionally, 75% of participants agreed that ChatGPT increased their motivation to study English. This supports prior research by Huang et al. (2023), which indicated that AI-enabled tools can significantly enhance learner motivation and engagement. The interactive nature of ChatGPT likely contributes to this increased motivation by making the learning process more engaging. Lastly, 80% of participants reported improvements in vocabulary and grammar. This is consistent with Kumar (2023) and Kohnke et al. (2023), who emphasized ChatGPT's ability to provide grammar feedback and simulate

language-rich contexts, which are essential for language acquisition. Students may use ChatGPT to imitate different English dialogue situations to increase their vocabulary. They can also let ChatGPT help them check and figure out grammar mistakes in their writing.

Further Study

While the findings are promising, this study was a pilot with a limited sample size and there is potential for further exploration. Future studies will add more items to measure each variable comprehensively. For instance, additional items will be developed for variables such as goal setting, progress monitoring, motivation, and resource utilization. Expanding the number of items for each variable will improve the precision of measurement and allow for more reliable data collection. Future studies will employ Confirmatory Factor Analysis (CFA) and Exploratory Factor Analysis (EFA) to evaluate the instrument's internal consistency, factor structure, and validity. Also, more extensive and more diverse samples will be recruited to increase the generalizability of the findings.

NOTE

This proceeding was reviewed and refined with the assistance of OpenAI's GPT-4o and Grammarly, complementing the human editorial process.

References

Cheng, S. F., Kuo, C. L., Lin, K. C., & Lee-Hsieh, J. (2010). Development and preliminary testing of a self-rating instrument to measure self-directed learning ability of nursing students. *International journal of nursing studies*, 47(9), 1152-1158. https://doi.org/10.1016/j.ijnurstu.2010.02.002

Cordie, L., Zhang, Y., He, Y., & Conely, L. (2024). Artificial intelligence and workforce development: Navigating the future. In *Generative AI in higher education: A handbook for educational leaders* (pp. 23–39). Center for Teaching and Curriculum Development, Universiti Kebangsaan Malaysia.

Fuchs, K. (2023). Exploring the opportunities and challenges of NLP models in higher education: Is ChatGPT a blessing or a curse? *Frontiers in Education, 8*, 1166682. https://doi.org/10.3389/feduc.2023.1166682

He, Y., & Cordie, L. (2024). The influence of ChatGPT on student learning outcomes in higher education: A meta-analysis of the initial empirical literature. In *ChatGPT and global higher education* (pp. 47–62). STAR Scholars Press.

Huang, W., Hew, K. F., & Fryer, L. K. (2022). Chatbots for language learning—Are they really useful? A systematic review of chatbot-supported language learning. *Journal of Computer Assisted Learning, 38*(1), 237-257.

Huang, A. Y., Lu, O. H., & Yang, S. J. (2023). Effects of artificial Intelligence–Enabled personalized recommendations on learners' learning engagement, motivation, and outcomes in a flipped classroom. *Computers & Education, 194*, 104684. https://doi.org/10.1016/j.compedu.2022.104684

Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences, 103*, 102274. https://doi.org/10.1016/j.lindif.2023.102274

Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for language teaching and learning. *RELC Journal, 54*(2), 537–550. https://doi.org/10.1177/00336882231162458

Kumar, A. H. (2023). Analysis of ChatGPT tool to assess the potential of its utility for academic writing in biomedical domain. *Biology, Engineering, Medicine and Science Reports, 9*(1), 24–30. https://doi.org/10.5530/bems.9.1.5

Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New directions for adult and continuing education, 2001*(89), 3.

McFadden, C. (2023). *ChatGPT: 30 incredible ways to use the AI-powered chatbot.* Retrieved February 1, 2023

from https://interestingengineering.com/lists/chatgpt-30-incredible-way-to-use

OpenAI. (2023). *ChatGPT*. http://openai.com/chatgpt

Radford, A., Wu, J., Child, R., Luan, D., Amodei, D., & Sutskever, I. (2019). Language models are unsupervised multitask learners. *OpenAI blog*, 1(8), 9.

Sullivan, M., Kelly, A., & McLaughlan, P. (2023). ChatGPT in higher education: Considerations for academic integrity and student learning. *Journal of Applied Learning and Teaching, 6*(1), 1-10. https://doi.org/10.37074/jalt.2023.6.1.17

Appendix

Adapted Self-Directed Learning Instruction Items:
1. ChatGPT encourages me to take responsibility for improving my English skills.
2. I feel motivated to learn English when I use ChatGPT.
3. I use ChatGPT to set specific learning objectives for my English studies.
4. ChatGPT helps me identify areas where I need to improve my English skills.
5. I use ChatGPT as a resource to clarify my doubts about English grammar or vocabulary.

Exploring the Challenge of Emotional Labor for Women Higher Education Leaders During the COVID-19 Pandemic

Cassandra A. Heath and Laura B. Holyoke
University of Idaho

Abstract: The COVID-19 pandemic led to heightened exhaustion, stress, and turnover among women leaders in higher education. In this qualitative study, we explored how senior women leaders in higher education institutions described their engagement in emotional labor in response to their institutions' approach to operating during the pandemic. We found that women leaders faced multiple crises, felt trapped in their positions, and experienced cognitive dissonance between responsibilities and role performance. They hid emotions and engaged in surface acting, increasing emotional exhaustion. The findings highlight the need for more supportive institutional structures to alleviate the emotional labor required during crises, particularly for women leaders in higher education.

Keywords: Emotional Labor, Crisis Leadership, Higher Education, Women Leaders

On March 11, 2020, the World Health Organization declared a global pandemic for an outbreak of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which causes the coronavirus disease (COVID-19). In response, U.S. higher education institutional leaders swiftly enacted policies and procedures that kept students, staff, and faculty safe while maintaining a modicum of basic operations. Few researchers have examined emotional labor among women who are leaders in higher education, especially during crises. We designed this qualitative study to explore how (if at all) women senior leaders in higher education institutions engaged in emotional labor in response to their institutions' approach to operating during the COVID-19 pandemic (hereafter referred to as "the pandemic"). Understanding how women in senior leadership positions, such as senior directors, deans, vice presidents, and presidents, engaged in emotional labor during the pandemic may identify factors supporting their well-being early in the COVID-19 pandemic.

Literature Review

The higher education industry has a reputation for its demanding nature, emotionally and physically, of employees (Ellis, 2021). Leading at a higher education institution has never been more stressful due to budget constraints, declining enrollments, and frequent crises, such as the pandemic, natural disasters, and school violence (Ellis, 2021; Kingston, 2023). Despite underrepresentation in higher education leadership positions (Kelderman, 2023), women leaders often work harder to secure and retain leadership positions while receiving lower compensation than their male counterparts (Fuesting et al., 2022). While emotional labor and crisis management/leadership have been extensively studied, there is a gap in research on the emotional labor required of higher education leaders during a crisis. This research gap highlights the need for further investigation into women leaders' emotional labor demands in this sector.

We used Hochschild's (1983) sociology of emotional labor theory in this study. Hochschild equated emotional labor to the regulation of emotions to meet job requirements. Emotional labor includes two ways employees manage their emotions: surface and deep acting (Hochschild, 1983). Surface acting is a form of impression management wherein employees modify their expressions to conform to the expected display rules despite their feelings (Fein & Isaacson, 2009; Hochschild, 1989; Zapf, 2002). In surface acting, employees suppress their emotions because they do not feel it is safe or appropriate to show how they feel. Deep acting means employees permanently adapt or change their emotions with an institution's expectations and values (Fein & Isaacson, 2009; Zapf, 2002).

Surface acting takes a more significant toll on people than deep acting because it creates a disparity between their true feelings and expected behavior (Zapf et al., 2021). Any emotional labor impacts individuals' well-being, but surface acting takes the most significant toll. Surface acting requires employees to adopt a persona while suppressing their genuine emotions, negatively affecting their well-being and performance (Zapf et al., 2021). Surface acting increases emotional exhaustion and decreases job satisfaction (Noreen et al., 2021). Emotional depletion or exhaustion can harm leaders and their institutional loyalty as they become disappointed with their organization (Mitchell, 2024).

Methodology

Using a generic qualitative study design (Campbell et al., 2011), we explored how women leaders in 5 higher education institutions described their engagement in emotional labor in response to their institutions' approach to operating during the pandemic. A generic design provides researchers with a "sense of flexibility" to utilize characteristics of qualitative designs while not being bound to a particular one (Ellis & Hart, p. 1761). This flexibility allows the participants' experiences to be better understood "as it infuses the narratives with broad descriptions" that are not constrained by a research design philosophy (Ellis & Hart, 2023, p. 1762).

Three research questions guided our study: (1) How did women leaders in higher education contend with their emotions during the COVID-19 pandemic, (2) How do women leaders interpret their institution's behavioral expectations of them during a crisis, and (3) How do women leaders describe their engagement with emotional labor during the COVID-19 pandemic. We designed a semi-structured interview protocol with open-ended questions highlighting the leaders' stories and conducted a reflexive thematic analysis to analyze the data.

Participants

We selected participants for this study using convenience sampling utilizing the lead author's personal and professional connections (Patton, 2015). The sample included seven women leaders from five different public and private R-2 and R-3 four-year higher education institutions on the U.S. West Coast who served in their leadership roles throughout 2020. We reached saturation during the fifth and sixth interviews, noting that participants' experiences no longer contained new information (Guest et al., 2020). We did not proceed with the seventh interview.

Findings

We aimed to explore and understand how women senior leaders in higher education institutions engaged in emotional labor in response to their institution's approach to operating during the pandemic from February 2020 through August 2021. The analysis process illuminated the participants' understanding of their institution's display rules during a crisis and how their engagement in emotional labor increased as their responsibility levels grew and became more complex. The participants struggled with managing their emotional labor around added responsibilities and impractical institutional decisions. We discerned four themes during analysis: (1) crises come in multiples, (2) positive emotions only, (3) compounding crises drive the desire to leave, and (4) a seismic shift in self-care is needed.

Crises Come in Multiples

The pandemic catalyzed other institutional issues, such as plummeting enrollment, financial concerns, and misalignment with outside consultants. Participants needed to quickly adapt to extra roles and responsibilities that "unfolded very secretively," adding to their emotional labor. These new assignments came simultaneously with an upheaval of households as people transitioned to working from home, helped school-age children switch to online learning, and dealt with congested internet connections. Additionally, participants grappled with changes in their social lives and everyday tasks that became fraught with complexity, seemingly with "zero recognition" from their institutions. Leaders identified that warning signs from each crisis that occurred in their lives were visible before the pandemic, but lack of awareness caused each crisis to worsen. Leaders felt they would have been better prepared to handle these dormant issues if they had been aware of them.

Positive Emotions Only

As the pandemic progressed, participants engaged increasingly in surface acting by suppressing or masking emotions to carry out their role. The participants no longer shared their real feelings as their institutions continued to expect heightened sustained effort to survive the pandemic. Marjorie felt that she did not have space to process her emotions. She shared,

> I was just trying to do my job. The emotions were not in it. It did not matter. It did not matter. How I felt about something did not matter. How all the people felt about what was happening did not matter. So, I knew I would not matter.

Participants perceived that their organizations required them to display positive emotions while suppressing negative ones, leading to increased emotional exhaustion.

Compounding Crises Drove Desire to Leave

The participants began searching for alternative strategies to handle the accumulating stress and find a way to reconcile how they felt about their institution's "tone-deaf" emotional expectations. Despite recognizing a "kind of fracturing" across their institutions, mounting pressures, and expectations, participants inferred they could not take a break or leave their positions, although they continually contemplated it. The participants acknowledged their dilemma, wanting to disengage from their roles completely yet feeling loyal to the students, the state of the economy, and higher education.

Seismic Shift in Self-Care Needed

As responsibilities across all areas of life increased, participants realized they were neglecting self-care, which served as a conduit for increased feelings of anxiety and depression. The participants developed a sense of urgency to change stress management strategies, recognizing that healthy coping meant significant lifestyle changes and increased exercise. Some found different outlets for social connection, while others incorporated mindfulness into their daily practices. Radically changing strategies helped the participants better manage their emotions, which helped them adhere to the institution's display rules.

Discussion

We aimed to fill a gap in the scholarship by examining how women leaders engaged in emotional labor in response to the crisis or crises their institutions experienced during the pandemic. Throughout the study, we continually refined themes into actions that current and future female leaders could take. In the discussion, we present refined themes and considerations for potential actions.

Be Aware of What Lies Dormant

As dormant crises sparked and ignited, immediate needs and long-term operational obligations collided, leaving leaders under-resourced and frustrated. This singular crisis evolved into polycrises for each institution. Polycrisis is a phenomenon that occurs when multiple singular crises co-occur, causing the impact of the crises to be more significant than just a singular crisis (Siirilä & Salonen, 2024). Participants became overwhelmed by these polycrises, assumed more duties, experienced further labor, and received less support, creating a domino effect. The participants experienced low job satisfaction, sharing that their institution cared more about the job than the person. Participants no longer felt motivated by the benefits and flexibilities they once enjoyed, as they were continually asked to give more with little in return (Ellis, 2021). While resource issues in higher education have persisted, the pandemic expedited leaders' evaluation of their willingness to continue to give to their under-resourced institutions that did not support them in return (Lederman, 2022). Higher education institutions cannot continue without adequately supporting their leaders and employees.

Accepting What You Feel

Participants engaged in both deep acting and surface acting early in the pandemic. However, as the gap grew between their values and institutional expectations, participants increased surface acting and reported decreased satisfaction and disengagement in their roles. Surface acting depletes mental resources, leading to higher burnout and lower job satisfaction (Cheung & Lun, 2015). Emotional labor, especially surface acting, may negatively affect well-being (Hochschild, 1983; Zapf, 2021), create harmful effects on a person's well-being (Cheung & Lun, 2015), and lead to psychological tension between what a person feels and what they feel is appropriate to display (Yang & Chen, 2021). As their workloads increased, participants' ability to regulate became impaired. Excessive emotional and physical workloads affect a leader's coping ability and may exacerbate emotional exhaustion (Gönül & Senyuva, 2023).

Why Do You Stay in Prison When the Door is Wide Open?
Seemingly, these leaders chose to stay, unable to see a way out or a path for growth, often parallelling their deteriorating health, burnout, and emotional exhaustion. Vial and Cowgill (2022) found that emotional labor's "psychological toll" diminishes well-being and is emotionally draining for leaders. Emotional exhaustion and depersonalization define burnout (Maslach & Leiter, 2016). Our participants described exhaustion or burnout due to immense emotional labor and added duties—increased surface-acting correlated with higher rates of burnout (Grandey et al., 2012).

Know Thyself and Adjust Accordingly
The participants changed their coping strategies to maintain their well-being because they depleted their resources, and their institution failed to contribute enough support. Healthy coping includes meditation, mindfulness, exercising, or spirituality, which can help bring meaning to life (Surtee et al., 2015). Emotional stability is crucial for successful leadership, especially when experiencing a work crisis (Fernandez & Shaw, 2020). Managing emotional well-being can help prepare leaders to function in a crisis. Strategies such as boundaries with work engagement, mindfulness, spiritual practices, and maintaining a good diet and exercise can help leaders to balance the psychological toll of emotional labor (Cheung & Lun, 2015; Surtee et al., 2015).

Conclusion

As the pandemic fades and other crises commence, it is imperative for institutions to examine leadership culture and create policies and structures that allow and encourage leaders to thrive. Healthy institutional expectations could help build morale and decrease the need for surface-acting (Zapf et al., 2021). Institutions need to be mindful of the burden already placed on leaders and should proactively address areas like budget or morale so that leaders can better manage through crisis (James & Wooten, 2022). Institutions need to resource their women leaders appropriately so they do not withdraw in times of high stress (Yang & Chen, 2021). This research contributes essential information to the emotional labor literature on leaders' exposure to prolonged and multiple crises. Future research on emotional labor during crises in higher education should explore emotional labor strategies and how institutions can adapt more realistic display rules.

References

Campbell, K., Orr, E., Durepos, P., Nguyen, L., Li, L., Whitmore, C., Gehrke, P., Graham, L., & Jack, S. (2021). Reflexive thematic analysis for applied qualitative health research. *Qualitative Report, 26*(6), 2011–2028. https://doi.org/10.46743/2160-3715/2021.5010

Cheung, F., & Lun, V. M.-C. (2015). Emotional labor and occupational well-being: A latent profile analytic approach. *Journal of Individual Differences, 36*(1), 30–37. https://doi.org/10.1027/1614-0001/a000152

Ellis, J., & Hart, D. (2023). Strengthening the choice for a generic qualitative research design. *Qualitative Report, 28*(6), 1759–1768. https://doi.org/10.46743/2160-3715/2023.5474

Ellis, L. (2021). The great disillusionment: College workers are burning out just when they'll be needed most. *The Chronicle of Higher Education*.https://www.chronicle.com/article/the-great-disillusionment

Fein, A. H., & Isaacson, N. S. (2009). Echoes of Columbine. *American Behavioral Scientist, 52*(9), 1327–1346. https://doi.org/10.1177/0002764209332549

Fernandez, A. A., & Shaw, G. P. (2020). Academic leadership in a time of crisis: The Coronavirus and COVID-19. *Journal of Leadership Studies, 14*(1), 39–45. https://doi.org/10.1002/jls.21684

Fuesting, M., Bichsel, J., & Schmidt, A. (2022). Women in the leadership pipeline in higher education have better

representation and pay in institutions with female presidents and provosts. *College and University Professional Association for Human Resources*. https://www.cupahr.org/surveys/research-briefs/women-executives-in-higher-ed/

Grandey, A., Foo, S. C., Groth, M., & Goodwin, R. E. (2012). Free to be you and me: A climate of authenticity alleviates burnout from emotional labor. *Journal of Occupational Health Psychology, 17*(1), 1–14. https://doi.org/10.1037/a0025102

Gönül, Ö. Ö., & Şenyuva, Z. (2023). Negative emotions at work. In H. C. Sozen & H. N. Basim (Eds.), *The dark side of organizational behavior: Examining undesirable aspects of organizational life* (1st ed., pp. 4–31). Routledge. https://doi.org/10.4324/9781003292401-2

Hochschild, A. R. (1983). *Exploring the managed heart*. University of California Press.

Holmes, A. G. D. (2020). Researcher positionality—A consideration of its influence and Place in qualitative research—a new researcher guide. *Shanlax International Journal of Education, 8*(4), 1–10.

James, E. H., & Wooten, L. P. (2022). *The prepared leader: Emerge from any crisis more resilient than before*. Wharton School Press.

Siirilä, J., &. Salonen, A.O., (2024). Towards a sustainable future in the age of polycrisis. Frontiers in Sustainability (Lausanne), 5. https://doi.org/10.3389/frsus.2024.1436740

Kelderman, E. (2023). 'Sexism, even misogyny': 3 female leaders explain why higher ed's glass ceiling hasn't cracked. *The Chronicle of Higher Education*. https://www.chronicle.com/article/sexism-even-misogyny-3-female-leaders-explain-why-higher-eds-glass-ceiling-hasnt-cracked

Kingston, R. (2023). Presidents don't talk about their panic attacks. *The Chronicle of Higher Education*. https://www.chronicle.com/article/presidents-dont-talk-about-their-panicattacks

Lederman, D. (2022). Turnover, burnout and demoralization in higher ed. *Inside Higher Education*. https://www.insidehighered.com/news/2022/05/04/turnover-burnout-and-demoralization-higher-ed

Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry, 15*(2), 103–111. https://doi.org/10.1002%2Fwps.203

Mitchell, H. (2024). Responding to disappointment and betrayal at work. *Journal of Spiritual Formation and Soul Care, 17*(1). https://doi.org/10.1177/19397909241259957

Noreen, S., Nisar, Q. A., Haider, S., & Yean, T. F. (2021). Role of leaders' emotional labor toward leader's job satisfaction and emotional exhaustion: Moderating role of psychological capital. *Gadjah Mada International Journal of Business, 23*(1), 36–54. https://doi.org/10.22146/gamaijb.53996

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Sage.

Surtee, S., Mayer, C.-H., Barnard, A., & Mayer, C.-H. (2015). Women leaders in higher education: A psycho-spiritual perspective. *South African Journal of Psychology, 45*(1), 102–115. https://doi.org/10.1177/0081246314548869

Vial, A. C., & Cowgill, C. M. (2022). Heavier lies her crown: Gendered patterns of leader emotional labor and their downstream effects. *Frontiers in Psychology, 13*, Article 849566. https://doi.org/10.3389/fpsyg.2022.849566

Yang, C., & Chen, A. (2021). Emotional labor: A comprehensive literature review. *Human Systems Management, 40*, 479–501. https://doi.org/ 10.3233/HSM-200937

Zapf, D. (2002). Emotional labor and psychological well-being: A review of the literature and some conceptual considerations. *Human Resource Management Review, 12*(2), 237-268. https://doi.org/10.1016/s1053-4822(02)00048-7

Zapf, D., Kern, M., Tschan, F., Holman, D., & Semmer, N. K. (2021). Emotional labor: A work psychology perspective. *Annual Review of Organizational Psychology and Organizational Behavior, 8*(1), 1–34. https://doi.org/10.1146/annurev-orgpsych-0124200624

A Descriptive Content Analysis of 32 Unpublished Doctoral Student Dissertations from 1995 to 2019 that Incorporated John Henschke's 1989 Instructional Perspectives Inventory Instrument in the Research Design

Susan Isenberg[1] and Somanita Kheang[2]
[1]Lindenwood University retired
[2]Ball State University

Abstract: The purpose of this study was to analyze 32 dissertations that used the Modified Instructional Perspective Inventory (MIPI) by John Henschke (1989) for tendencies and new meanings. Three tendencies resulted: (a) the MIPI tends to improve any learning environment, (b) the MIPI tends to be an accelerant for change toward improving any learning environment, and (c) Henschke tends to model what he is teaching. Three new meanings resulted: (a) the MIPI is a checklist of Knowles's andragogy essential factors for improving any adult learning environment, (b) the MIPI is predictive, and (c) congruency between words and actions is essential among adult educators. A new trajectory for adult learning is using the MIPI to improve learning in any global environment.

Keywords: Modified Instructional Perspective Inventory, self-assessment, andragogy, adult learning principles, congruency

Our long-standing practitioner's concern is that the potential for andragogy, the art and science of helping adults learn (Knowles, 1980, p. 43), is not being realized at a time of unprecedented acceleration of change requiring an accelerated need for lifelong adult learning (Friedman, 2016). Hoggan and Hoggan-Kloubert (2023) remind us that "helping people change is precisely the role of education" (p. 363). Bouchirika (2024) argued that "incorporating the andragogy framework may serve as a hedge for the future of society as we know it" (andragogy in the unpredictable future section, para. 9). But education, science, and academic research practice must also be rich in principles (Hutchins, 2012 as cited in Rosen, 1985). "And . . . andragogy in the tradition of Knowles is rich in it" (Hutchins, 2012, as cited in Bouchirika, 2024). However, andragogy seems to live in higher education graduate degree programs and is largely unknown to the public. In sum, Knowles' model of andragogy, with its richness in principles, may be a resource to address the increasing need for accelerated learning around the world, but it lacks "the stickiness factor" (Gladwell, 2002 p. 25) that makes it memorable.

Recently, a phenomenon of interest emerged: 32 doctoral students used in their research design Henschke's (1989) assessment instrument titled the Instructional Perspective Inventory (IPI), later the Modified Instructional Perspective Inventory (MIPI), in their completed unpublished doctoral dissertations from 1995 to 2020, for the purpose of helping learners assess themselves or others as adult educators with the "beliefs, feelings, and behaviors adult educators need to possess" (Henschke, 1989, p. 81). The purpose of this study was to analyze the content of those 32 dissertations that used the MIPI for tendencies and new meanings to perhaps advance the field of adult education. The research question was: How do the tendencies and new meanings that resulted from analysis of the 32 doctoral dissertations that used the MIPI add knowledge to the

field of andragogy?

Background

John Henschke's 2021 book, *Facilitating Adult and Organizational Learning Through Andragogy: A History, Philosophy, and Major Themes*, is an interpretive inquiry research study of the "more than 500" (p. xix) English language publications on andragogy from 1967 to 2020 "to help in applying adult learning principles" (p. xviii). Within the first two decades of those more than 50 years of analyzing the andragogy literature, Henschke (1989, 2021) created the IPI, then the MIPI, that were based on his same research findings from reviewing those 500 publications and his practitioner experiences he used to write the book.

Instrument

The MIPI is a 35-year-old Likert scale assessment of the seven factors based on Knowles' model of andragogy that has three components: First, the six assumptions are that adult learners (a) need to know a reason to learn, (b) are increasingly self-directed, (c) find that experiences are rich resources for learning, (d) develop readiness to learn from life tasks, (e) need immediate application of learning, and (f) are internally motivated to learn (Knowles, 1990). Second, the eight process elements of adult learning include (a) prepare the learner, (b) establish a climate conductive to learning, (c) involve the learner in mutual planning, (d) involve learner in diagnosing own learning needs, (e) involve the learner in forming own learning objectives, (f) involve the learner in designing a learning plan, (g) jointly develop learning activities, and (h) involve learner in evaluation of learning outcomes (Knowles, 1995). Third, there must be "congruence between Knowles' andragogy model and practice" (Henschke, 2017, p. 605). Newman (2007) said that "Knowles had contributed something to adult education and andragogy that was quite unique . . . by providing a means to assess the needs of adult learners" (personal communication).

The seven factors assessed with the MIPI are the following: (a) teacher empathy with learners, (b) teacher trust of learners, (c) planning and delivery of instruction, (d) accommodating learner uniqueness, (e) teacher insensitivity toward learners (pedagogical), (f) experience-based learning techniques (learner-centered process), and (g) teacher-centered learning process (pedagogical). Some are about ways to think (factors 1, 2, 5), and some are about what to do (factors 3, 4, 6, 7); 45 statements are related to the seven factors, and the five response choices are almost never, not often, sometimes, usually, and almost always. Results categories are high above average, above average, average, below average, and low below average. Factors 5 and 7 are the opposite of andragogical: They are pedagogical to force those taking the MIPI to read each item before marking the answer.

Assumptions
There were five underlying assumptions in this study: (a) the MIPI is a valid and reliable instrument (Moehl, 2011; Stanton, 2005; Vatcharasirisook, 2011); (b) "the central and strongest major core of this instrument was originally and is still the second factor 'teacher trust of learners'" (Henschke, 2021, p. 34); (c) the MIPI is the only one of its kind (Young et al., 2019); (d) the andragogy teachings of Knowles (1980)—"the six assumptions and eight processes of

andragogy (Knowles, 1990, 1995) . . . exemplified congruence/consistency between [Knowles] andragogy model and practice" (Henschke, 2017, p. 605) are all foundational to the MIPI's seven factors even though congruency between the adult educator's model and practice is not one of the seven MIPI factors; and (e) the instrument is copyrighted but has not been made public.

Methodology

Descriptive content analysis seemed to be the methodology that could best answer the research question. "Descriptive content analysis refers to the analysis of previous studies or the collective interpretation of their findings in order to obtain tendencies in a specific field" (Calik & Sozbilir, 2014, in Dinçer, 2018, p. 181). And, because the 32 dissertations were a mix of research designs, this methodology allowed both quantitative and qualitative data to be used (Dinçer, 2018). Analysis was conducted using descriptive statistics, mainly frequencies and percentages, and qualitative coding methods.

Results

Analysis of the dissertation content was unremarkable except for the results. All the results were positive, positive, and negative. As an example of a positive result, Ryan (2009) used the MIPI on students in foreign language classrooms at a community college. As students perceived an increased use of andragogical principles by the classroom instructor as determined by the MIPI results, satisfaction with learning increased. As an example of a positive and negative result, Stricker (2006) used the MIPI with K–12 teachers and principals during staff development where the principals were the instructors. Principals scored themselves higher than the teachers scored them. Stricker planned changes to the principal degree program to include adult learning and explained that principals have a "significant pedagogical background" (p. 217).

Because there was only one notable result, a qualitative analysis was conducted on 24 of the dissertation acknowledgments—only those written by students who had Henschke as chair (16) or committee members (8). We simply counted the number of words students used to acknowledge Henschke and then used axial coding method to find the number of alignments between words used to acknowledge Henschke and words that described the seven MIPI factors. The results revealed that those doctoral students whom Henschke chaired not only used more words to acknowledge him but, more importantly, used the largest number of words that aligned with the seven MIPI factors. Examples are Stanton (2005), "His [Henschke] modeling of the principles that are the foundation of adult education provided the example that supported me during the rough times" (Factor 1 - Empathy), and Risley (2012): "Without your trust, this study would not have been possible" (Factor 2 - Trust). The most frequent MIPI factor found by far in the acknowledgments of those students he chaired was Factor 2, teacher trust of learners. In other words, Henschke again demonstrated congruency between his scholarship and practice found initially by Risley (2012), and again, Factor 2 (teacher trust learners) was the most frequent factor found (Henschke, 2021, p. 34).

Findings

Three tendencies emerged from the analysis. First, MIPI use tends to improve any learning

environment. When the outcomes were positive, things were "better off" than before the MIPI (Fraenkel et al., 2012, p. 50). The beliefs, feelings, and behaviors already in existence were reinforced. Kheang (2018) demonstrated "better off" from a different perspective. She used the MIPI with international undergraduate students to look at the results through those three different lenses (beliefs, feelings, and behaviors) to improve the learning environment. When the outcomes were negative and positive, things were still better off. Improvement in the learning environment was planned or explained, as in Stricker (2006). Second, the MIPI tends to be an accelerant for change toward improving any adult learning environment, even one that has not heard of adult learning principles or andragogy; therefore, its use can be thought of as the tip of the andragogy spear, a fast way into organizations including higher education. The voluntary MIPI creates a pull toward adult learning, not a push as can happen in involuntary professional development. Third, Henschke tends to model what he is teaching.

There were three new meanings derived from the analysis. First, the MIPI could be considered a checklist of essential factors for improving any adult learning environment. A low score on any one of the factors could jeopardize the learning environment. Examples of essential checklists in the literature are surgeon Gawande's (2009) pre-surgery checklist of "'the killer items' . . . that are most dangerous to skip" (p. 123), such as confirming with the patient before anesthesia their name, birth date, medication allergies, and surgery; and South Africa's Governance Assessment instrument used to rid South Africa of Apartheid that assessed for nine "critical" elements that when scored indicate an alignment with either authoritarian governance or participative governance (McLagan & Nels, 1995, p. 28). Any of the nine element scores in the authoritarian column would have jeopardized the success of ridding South Africa of Apartheid. The second new meaning is the MIPI is predictive. The number of positive outcomes over 25 years of use provides confidence that this pattern will continue. The third new meaning is that congruency between words and actions is essential among adult educators. In summary, the three new meanings are as follows: the MIPI is an andragogy essentials checklist; the MIPI is predictive; and congruency between words and actions is essential among adult educators.

Discussion

Based on the findings, we have two recommendations: The first is to add an eighth essential factor to the 7-factor MIPI, one that assesses for congruency between words and actions. Imagine a 3-legged stool as representative of Knowles' andragogy model: the first leg is his six assumptions of the adult learner; the second leg is his eight process elements essential for helping adults learn; and the third leg is congruency between Knowles's andragogy model and practice. Without the congruency third leg, the stool falls (the learning environment is jeopardized). Currently, congruency or lack of congruency between model and practice is revealed only when the MIPI is used by instructors to assess themselves while at the same time used by the learners to assess the same instructors. A mismatch is seen in the Stricker (2006) example. The second recommendation is to change the name of the instrument to the Henschke-Knowles Instructional Perspective Inventory for the purpose of crediting the creators of the process and content and changing the overstory (Gladwell, 2024) to make it more memorable, like the Myers-Briggs Type Indicator. The MIPI is to andragogy as the Myers-Briggs Type Indicator is to psychology.

Answering the research question of how tendencies and new meanings contribute to the field of adult education—specifically, andragogy—the MIPI serves to enhance learning environments and act as a catalyst for change. The analogies of the MIPI as a critical checklist and tip of the spear take the complex field of andragogy and transform it into everyday images that are easy to understand and may get andragogy access to places or people who have never heard of it, as did the 32 doctoral students who took the MIPI into places that had never heard of it. If MIPI goes online, we recommend it be voluntary, with self-scoring that leads users to not only results but also interpretations and expert feedback resources to help users make wanted changes.

Conclusion

Just as Newman (personal communication, 2007) declared that Knowles had contributed something to adult education and andragogy that was quite unique, "a means to assess the needs of adult learners" based on Knowles' model, we say that John Henschke (1989) also contributed something memorable to adult education and andragogy that, too, is quite unique—a means to assess adult educators for adult learning principles based on Knowles' model, a tool that improves any learning environment in a fast and predictable way. Based on our long-standing practitioner's concern that the potential for andragogy is not being realized at a time of fast change requiring fast learning, the time seems right to promote fast improvement in any learning environment with the MIPI program (the instrument along with the option for expert follow up) in the community and in the world.

Authors' Note

Dr. John Henschke attended the conference session to answer questions as the instrument's author, but he did not participate in the analysis nor the write up of it to avoid conflict of interest.

References

Bouchrika, I. (2024). *The andragogy approach: Knowles' adult learning theory principles in 2024*. Research.com. https://research.com/education/the-andragogy-approach

Dinçer, S. (2018). Content analysis in scientific research: Meta-analysis, meta-synthesis, and descriptive content analysis. *Bartin University Journal of Faculty of Education, 7*(1), 176–190. https://doi.org/10.14686/buefad.363159

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2015). *How to design and evaluate research in education* (9th ed.). McGraw-Hill.

Friedman, T. L. (2016). *Thank you for being late: An optimist's guide to thriving in the age of accelerations*. Farrar, Straus, & Giroux.

Gawande, A. (2009). *The checklist manifesto: How to get things right*. Metropolitan Books.

Gladwell, M. (2002). *The tipping point*: How little things can make a big difference. Back Bay Books.

_____ (2024). *Revenge of the tipping point: Overstories, superspreaders, and the rise of social engineering*. Little, Brown, and Company.

Henschke, J. A. (1989). Identifying appropriate adult educator practices: Beliefs, feelings, and behaviors. *Proceedings of the Midwest Research-to-Practice Conference in Adult, Continuing and Community Education*, USA, 81–87. https://www.umsl.edu/~henschkej/articles/ResearchtoPractice1989Info.pdf

_____ (2017). The essence of Malcolm Knowles's teachings of andragogy. In A. B. Knox, S. C. O. Conceicao, & L. G. Martin (Eds.), *Mapping the field of adult & continuing education: An international compendium* (Volume 4: Inquiry and Influences, pp. 605-606). Stylus Publishing.

_____ (2021). *Facilitating adult and organizational learning through andragogy: A history, philosophy, and major themes*. IGI Global.

Hoggan, C., & Hoggan-Kloubert, T. (2023). The ethics of radical and transformative education. *Adult Education*

Quarterly, *73*(4), 363–381. https://doi.org/10.1177/07417136231187840

Kheang, S. (2018). *Guidelines for U.S. teacher leaders in adult classrooms to enhance international undergraduate satisfaction* (Publication No. 10809700) [Doctoral dissertation, Lindenwood University]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/guidelines-u-s-teacher-leaders-adult-classrooms/docview/2036959023/se-2

Knowles, M. S. (1980). *The modern practice of adult education*: *From pedagogy to andragogy* (Rev. ed). Cambridge.

_____ (1990). *The adult learner: A neglected species* (2nd ed.). Gulf.

_____ (1995). *Designs for adult learning.* American Society for Training and Development.

McLagan, P., & Nels, C. (1995). *The age of participation: New governance for the workplace and the world.* Barrett-Koehler Publishers.

Moehl, P. (2011, July). *Exploring the relationship between Myers-Briggs type and instructional perspectives among college faculty across academic disciplines* (Publication No. 3466530) [Doctoral dissertation, University of Missouri-St. Louis]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/exploring-relationship-between-myers-briggs-type/docview/885228745/se-2

Risley, L. (2012). *Exploring congruency between John A. Henschke's practice and scholarship* (Publication No. 3545191) [Doctoral dissertation, Lindenwood University]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/exploring-congruency-between-john-henschkes/docview/1238015881/se-2

Rosen, R. (1985). *Anticipatory systems: Philosophical, mathematical, and methodological foundations.* Pergamon Press.

Ryan, L. (2009). *Adult learning satisfaction and instructional perspective in the foreign language classroom* (Publication No. 3393635.) [Doctoral dissertation, University of Missouri-St. Louis] ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/adult-learning-satisfaction-instructional/docview/305086104/se-2

Stanton, C. (2005). *A construct validity assessment of the Instructional Perspectives Inventory* (Publication No. 3173438) [Doctoral dissertation, University of Missouri-St. Louis]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/construct-validity-assessment-instructional/docview/305369157/se-2

Stricker, A. (2006). *Learning leadership: An investigation of principals' attitudes toward teachers in creating the conditions conducive for learning in school-based staff development* (Publication No. 3224947) [Doctoral dissertation, University of Missouri-St. Louis]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/learning-leadership-investigation-principals/docview/304959883/se-2

Vatcharasirisook, V. (2011). *Organizational learning and employee retention: A focused study examining the role of relationships between supervisors and subordinates* (Publication No. 3460075) [Doctoral dissertation, University of Missouri-St. Louis]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/organizational-learning-employee-retention/docview/876019592/se-2

Young, B. W., Rathwell, S., & Callary, B. (2019). Testing a coaching assessment tool derived from adult education in adult sport. *Psychology of Sport & Exercise, 47,* 101632. https://doi.org/10.1016/j.psychsport.2019.101632

Cohort vs Non-Cohort Programs: Online Doctoral Student Trajectories

Elise Kokenge, Ben Quintana, Cassandra A. Heath, Laura B. Holyoke, and Kyle Znamenak
University of Idaho

Abstract: This conceptual study investigated website descriptions of cohort and non-cohort designs of 14 online doctoral programs in education or leadership to address retention challenges amid increased enrollments. Guided by Self-Directed Learning Theory and researcher reflexivity, we evaluated variables related to program design, cost, and curriculum. The analysis revealed wide variability in how programs described design elements and identified an inverse relationship between curriculum flexibility and costs. The findings suggest that fluid and open cohort models balance structure and opportunities for self-directed learning. Clear, accessible program design on institutional websites is essential and a visual tool could align student expectations with design, improving retention. This research informs online doctoral program success and communication strategies.

Keywords: self-directed learning theory, education, retention, recruitment

Enrollment in online doctoral programs has increased at a steady rate in the United States and doubled after the COVID-19 pandemic (National Center of Educational Statistics, 2023). Previous studies have indicated that the national attrition average for doctoral students ranges between 30 and 70% (Jones, 2013). Online programs vary greatly in modalities but neglect to report timely and accurate completion rates. With increased enrollments for doctoral programs, it is critical for programs to align student needs with program design and learning outcomes to improve retention and completion rates. The objective of this conceptual paper was to examine: (a) the use of the word "cohort" on websites for online doctoral programs at peer institutions, (b) the structure of expectations listed for prospective students, and (c) the impact program structures have on cost and self-directed learning opportunities.

Background

The common interpretation of the term *cohort* in academic contexts refers to a learning environment where students advance through a set course sequence as a cohesive group (Lively et al., 2016). However, the application of the term cohort in academic programming varies, ranging from vague usage (Gurbutt et al., 2020) to differences in group size and course sequencing (Lively et al.). As researchers, we adopted Basom et al.'s (1995) fluid, open, and closed cohort definitions for this conceptual paper. Fluid cohorts foster shared experiences and collaboration among students with staggered start and graduation times. In open cohorts, students start together and share core courses before personalizing their paths. Closed cohorts are highly structured, with students advancing together. Each model shaped student interactions and the learning environment in distinct ways.

Cohort-style programs first appeared in educational leadership curricula in the 1950s (Barnett et al., 2000). They have since gained prominence in leadership preparation programs due to the

connection between improved persistence and academic achievement (Barnett et al., 2000; Lively et al., 2016). Further, cohorts have been shown to foster belonging, community, shared purpose and increased academic rigor (Lively et al.).

Self-directed learning theory (SDL) is a robust adult learning concept in which students assume personal responsibility for planning, managing, and evaluating their progress toward self-identified learning objectives (Garrison, 1997; Loeng, 2020). SDL is recognized as essential for online learning success (Song & Hill, 2007), with higher levels of SDL correlated with greater academic achievement (Doo & Zhu, 2023). Song and Hill's conceptual model for understanding self-directed learning in online environments incorporated several key elements: persistent decision factors for online adult learners (Rovai, 2002), self-directed learning (Brookfield, 1985; Garrison, 1997), and the learning environment (Candy, 1991). These elements influence how learners navigate resources and the type and quality of faculty and peer interactions at the course level. We adapted Song and Hill's course-focused model to examine the influence of program design on student satisfaction in online doctoral programs, comparing cohort and non-cohort designs.

Previous research indicated the crucial role of community building in retention for both cohort and non-cohort models in doctoral education (Lively et al., 2016). Identity formation for doctoral students in education sciences proposed a dynamic process that combined professional and scholarly identities. Professional identity encompassed specialized skills and knowledge used in the profession. In contrast, scholarly identity refers to an individual's "felt or recognized association with communities doing scholarship pertaining to an academic discipline" (Choi et al., 2021, p. 91). The refinement of a doctoral student's identity within a program was influenced by peer and mentor interactions, ongoing training and familiarity with research, and scaffolded learning experiences that supported their development as emerging scholars (Coffman et al., 2016; Ducheny et al., 1997). Supportive peer interactions were found to contribute to students' scholarly development and support throughout the program. Doctoral students in education science programs developed their scholarly identities by integrating pre-existing personal identities (e.g., K-12 educator, parent) with their experiences in academic communities, where program designs, relationships with peers and faculty, and broader disciplinary interactions shaped their evolving notions of what it means to be a scholar (Choi et al., 2021).

Approach

Our conceptual research approach involved extensive researcher reflexivity (Patton, 2015). The research team included two faculty mentors, two doctoral candidates, and one second-year doctoral student across Idaho, California, and Ohio in an online fluid cohort doctoral program through the University of Idaho. Our professional roles included working with online non-thesis master's students in natural resources, serving as a registrar for a private institution of higher education, and an adjunct instructor for closed cohort Master of Business Administration programs. We acknowledged that our positionalities significantly influenced our research approach. To ensure peer debriefing (Given, 2008) and trustworthiness (Lincoln & Guba, 1986), we met via Zoom bi-weekly or weekly over seven months, as schedules permitted.

Our initial search criteria included online doctoral program websites in education or leadership in

the United States. Data were organized and analyzed in Microsoft Excel. Search criteria included type of program (Ph.D. or Ed.D.), cost, location, program design, online-only, credits required, and curriculum schedule coded as a cohort, non-cohort, or undefined. The curriculum was examined to determine if cohort programs were closed, open, fluid, or non-cohort (Basom et al., 1995). Program websites lacking program design details were categorized as unknown cohort or non-cohort.

Inchoate Themes

The study included 14 institutions offering online doctoral programs in education or leadership, mostly private or public for profit institutions. Key themes included program design, structure information, and cost variation. Websites for these programs varied in format and detail, with some sites offering extensive program information (e.g., curriculum, costs, student expectations) and others requiring prospective students to request additional information.

Program design details were difficult to find or access, often requiring multiple clicks and page searches to locate information. Four institutions used "cohort" on their website to describe their program without defining the term. One program provided information on the benefits of cohorts as a community for networking, support, and shared learning and growth opportunities. Overall, we identified seven cohort-style programs: three closed, two open, one fluid, and one unknown. Four programs were non-cohort, and three did not provide enough information to determine program design. All 14 online doctoral programs shared the following structural components: a learning management system (LMS) that facilitated online learning, courses delivered in synchronous and asynchronous formats, and dedicated faculty. There were distinct differences between fixed cohort programs and other designs. All closed cohort programs contained defined spaces for student connection, learning, and community building, published a set course schedule, offered peer collaborations within the same group as students started and ended together, described dedicated staff support, and required immersion experiences. Other programs may or may not have defined learning spaces designed for student connection, learning, and community building; course schedules were open; variable groups for peer collaboration; different starting and ending times; shared or fragmented staff support; and did not require immersion experiences.

We found that curriculum flexibility and tuition costs were inversely related. Program designs were on a continuum, with highly structured, inflexible curricula and closed cohort models at one end and non-traditional models with flexible curricula at the other. Fluid and open cohort models inhabited the middle ground. On average, non-cohort and undefined programs were less expensive per credit and total tuition than their cohort counterparts.

Discussion

Our review of online doctoral programs found significant variability in program design descriptions across institutions. Many institutional websites needed more specific details, making it easier for prospective students to choose an appropriate program. Clear information about performance expectations and course structure can help align programs with student needs,

potentially increasing completion rates (Andrews, 2023). The term cohort was undefined in programs with closed curriculum design, which could confuse prospective students given the variety of cohort designs. Given the wide range of what cohort can mean to different programs (Lively et al., 2016; Nimer, 2009), explicit and clear program design definitions on websites support aligning students, faculty, and staff on program expectations that stem from design. Cohort design differences impact student interactions and expectations, highlighting the importance of clearly defined programs to support student success.

Building intentional spaces is vital in cohort programs to foster student community, increase completion rates (Lively et al., 2016), and support scholarly identity development (Choi et al., 2021) through peer connection, collaboration, shared learning experiences, and networks. One institution mentioned the benefits of the cohort design, but defined spaces for how interactions would be supported were not explicit. A lack of emphasis on the community benefits of cohort designs represents a considerable oversight in program descriptions, given the evidence of impact on student success. We stress the potential of fluid, open, and non-cohort programs to build community and support the development of scholarly identity by offering structured opportunities for collaboration, shared research experiences, and maintaining a research database, effectively supporting students' academic identity and sense of belonging (Choi et al., 2021).

Program structures also impact peer engagement, influencing online learning effectiveness and satisfaction (Song & Hill, 2007). Chen et al. (2024) found that pairing newer and advanced students in peer mentorship programs increased learning effectiveness and satisfaction, positively impacting students' social resources, skills, confidence, enjoyment, motivation, and career advancement. Closed cohort programs can limit cross-cohort collaboration opportunities unless intentional spaces for interaction are established. In contrast, fluid and open cohort programs with organic cross-group peer-to-peer mentorship and collaboration can emerge. Our experiences in a fluid cohort program show that engaging with peers across academic years has enriched our community, support networks, and learning opportunities. Programs could establish formal mentoring relationships between advanced and early-stage doctoral students (Chen et al., 2024) to lessen the social constrictions of closed cohort designs. Such designs also promote dynamic student-faculty interactions, which may be more constrained in closed cohort models and could potentially misalign with students' diverse learning preferences.

Figure 1
Program Design and Self-Directed Learning Opportunities
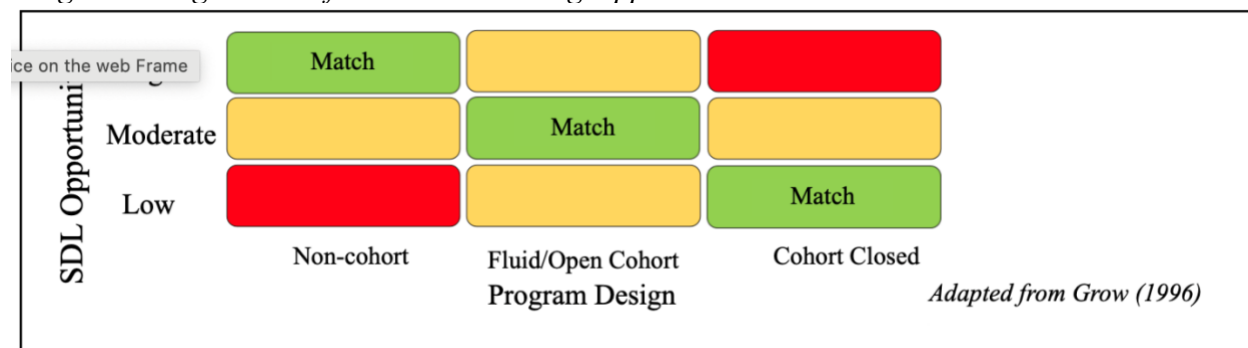
Explicit descriptions of program design may prevent mismatches between student learning preferences and program design, leading to dissatisfaction, like the incompatibility between authority teaching styles and self-directed learners (Grow, 1996). Students with preferences for high SDL opportunities may feel constrained in a closed cohort (Figure 1). Non-cohort programs offer more self-directed learning opportunities, explaining why self-directed students often achieve higher learning outcomes in online environments (Doo & Zhu, 2023). Fluid and open cohort models with intentional spaces designed to connect students across groups may provide a cost-effective balance, offering structure while accommodating students' self-direction needs.

Conclusion

Increasing enrollment in online doctoral programs with potential declining completion rates accentuates the need for aligning student expectations with program design. Institutional websites serve as a primary tool for prospective students seeking online graduate programs, requiring clear articulation of program designs, especially concerning cohort and non-cohort models. By explaining factors such as self-directed learning opportunities, community building, and identity formation, institutions can improve program designs while empowering informed decision-making by potential students. We advocate for comprehensive and accurate web-based program information, highlighting structural components to facilitate informed program comparisons. It is recommended that the proposed visual communication tool (Figure 1) be integrated into admission and orientation processes, with further refinement and customization to enhance its effectiveness. Ultimately, doctoral programs can enhance student success by fostering intentional, collaborative spaces that support self-directed learning across cohort designs.

References

Andrews, J. (2023). Recruiting doctoral students: Getting it right for all involved. *Encyclopedia, 3*(4), 1262–1269. https://doi.org/10.3390/encyclopedia3040091

Basom, M., Yerkes, D., Norris, C., Barnett, B. (1995). Exploring cohorts: Effects on principal preparation and leadership practice. *Institute of Education Sciences*, https://files.eric.ed.gov/fulltext/ED387857.pdf

Barnett, B. G., Basom, M.R., Yerkes, D. M. & Morris, C. J. (2000). Cohorts in educational leadership programs: Benefits, difficulties, and the potential for developing school leaders. *Educational Administration Quarterly, 36*, 255–282. https://doi.org/10.1177/0013161X00362005

Brookfield, S. (Ed.). (1985). *Self-directed learning: From theory to practice*. Jossey-Bass.

Candy, P. C. (1991). *Self direction for lifelong learning*. Jossey-Bass.

Chen, J. C. C., Plank, J. R., Tsai, A., Lyndon, M., & Henning, M. A. (2024). The value of a peer mentorship programme for postgraduate students in New Zealand: A qualitative study. *Medical Science Educator.* https://doi.org/10.1007/s40670-024-02189-4

Choi, Y. H., Bouwma-Gearhart, J., & Ermis, G. (2021). Doctoral students' identity development as scholars in the education sciences: Literature review and implications. *International Journal of Doctoral Studies, 16*, 89–125. https://doi.org/10.28945/4687

Coffman, K., Putman, P., Adkisson, A., Kriner, B., & Monaghan, C. (2016). Waiting for the expert to arrive: Using a community of practice to develop the scholarly identity of doctoral students. *International Journal of Teaching and Learning in Higher Education, 28*(1), 30–37. https://doi.org/10.1177/10451595155730

Doo, M. Y., & Zhu, M. (2023). A meta-analysis of effects of self-directed learning in online environments. *Journal of Computer Assisted Learning, 40*,1–20. https://doi.org/10.1111/jcal.12865

Ducheny, K., Alletzhauser, H. L., Crandell, D., & Schneider, T. R. (1997). Graduate student professional development. *Professional Psychology: Research and Practice, 28*(1), 87–91. https://doi.org/10.1037/0735-7028.28.1.87

Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly, 48*(1),

18–33. https://doi.org/10.1177/07417136970480010

Given, L. M. (2008). *The SAGE encyclopedia of qualitative research methods*. SAGE Publications, Inc. https://doi.org/10.4135/9781412963909

Grow, G. O. (1996). Teaching learners to be self-directed. *Adult Education Quarterly, 41*(3), 125–149. https://doi.org/10.1177/0001848191041003001

Gurbutt, D., Duckworth, J. E., Hazel, P., & Gurbutt, R. (2020, March 2–4). *The 'hidden curriculum' for invisible students: Challenges of elearning* [Conference paper]. 14th International Technology, Education and Development Conference, Valencia Spain. http://doi.org/10.21125/inted.2020.0373

Jones, M. (2013). Issues in doctoral studies - Forty years of journal discussion: Where have we been and where are we going? *International Journal of Doctoral Studies*, 8, 83–104. https://doi.org/10.28945/1871

Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New directions for program evaluation*, *1986*(30), 73–84.

Lively, C. L., Blevins, B., Talbert, S., & Cooper, S. (2016). Building community in online professional practice doctoral programs. *Journal of Transforming Professional Practice, 6*(3), 21–29. https://doi.org/10.5195/ie.2021.187

Loeng, S. (2020). Self-directed learning: A core concept in adult education. *Education Research International*, *2020*, 1–12. https://doi.org/10.1155/2020/3816132

National Center for Education Statistics. (2023). Table 311.15. Number and percentage of students enrolled in degree-granting postsecondary institutions, by distance education participation, location of student, level of enrollment, and control and level of institution. *United States Department of Education.* https://nces.ed.gov/programs/digest/d21/tables/dt21_311.15.asp

Nimer, M. (2009). The doctoral cohort model: Increasing opportunities for success. *College Student Journal, 43*(4), 1373–1379. https://eric.ed.gov/?id=EJ872353

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE Publications, Inc.

Rovai, A. P. (2002). Sense of community, perceived cognitive learning, and persistence in asynchronous learning networks. *The Internet and Higher Education, 5,* 319–332. https://doi.org/10.1016/S1096-7516(02)00130-6

Song, L., & Hill, J. R. (2007). A conceptual model for understanding self-directed learning in online environments. *Journal of Interactive Online Learning*, *6*(1), 27–42. https://www.ncolr.org/issues/jiol/v6/n1/a-conceptual-model-for-understanding-self-directed-learning-in-online-environments.html

Entering Motivations and Persistence of Online Non-Thesis Students

Elise Kokenge and Laura Holyoke
University of Idaho

Abstract: Online non-thesis master's programs in natural resources and environmental sciences are underrepresented in adult learning theory. Persistence challenges for online graduate programs are increasingly complex, with most attrition occurring early in these programs. A grounded theory qualitative inquiry explored factors influencing early persistence decisions and entry motivation. Preliminary categories for entering motivation were seeking a new direction, growing as a person, dissatisfying positions, changing trajectory, advancing in career, and learning as fulfillment. Participants assessed values and future goals, program flexibility, and cost when choosing a program.

Keywords: decision making, working professionals, online masters, values, motivation

Literature Review

Student retention has been a topic of importance since the inception of higher education. Retaining students through to degree completion is necessary for the long-term success of institutions that promote economic success by developing a skilled and educated workforce (Seery et al., 2021). Over the past decade, access to fully online programs has increased enrollment, including graduate students and programs (National Center for Education Statistics, 2023), significantly impacting education and institutional financial models (Cheslock & Jacuette, 2022). Despite increased enrollments, online students experience lower retention and degree completion compared to in-person classes or programs (Haydarov et al., 2013; Seaman et al., 2018). Retention and completion rates are lowest in science, technology, engineering, and mathematics (STEM) programs (Li et al., 2022). Kokenge et al. (2024) found that most students who leave online natural resource or environmental science programs did so within the first two semesters.

There are two categories of master's degrees. While both programs consist of students taking courses, traditional master's thesis programs are research-based (empirical study), while master's non-thesis programs are course-based and culminate with a project (Allum et al., 2013; Maynard et al., 2023). The expanded availability of non-thesis online master's degree programs in STEM since the 1990s may have contributed to increased graduate enrollments in the discipline. Tracking growth rates of thesis vs. non-thesis master's students in the United States is impossible nationally, as the Department of Education reports only total master's enrollment without distinguishing between the two (Allum et al., 2013; Haydarov et al., 2013; Lenio, 2023). Without federal reporting requirements, unit administrators must use independent methods to delineate between thesis and non-thesis master's admission, attrition, retention, and graduation rates. Previous attrition and retention research for online master's degree programs has focused on nursing (Lenio, 2023; Roets & Botma, 2012), business (Massyn, 2018), and STEM (Allum et al., 2013). Survival analysis of longitudinal data found that 70% of master's students who

discontinued online programs specific to natural resources or environmental sciences did so by the third term (Kokenge et al., 2024).

Given the paucity of research specific to the population of online students in STEM, a constructivist grounded theory approach was chosen; such an approach promotes rethinking long-standing concepts and theories in adult education disciplines from the perspectives of a population missing from original data collection rather than conforming the data to fit into a previously conceptualized form and, by so doing, develops new theory (Charmaz & Thornburg, 2020). The purpose of this research study was to develop a theory of early persistence decision making for online students in natural resources and environmental science programs. The following research question guided this study: What is happening to motivate students to persist or not persist early in online graduate programs in natural resources and environmental science? The sub-research question addressed in this paper is: what motivates students to enter graduate programs in natural resources or environmental science?

Research Design

After IRB approval, participants were recruited through email and telephone calls. Participants were selected using a stratified purposeful sampling strategy (Creswell & Poth, 2018) from students enrolled in the Master of Natural Resource (MNR) and Environmental Science Master of Science (ENVS) non-thesis programs from summer 2023 and summer 2024 at the University of Idaho. A total of 29 participants were interviewed from the sample frame of 164, ages 21 to 71. Gender neutral pseudonyms and pronouns were used to ensure confidentiality.

Semi-structured interviews were conducted via Zoom, recorded, then transcribed and de-identified to protect participant anonymity in Microsoft Word. Open-ended questions explored students' experiences (Charmaz, 2014) and evolved with the interview data through an iterative analysis and interview process (Charmaz & Thornberg, 2020). Conversations prioritized participant comfort (Gubrium et al., 2012), starting with entry motivations, progressing to self-management and continued motivation in the first semester, and concluding with reflections on growth and skills gained. Transcriptions were coded and categorized in Microsoft Excel using gerund terms for concise, descriptive labels (Charmaz, 2014). Focused coding integrated researcher reflexivity, influencing subsequent interviews. Categories and themes were developed using Excel and Miro, with constant comparison ensuring increasingly analytical insights (Charmaz, 2014). Peer debriefing enhanced credibility, minimized bias, and maintained an audit trail (Given, 2008). Modified timeline mapping visualized students' motivations and broader academic and professional journeys (Adriansen, 2012).

Preliminary Findings

Online graduate students in the MNR and ENVS brought diverse backgrounds and career stages, ranging from transitions from unrelated fields to established careers within the discipline. Participants were split into two categories for fall 2024: registered in classes (18) or not registered in classes (9). Most participants (85%) reflected cognitive styles in the conventional stage of ego development (Cook-Greuter, 2021). Timeline mapping showed that participants were either in a non-discipline career, early to mid-career in the discipline-specific job after

transitioning from a non-discipline career, or only in a discipline career; participants were predominately entry-level professionals. Despite differences in either career stages or disciplines, students shared two core motivations to start an online graduate program: seeking a new direction and growing as a person; subcategories included dissatisfying positions, changing trajectory, advancing in career, and learning as fulfillment (Figure 1). The flexibility of online programming was a key element expressed by all participants in choosing an online graduate program. Cost was a key consideration and reason for selecting an institution.

Figure 1
Preliminary Categories and Subcategories of Entering Motivation
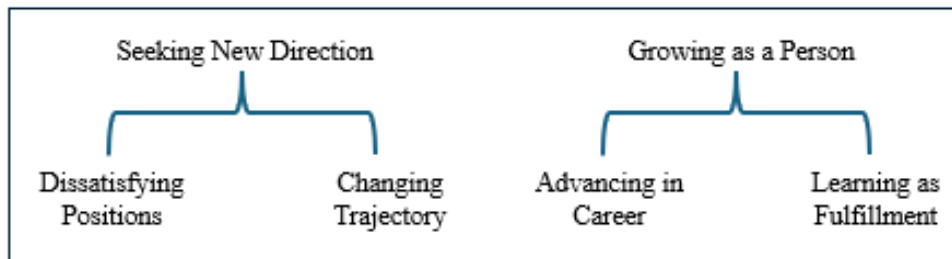
Discussion

Preliminary findings indicated that early persistence was closely linked to students' initial enrollment motivations, with continuation influenced by external factors (e.g., life crises, work hours, and family responsibilities) (Rovai, 2003). Enrollment decisions stemmed from the evaluation of financial resources, time, and flexibility, alongside a desire to work toward environmental conservation or repair for themselves or future generations. Entry motivations fell into preliminary categories of seeking new directions or personal growth, with subcategories including dissatisfaction with current roles, career advancement, trajectory shifts, and learning for fulfillment. Entry motivations reflected elements of self-determination theory (Howard et al., 2021), basic values assessment (Schwartz, 2014), and ego development stages (Cook-Greuter, 2021).
Participants ranged from entry-level professionals to retirees. The decision to pursue an online graduate program was informed by differing experience levels and motivation. Worldviews moved from the simple to the more complex throughout a lifetime of lived experiences, intentional reflection, and cultivation of practices, a nuance integrated within ego development theory of whole person meaning making (Cook-Greuter, 2021). Findings aligned with Cook-Greuter's conventional stages for cognition from ego development theory. However, evaluation of participants within the framework of ego development theory presents challenges as "a person who has reached a later stage can understand earlier ones because they are a part of their own becoming, but a person at an earlier stage cannot fully understand the later ones" (p. 7).

The first preliminary category for entering motivation was *looking for a new direction.* Participants had either left professional positions, planned for the next steps, or changed their focus with two subcategories: *changing trajectory* and *dissatisfaction with the professional position*. Several participants aimed to build a better future by *changing their trajectory*. After 20 years in their non-discipline career, Frankie hoped a degree in ENVS would open opportunities

for a part-time role after retirement. For some, changing their trajectory was necessary because their previous path was no longer viable. Carroll said they mourned the loss of medical school but realized "my autoimmune journey made me notice connections between the environment and sickness," and online graduate school allowed them the flexibility to attend to their medical needs while still pursuing graduate-level education.

Participants also experienced *dissatisfying positions*. Several participants described their previous jobs as unfulfilling, boring, or impacting their physical or psychological health. Chris left a 20-year career in government administration to pursue online graduate school, saying, "I was very unhappy... [my job] was slowly eating away at my mental and physical health... I was getting more sick and more stressed out." Chris was motivated to pursue NR after visiting a national park and realizing the importance of preserving the integrity of the land for future generations. Tegan left a prosperous sales career and described their decision to change because contributing to the wheels of capitalism was not what they wanted for their life. "It was killing me internally… I can't do semi-trucks bringing bunch of stuff to places that people will buy and then throw away in a day like I just hated all of it." Tegan questioned their values and determined they cared about natural resources. They started looking for flexible online programs that were affordable and did not require them to move.

The second preliminary category for entering motivation was *growing as a person*. Subcategories included *advancing in career* and *learning as fulfillment*. Just under half of the participants were entry level in discipline-specific careers and were looking to advance in those careers. Tatum, after leaving a successful 20-year career in marketing, was seven years into a discipline-specific career and expressed "hitting a wall, with [the state] not allowing archaeologists to advance from environmental planners to environmental scientists without that science degree." Kirby had been in a discipline-specific career for 20 years and had been unsuccessful at moving into different roles because "they're looking for people that have a greater depth of knowledge base, you know? Like that master's level. I think that will help me be more competitive."

A final preliminary subcategory for entering motivation was *learning as fulfillment*. Some participants were already positioned in their ideal careers (in or out of the discipline) or did not require a degree to move up the career ladder. These students wanted the degree to expand their own knowledge of the world. Cory had a 20-year career with the military and, after "seeing the worst of humanity," wanted to "become a part of something green and growing." Their motivation to start the degree was to gain knowledge. "I really wanted to have a hardwood tree farm and plant trees and do all this, but I had absolutely no knowledge of how to do that—like I didn't know how to improve my soil. I didn't have best practices." Cory wanted to ensure healthy land practices for future generations of their family, but they needed to remain in their current location for their work. Justice found an ideal position out of their undergraduate degree at the top of the state advancement scale. Adding a master's degree was to deepen Justice's knowledge. They loved learning and wanted to continue to share that learning with others. They wanted a flexible and affordable online program that would allow them to keep working and choose the number of courses they took each term.

All preliminary categories of entering motivation indicate a period of self-reflection on basic

value alignment (Schwartz, 2014) in relation to personal environmental philosophy summarized as practicing resource management with humans as the arbiters of decisions or humans as species responsible for ensuring benefit to all species (Callicott & Frodeman, 2009). Continued assessment of the relationship between entry motivation and participant persistence decision making is needed to develop a theory of early persistence decision making for students in ENVS and MNR. Understanding student motivation and goals can aid institution faculty and staff in supporting students and developing meaningful retention strategies to bolster students' retention in online graduate programs (Seery et al., 2021).

In conclusion, preliminary findings indicate that understanding student values and motivation for program enrollment may be linked to persistence. As such, we recommend that programs connect with prospective students to ensure program alignment and early advising to assess student needs in balancing professional, personal, and academic life. The next steps for this research study are to continue interviews with thematic sampling until thematic saturation is achieved, while continuing to build a theory rooted in the data to develop a theory of early persistence decision making for online graduate students in MNR and ENVS.

References

Adriansen, H. K. (2012). Timeline interviews: A tool for conducting life history research. *Qualitative Studies, 3*(1), 40–55. https://doi.org/10.7146/qs.v3i1.6272

Allum, J., Kirby, S. N., Sowell, R., & Gonzales, L. (2013). *Completion and attrition in STEM master's programs*. Council of Graduate Schools. https://prod.wp.cdn.aws.wfu.edu/sites/202/2021/04/EDITED_Completion_and_Attrition_in_STEM_Masters_Programs_2013-Copy.pdf

Callicott, J. B., & Frodeman, R. (2009). What is Environmental Philosophy? *The Encyclopedia of environmental ethics and philosophy, 1*, 372–381. https://iseethics.wordpress.com/wp-content/uploads/2013/01/brennan-andrew-what-is-environmental-philosophy.pdf

Charmaz, K. (2014). *Constructing grounded theory*. SAGE Publications, Inc.

Charmaz, K., & Thornberg, R. (2020). The pursuit of quality in grounded theory. *Qualitative Research in Psychology, 18*(3), 305–327. https://doi.org/10.1080/14780887.2020.1780357

Cheslock, J. J., & Jacuette, O. (2022). Concentrated or fragmented? The U.S. market for online higher education. *Research in Higher Education, 63*, 33–59. https://doi.org/10.1007/s11162-021-09639-7

Cook-Greuter, S. (2021). Ego development: A full-spectrum theory of vertical growth and meaning making. *Research Gate.* https://www.researchgate.net/publication/356357233_Ego_Development_A_Full-Spectrum_Theory_Of_Vertical_Growth_And_Meaning_Making

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). SAGE Publications, Inc.

Creswell, J. W., Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). SAGE Publications Inc.

Gubrium, J. F., Holstein, J. A., Marvasti, A. B., & McKinney, K. D. (2012). *The SAGE handbook of interview research: The complexity of the craft.* SAGE Publications, Inc. https://doi.org/10.4135/9781452218403

Given, L. M. (2008). *The SAGE encyclopedia of qualitative research methods*. SAGE Publications, Inc. https://doi.org/10.4135/9781412963909

Haydarov, R., Moxley, V., & Anderson, D. (2013). Counting chickens before they are hatched: An examination of student retention, graduation, attrition, and dropout measurement validity in an online master's environment. *Journal of College Student Retention, 14*(4), 429–449. https://doi.org/10.2190/CS.14.4.a

Howard, J. L., Bureau, J. S., Guay, F., Chong, J. X. Y., Ryan, R. M. (2021). Student motivation and associated outcomes: A meta-analysis from self-determination theory. *Perspectives on Psychological Science, 16*(6), 1300–1323. https://doi.org/10.1177/1745691620966789

Kokenge, E., Holyoke, L. B., Soria, K. M., Kobizar, L., & Daley-Laursen, S. B. (in press). Online programs: Attrition risks differ between environmental science and natural resource master's non-thesis students.

Natural Sciences Education, 54. https://doi.org/10.1002/nse2.70005.

Lenio, J. A. (2023). Employer support as a predictor of online master's student retention. *Journal of College Student Retention, 25*(3), 572–593. http://dx.doi.org/10.1177/15210251211001561

Li, C., Herbert, N., Yeom, S., & Montgomery, J. (2022). Retention factors in STEM education identified using learning analytics: A systematic review. *Education Sciences, 12.* https://doi.org/10.3390/educsci12110781

Massyn, L. (2018). Enhancing completion rates of mini-dissertations for a professional master's degree: An integrated approach. *The International Journal of Management Education, 16*(1), 114–120. https://doi.org/10.1016/j.ijme.2018.01.002

Maynard, R. C. I., Pennisi, S. V., & Lombardini, L. (2023). Identifying faculty opinions about implementing an online, non-thesis master's degree. *Frontiers Education, 8.* https://doi.org/10.3389/feduc.2023.1252353

National Center for Education Statistics. (2023). *Table 311.15. Number and percentage of students enrolled in degree-granting postsecondary institutions, by distance education participation, location of student, level of enrollment, and control and level of institution: Fall 2021 and Fall 2022.* U.S. Department of Education. https://nces.ed.gov/programs/digest/d22/tables/dt22_311.15.asp

Roets, L., & Botma, Y. (2012). Cyclic efforts to improve completion rates of masters' degree students in nursing: Original research. *Curationis, 35*(1). https://doi.org/10.4102/curationis.v35i1.111

Rovai, A. P. (2003). In search of higher persistence rates in distance education online programs. *The Internet and Higher Education, 6*(1), 1–16. https://doi.org/10.1016/S1096-7516(02)00158-6

Schwartz, S. H. (2014). Negativity bias and basic values. *Behavior and Brain Sciences, 37*(3), 328–329. https://doi.org/10.1017/S0140525X13002720

Seaman, J. E., Allen, I. E., & Seaman, J. (2018). *Grade increase: Tracking distance education in the United States.* Babson Survey Research Group. https://eric.ed.gov/?id=ED580852

Seery, K., Barreda, A. A., Hein, S. G., & Hiller, J. L. (2021). Retention strategies for online students: A systematic literature review. *Journal of Global Education and Research, 5*(1), 72–84. https://www.doi.org/10.5038/2577-509X.5.1.1105

Community Education for Older Women: Opportunities in Quilting Guilds

Teresa Lara
University of Memphis

Abstract: Older women find fewer opportunities for learning offered in communities in Mississippi, yet these women are still active cognitively and physically. This gap can be filled by quilting guilds, groups that satisfy the older woman's need to challenge her mind and create camaraderie with other older women who have a common interest. Quilting allows older women to exercise their creativity while designing and creating a masterpiece that tells a story. Quilts can retell history, bond family members, nurture a lonely or lost soul, and provide comfort for the seamstress and the recipient. Designing and creating quilts with others in a guild multiplies the quilter's creativity and builds relationships with other older women, thereby encouraging lifelong learning in the senior sector. This research focuses on quilters – how they engage in adult learning through quilting, the benefits of quilting guilds for adult learners, and the stories and life experiences quilters share with their craft.

Keywords: quilt, quilter, women, craft, art, informal adult education, community education

Quilts create connections. Quilts are an art form that has the ability to tie generations together, connect families to their past, retell history, and reveal where we have come from. Though quilting began as a necessity for protection against harsh winter weather, quilting has evolved into a hobby that can weave stories and history together in a beautiful piece of art. Quilters involved in adult and community education in the Midsouth and specifically Mississippi have often accidentally retold the history of the people who settled in the state through the quilts that also tell their own stories. According to the Mississippi Department of Archives and History (n.d), quilting serves as a legacy of historical claims in Mississippi (Mississippi Department of Archives and History, n.d.). History intertwined with personal and family stories is a beautiful art that might surprise even the quilters themselves.

Horton (2000) and Johnson and Schwalm (2001) dive into historical quilting practices, revealing how quilting traditions reflect broader changes in society of that time. Quilting has often been a medium for activism, as exemplified in the works of the Freedom Quilting Bee, which combined folk art with the Civil Rights Movement (Callahan, 2014). Clover and Stalker (2008) emphasized how fabric arts serve as tools for education and activism, enabling women to address societal issues creatively. Quilts created by African American seamstresses sometimes expressed symbolic statements, with patterns like the "Shoofly" and "Monkey Wrench" patterns rumored to have been used in the Underground Railroad to communicate messages. However, this theory remains a debated part of quilt folklore (Johnson & Schwalm, 2001).

Review of Literature

With narrative review as my approach, I have identified a gap in the existing literature. There is

little research on older women quilters in Mississippi, therefore, this marginalized group is the focus of my research. My research questions delve into how the quilting practices of older women are passed down through communities of practice, how quilting guilds support the learning of women quilters within their communities of practice, and how older women quilters in Mississippi communicate their life experiences through their quilts. As I explored existing literature, I found that adult learning opportunities for senior women in Mississippi are scarce, so the women fill the void by establishing their own communities of practice in local quilting guilds. Although there are some younger quilters in Mississippi, there is a significantly higher number of quilting practitioners in the over-55 age group. In addition, this age group has more life experiences and stories to share as well as more time to devote to learning through quilting, so this group is the focus of my research.

Social Learning and Community

Social learning, based on Albert Bandura's theory, is a process of learning where individuals learn new knowledge and behaviors through observing others in a social setting (Sims & Manz, 1982). The formation of quilting guilds was a catalyst for social learning among women. Individuals watch the behavior of others and imitate the behaviors that they learn. Quilting fosters community-building, as examined by Mesle-Morain (2016), who explored the history of a long-running quilting society in Iowa, the Old Capitol Guild. The guild welcomed anyone who wanted to learn quilting skills, collaborate ideas with other quilters, or just enjoy a social time with other ladies. Lawton (2010) illustrated how collaborative quilting projects unite diverse individuals, fostering mutual connections despite their differences in background, religion, age, race, or socioeconomic status.

Communities of Practice

The origin of the concept of communities of practice is in situated learning theory. Lave and Wenger clearly defined their theory on communities of practice. "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Lave & Wenger, 1991). Lave and Wenger believed that when viewed as a theory, a community of practice is a social theory. The theory of communities of practice is situated in historical and cultural context and is not reliant on an individual (Lave & Wenger, 1991). Often, we talk about learning and education based on the individual learner. We think that learning has a beginning and an end, separate from the rest of our lives. These two social scientists believe that learning is social and comes from our experiences in life. This model of situated learning proposed that learning involves engagement in a community of practice without the constraints of time frames and inclusive of the other parts of our lives (Wenger-Trayner & Wenger, 2015).

Communities of practice have three crucial characteristics, and all three must be met to be considered a true community of practice. In their 1991 work *Situated Learning: Legitimate Peripheral Participation,* Lave and Wenger outlined the key tenets of Communities of Practice:
1. Domain – shared domain of interest, but not just a club. Committed to the domain, members value their collective expertise and learn from each other. The members share knowledge and activities together.

2. Community – Members engage in a variety of joint activities, help each other, share information, and build relationships that promote discussions and learning.
3. Practice – Members of a community of practice are practitioners, not fans. Time and interaction create shared resources (verbiage, stories, tools, and routines) for practice (Lave & Wenger, 1991).

Lave and Wenger also introduced the concept of Legitimate Peripheral Participation (LPP), which describes how newcomers to a community of practice integrate gradually (Lave & Wenger, 1991). The new member initially begins with a peripheral role and slowly becomes more engaged and knowledgeable, eventually moving to full participation in the community.

Benefits of Guilds

The rich history of quilting as a cultural icon is explored by Cerny et al. (1993), who examined the evolution of quilting guilds and their role in modern society. Their article articulates how women celebrate feminine values and female experiences and thus define their own female personas within a social setting.

The therapeutic and mindful nature of quilting found within guilds is documented by Burt and Atkinson (2012), who found that the craft promotes well-being through creativity, relaxation, and social engagement. Similarly, Dickie (2003) highlighted quilting as a learning process that enhances individuals' self-satisfaction of a task completed well and also contributes to the well-being of their families and guilds. Cheek and Piercy (2004) explored how quilting helps older women express age identity, providing a sense of purpose within their communities. As the older women instruct the younger women, they are gratified by their contribution to the quilting groups. Humphery, an avid researcher of the history of quilting, explains that "transmitting quilt making to a new generation is as much about sharing an appreciation for the objects and their roles within the culture, building relationships, and preserving the past" (2025). Humphery quoted a participant in one of her studies, Diane Guadynski, who felt appreciated by the younger women who learned quilting from her. Guadynski said,

> It is not like we are going to turn the world into master quiltmakers; that is far from it. However, quilt-making is so much more than making a perfect quilt. Sometimes, we feel like we should be hanging a shingle out because it gives women who are sad or grieving or have other problems a chance to get together with other women and somebody who thinks they can't do anything because they are not creative when they do something they just light up and, even if it is a short time, sad women can become happy. That is very important. It sounds pretty fake, but good teachers, I believe, touch people's lives, and quilt-making touches people's lives. (Humphery, 2025).

Quilting guilds hold many benefits for the quilters/adult learners. Research has shown that quilting benefits older women's cognitive and creative engagement. A research study on group art therapy focused on quilting explored themes such as connection with the body, the quilter's concept of womanhood, and the creative aspect of generativity (Gardner, 2016). Gardner concluded that quilting serves as a therapeutic tool, combining cognition and creativity. Whether a woman is creating her own design or following a pattern, there is measuring, calculating,

designing of the pattern and choosing the color combinations or theme that keeps the cognitive senses actively engaged. Quilting allows older women to exercise their minds with the creativity of designing and creating a masterpiece that tells a story. Designing and creating quilts with others in a guild multiplies the creativity of the quilter and builds relationships with other older women, thereby encouraging lifelong learning for adults who are members of a senior community. Lifelong learning is a self-motivated and continuous quest for knowledge, either for professional or personal gain (Field, 2006). Education changes the path of an adult learner, and there are no more passionate adult learners than those who are pursuing a hobby that tells their life stories.

There is physical movement in cutting, sewing, ironing, sandwiching the fabric, and quilting the final product that will help an older woman to maintain flexibility through movement. A study reported in the Frederick Living blog cites improvement in fine motor skills as well as increased physical activity among quilters (2025). Another study concludes, "Quilting decreases stress levels and causes the feeling of a sense of accomplishment as it increases the reward chemicals in our brains. As a result, it also lowers the risk of heart attack and stroke. An entry in the Journal of the American Medical Association shows evidence that quilt-making decreases the blood pressure, respiration, and heart rate. Harvard neurologist Dr. Marie Pasinskis also points out that quilt-making calms the brain and results in a sense of wellbeing" (Cecilia, 2020). The health benefits of quilting abound.

Artwork

Langellier (1992) elaborated on quilting as an art form for storytelling and preserving family memories. African American quilting holds a unique place in the fabric of American and Mississippi history. Drury (2017) and Valentine (2023) celebrated the work of Mississippian Sarah Mary Taylor. Her contributions to quilting as art showcased the intersection of artwork and cultural identity. Walsh (2020) discussed how Sarah Mary Taylor's artistic vision exemplifies innovation within traditional quilting. Hines (2021) chronicled the formation of innovative African American quilting communities, highlighting the societal and cultural significance of their work. Walkley (1994) explored how quilting adapts to new challenges, retaining its relevance in contemporary times. Quilting as an art form has been lauded for its ability to combine functionality with aesthetic appeal.

Adult Education

Quilting is the epitome of informal adult education in my community of Hernando, Mississippi. Merriam and Burman (2005) define **informal adult education** as learning that occurs outside of formal or structured environments. It is often spontaneous, ongoing, and driven by the interest, needs, or life experiences of the learners. (Merriam & Bierema, 2005). The Quilters on the Square Quilting Guild is a community group formed almost 25 years ago by a few ladies who wanted to quilt together and learn quilting techniques from each other. It consists of ladies who enjoy quilting, want to improve their quilting skills, enjoy creating beautiful artwork, and like the camaraderie of belonging to a group of like-minded women. The group accepts new members who are interested in quilting and currently has about 15 active members who meet monthly at the public library.

The guild rotates the focus of the meetings between Show and Tell, Community, Sit and Sew, and Business Meeting with Bingo. A "Show and Tell" meeting is one where everyone brings projects from home to share with the group. These meetings result in lots of question-and-answer sessions and picture-taking. This type of meeting is a perfect example of informal education for the ladies in the guild. A "Sit and Sew" meeting is one where the women bring their sewing machines and work on their own projects. Adult education is evident as the meeting room buzzes with excitement and chatter as the women jump in to help each other with a project or excitedly get an idea for a project of their own.

Significance

Quilting is more than a hobby or craft for women; it is a dynamic cultural practice that fosters mental and physical well-being, preserves history and family tradition, and serves as a vehicle for social activism and artistic expression. These authors all examine how quilting has contributed to society as social learning, as a medium of expression toward societal issues, and as an art that preserves family traditions and history. This literature review successfully examines several facets of quilting as adult education, but there is a gap in the research. The missing piece is a focus on Southern quilters, specifically Mississippi quilters, and how they use their craft of quilting to tell their own life stories. This gap will be the topic of my dissertation research project.

Discussion

Quilting is a way for adult learners to begin or continue to be lifelong learners. The hobby of quilting is an activity that allows older women to teach younger women how to quilt. Through this informal education, quilters can share quilt design and planning techniques, sewing skills, quilting skills, and even life skills with the younger quilters who are learning from them. Some women may begin quilting later in life, making them the adult learner instead of the adult educator. This late adult learner reaps the same benefits from a more experienced quilter who is willing to educate her. Whether the quilter is in the role of adult learner or adult educator, quilting is an avenue for teaching and learning in the senior community. Mississippi quilters tell their own life experiences with their quilts, but they also share a piece of history. Many Mississippi quilters have unknowingly shared pieces of Mississippi's history as well as their own through their quilts. Further research opportunities include exploring how the history of Mississippi and the history told by the quilters correlate. The history of quilting and how it has evolved through the decades is another avenue worth exploring.

References

Burt, E. L., & Atkinson, J. (2012). The relationship between quilting and wellbeing. *Journal of Public Health (Oxford, England)*, *34*(1), 54–59. https://doi.org/10.1093/pubmed/fdr041

Callahan, N. (2014). *The Freedom Quilting Bee: Folk Art and the Civil Rights Movement*. Fire Ant Books.

Cecilia, M. (2020, August 12). *The many amazing benefits of quilting*. So Sew Easy. https://so-sew-easy.com/amazing-benefits-of-quilting/

Cerny, C. A., Eicher, J. B., & DeLong, M. R. (1993). Quiltmaking and the modern guild: Cultural idiom. *Clothing and Textiles Research Journal*, *12*(1), 16–25. https://doi.org/10.1177/0887302X9301200102

Cheek, C., & Piercy, K. W. (2004). Quilting as age identity expression in traditional women. *International Journal of Aging & Human Development*, *59*(4), 321–337. https://doi.org/10.2190/T1R0-D8TW-ML6Y-VYYL

Clover, D. E., & Stalker, J. (2008). Feisty fabrics: Women's education, learning and activism through fabric arts in Canada and Aotearoa New Zealand. *Studies in the Education of Adults*, *40*(1), 80–95.

Dickie, V. A. (2003). The Role of Learning in Quilt Making. *Journal of Occupational Science, 10*(3), 120–129. https://doi.org/10.1080/14427591.2003.9686519

Drury, J. (2017, May 30). *Sarah Mary Taylor: A pattern of perfection*. Mississippi Folklife. https://mississippifolklife.org/articles/sarah-mary-taylor-a-pattern-of-perfection

Field, J. (2006). *Lifelong learning and the new educational order*. Trentham Books.

Gardner, J. (2016). Quilting a connection: The use of quilting in group art therapy to promote well-being for older women. Concordia University, Montréal, Québec.

Hines, A. M. (2021). Glendora Hutson's friendship quilt and the origins of a vibrant and innovative quilting community. *Uncoverings*, *42*, 118–146.

Humphrey, Christine. (2025). *Passing on a little bit of who I am*. Quilt Alliance. Retrieved March 9, 2025, from https://quiltalliance.org/ardis-james-scholars-old/passing-on-a-little-bit-of-who-i-am

Johnson, M. E., & Schwalm, J. D. (2001). *Mississippi quilts*. University Press of Mississippi.

Langellier, K. M. (1992). Show and tell in contemporary quiltmaking culture. *Uncoverings*, *13*, 127–147.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Lawton, P. H. (2010). Hand-in hand, building community on common ground. *Art Education*, *63*(6), 6–12.

Merriam, S. B., & Bierema, L. L. (2005). *Adult learning: Linking theory and practice*. Jossey-Bass.

Mesle-Morain, S. (2016, Spring). What were the women to do?: A history of the longest continuously running quilting society in Iowa. *The John Whitmer Historical Association Journal,* 36(1), 81-94. https://www.jstor.org/stable/26316814

Mississippi Department of Archives and History. (n.d.). *Quilting: A legacy of storytelling*. Mississippi Department of Archives and History. Retrieved March 4, 2025, from https://www.mdah.ms.gov/event/quilting-legacy-storytelling

Sims, H. P., Jr., & Manz, C. C. (1982). Social learning theory. *Journal of Organizational Behavior Management*, *3*(4), 55–63. https://doi.org/10.1300/J075v03n04_06

The health benefits of quilting for older adults: Mindful crafting for well-being. (2025). *Frederick Living*. Retrieved March 9, 2025, from https://frederickliving.org/blog/the-health-benefits-of-quilting-for-older-adults-mindful-crafting-for-well-being

Valentine, V. L. (2023, September 22). Lots to watch: Quilts by Sarah Mary Taylor and other African American quilters featured in North Carolina Folk Art Auction. *Culture Type*. https://www.culturetype.com/2023/09/22/lots-to-watch-quilts-by-sarah-mary-taylor-and-other-african-american-quilters-featured-in-north-carolina-folk-art-auction/

Walkley, C. (1994). Quilting the rocky road. *History Today*, *44*, 30–36.

Walsh, B. (2020, July 23). *An online exhibition of drawings by Mississippi artist Sarah Mary Taylor is full of unknown richness*. Forbes. https://www.forbes.com/sites/briennewalsh/2020/07/22/an-online-exhibition-of-drawings-by-sarah-mary-taylor-an-artist-from-mississippi-is-full-of-unknown-richness/

Wenger-Trayner, B., & Wenger, E. (2015). *Introduction to communities of practice - Wenger-Trayner*. https://www.wenger-trayner.com/introduction-to-communities-of-practice/

A Conceptual Framework for Trauma-Informed Instructional and Programmatic Design

Heather Ebba Maib and Laura Holyoke
University of Idaho

Abstract: Trauma-informed practices have emerged as a promising approach to fostering equitable and inclusive learning environments. Initially applied in human services and K-12 education, these practices are expanding into adult and continuing education due to the pervasive nature of trauma. As the adoption of a trauma-informed approach grows, so does the need to bolster implementation support and instructional design strategies. This paper introduces a novel conceptual framework integrating trauma-informed principles and practices, universal design for learning (UDL), and adult learning theory for instructional programmatic design. By synthesizing these approaches, this framework provides educators and instructional designers with a tool for creating learning environments that are trauma-sensitive, universally accessible, and andragogically sound.

Keywords: Trauma-Informed, Instructional Design, Framework, Adult Learning

Over half of the United States (US) population has experienced a traumatic event (Donisch et al., 2016; Gray & Litz, 2005). Trauma and early life adversity are linked to a variety of physiological and psychological health problems in adulthood (Muzik et al., 2013). The occurrence of trauma in a child's life is the second highest predictor of academic failure, and those who have multiple early life adversities have increased problems with attendance, behavior, academic performance/failure, and health (Stevens, 2018). The lived experience of learners in their early educational careers directly influences their current learning context, future learning, and educational attainment (West et al., 2014). Students who have early life trauma and adversity are twice as likely to drop out of school, which is a process that begins during primary school (Porche et al., 2011). Systems that create economic security, such as post-secondary training and education, need to adapt to support those with a history of childhood adversity (Williams Shanks & Robinson, 2013; Nikulina et al., 2011). Adopting a trauma-informed approach supports educators in reframing their approach from a deficit perspective of *What's wrong with you?* to an appreciative inquiry approach by asking, *What happened to you?*

Applying trauma-informed approaches to teaching and course development is increasingly considered critical in fostering holistic and inclusive learning environments (Marquart & Cresswell Báez, 2021). While social work, medical fields, and K-12 education were the first to implement these practices, the pervasive nature of trauma has led to an increasing interest in trauma-informed and sensitive practices in educational contexts aimed at older individuals. What happens in childhood follows people into adulthood; the idea that once one reaches the age of 18, they no longer need or benefit from trauma-sensitive practices is arbitrary (Bodfield & Culshaw, 2024). However, much of the work on trauma-informed educational approaches focuses on K-12 and traditional-aged students, creating an urgent need to design a strategy that explicitly addresses the needs of a wider audience. This paper introduces an instructional and program

design conceptual framework integrating elements from adult learning theory, Universal Design for Learning (UDL), and trauma-informed practices (TIP). These elements work together to support educators and trainers in developing and fostering equitable and holistic learning contexts, emphasizing the urgency of this task.

Background

Our trauma-informed instructional and programmatic design framework emerged from our ongoing journey as educators, practitioners, and scholars in trauma-informed adult education. After seeing a need for trauma-informed practice in higher education contexts, we developed presentations and professional development workshops for educators in trauma-informed practice. We tailored each workshop to meet the needs of the groups requesting our expertise and met with each client to understand their work and then develop goals and learning objectives to meet their needs. In addition to working with our clients, we invited workshop attendees (professionals in higher education) to participate in post-workshop research interviews. These interviews were a collaborative effort to understand attendees' reactions to the concepts and strategies presented in the workshop and what material they found meaningful, or that fostered a shared learning experience (Holyoke et al., 2022; Maib et al., 2022).

The literature illustrates that trauma-informed professional development and training vary in time and content (Purtle, 2020). We found that adequate time is critical for concept application and personal reflection (Maib et al., 2022). As educators and learners, we felt the workshops needed to be meaningful, engaging, and applicable, and the content should be accessible to a wide variety of learners with unique learning needs. We kept in mind that teaching concepts in trauma-informed practice may unintentionally trigger past trauma in our participants by applying a trauma-informed lens to our approach toward the end of the workshop design and not at the onset. We learned that teaching about adverse childhood experiences, the forms of trauma, and trauma-informed practice is not the same as utilizing a trauma-informed lens in instructional design (Carillo & Butler, 2014); creating holistic learning contexts must be intentionally and carefully crafted to reduce learner harm.

Framework Development

Our research into trauma-informed practice revealed a critical gap in training. Trainers recognize the value of this approach (Purtle, 2020), but standardized training and implementation strategies are lacking (Maib et al., 2023). The deficiency became apparent when a client remarked that they previously received training without practical implementation guidance. Our curriculum needed to be designed thoughtfully to address this deficiency, nurture mutual respect between the students and us, and support their learning (Knowles, 1977). We reflected on our knowledge about the learners (*the who: adult and non-traditional students*) and the content (*the what: the principles of trauma-informed care*) we were teaching. However, we needed an instructional design model (*the how*) that (a) was person-centered and holistic, (b) promoted healing-centered engagement (Ginwright, 2022), and (c) supported application and learner engagement.

We considered several instructional design models, including Analyze, Design, Develop, Implement, Evaluate (ADDIE; Branson et al., 1975), Bloom's Taxonomy (Bloom et al., 1956),

Gagné's Nine Events of Instruction (Gagné, 1985), and Merrill's Principles (Merrill, 1994). After reviewing these models, we recognized the potential to apply a trauma-informed lens to any of them, demonstrating the flexibility and applicability of trauma-informed practices. For example, Carr-Chellman and Bogard (2023) applied a trauma-informed lens to the ADDIE instructional model to create Trauma-Informed Model of Instructional Design (TI-ADDIE). Instead of expanding on this work, we felt a model designed with access, inclusivity, and equity woven into its foundation would work best for our purposes. Universal Design for Learning (UDL) emerged as an ideal model, embracing the principle that "what is 'essential for some' is almost always 'good for all'" (Meyer et al., 2014, p. 90).

Key Framework Elements

The conceptual framework we introduce in this paper is a roadmap of the key concepts for providing a holistic and trauma-informed approach for all learners, particularly adult and non-traditional learners (MacInnis, 2011, as cited in Jaakkola, 2020). Figure 1 illustrates how we integrated the concepts to create a novel approach to instructional design.

Assumptions of Adult Learners

Developed by Malcolm Knowles, the six assumptions of adult learners are self-concept, role of experience, readiness to learn, need to know (applicability), intrinsic motivation, and orientation to learning (Knowles, 1977; Knowles et al., 1998). These characteristics honor where learners come from, the demands of their current situation, and their future goals. Acknowledging that these assumptions apply to a broader audience honors the life experience of traditional-aged learners whose life circumstances and early adversity required them to take on adult responsibilities earlier in life.

Trauma-Informed Practice

The Substance Abuse and Mental Health Services Administration (SAMHSA, 2014) established four key assumptions and six principles that comprise the framework for a trauma-informed practice. As drafted by SAMHSA (2014), the four key assumptions of a trauma-informed approach are to Realize, Recognize, Respond, and Resist Re-traumatization. We adapted the definitions of these assumptions to address learners and specific learning contexts:

1. *Realize* the widespread nature of trauma and how the experience and impact are unique to each learner.
2. *Recognize* the signs and behaviors of trauma in learners (and yourself).
3. *Respond* by integrating trauma-aware and sensitive practices in your approach to teaching, curricular design, and evaluation.
4. *Resist Re-traumatization* by understanding how the course content and environment may unintentionally harm the learners and take action to reduce potential harm

The six principles make up the core tenets needed to adopt trauma-informed practice. These principles are (a) Safety, (b) Trustworthiness and Transparency, (c) Peer Support, (d) Collaboration and Mutuality, (e) Empowerment, Voice and Choice, and (f) Cultural, Historical, and Gender Issues (SAMHSA, 2014). We adapted the sixth principle to read as "Culturally

Responsive" to better describe the principle's intention and meaning (Trauma Informed Oregon, 2023). These principles serve as a lens for crafting all aspects of the learning environment: learning goals and objectives, content delivery, and assignments.

Figure 1.
Framework for Trauma-informed Program & Instruction Design
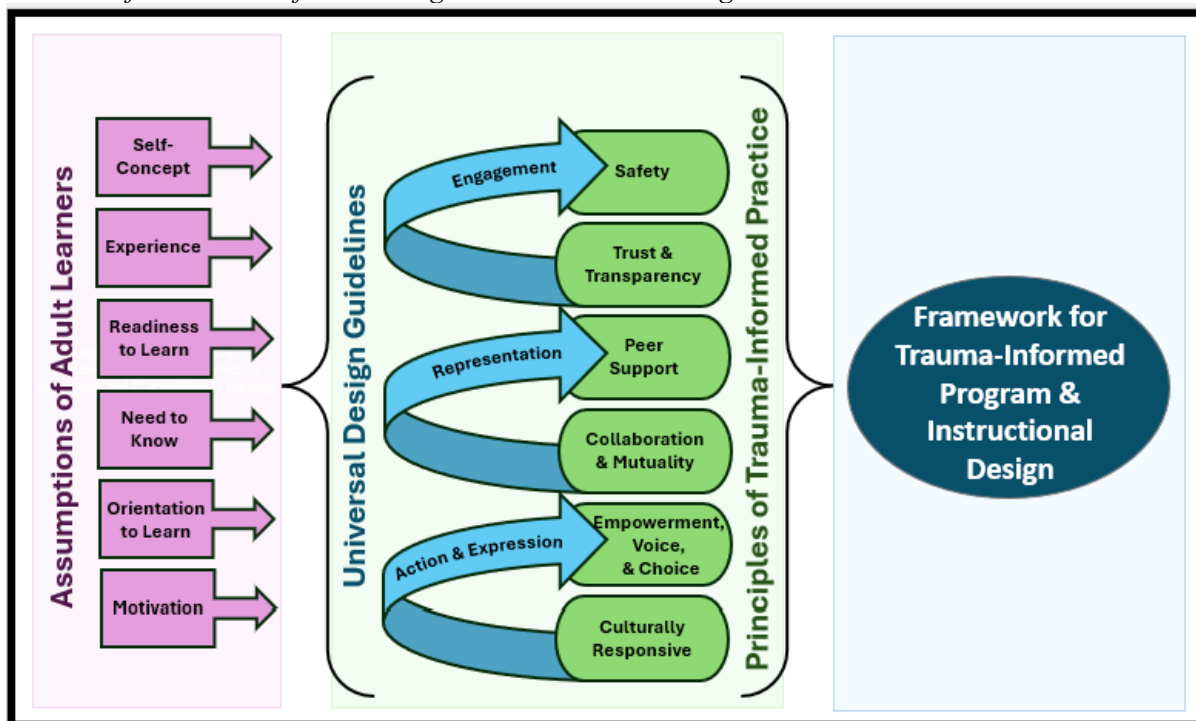
Table 1.
Activity & Signature Assignment

Course Element	Description	Adult Learning Assumptions	UDL Guidelines	Trauma-Informed Principles
Our Shared Space	In this activity, the instructors and students co-construct our shared expectations for conducting ourselves in our learning space and how we treat one another. The activity establishes our shared norms and values. All elements must have 100% agreement.	Self-concept; Readiness to Learn	Engagement; Action & Expression; Representation	Safety; Trust & Transparency; Collaboration & Mutuality; Empowerment, Voice, & Choice, Culturally Responsive
Lead It Forward	A final group or individual project to teach/lead/pay forward meaningful learnings that reflect course objectives and material application. Students are encouraged to use a variety of media to illustrate their learning.	Self-concept; Readiness to Learn; Orientation to Learning; Experience	Engagement; Action & Expression; Representation	Collaboration & Mutuality; Peer Support; Empowerment, Voice, & Choice

Universal Design for Learning

Developed in the 1980s, UDL grew out of best practices in special education. This approach aims to remove potential barriers to learning in support of accessible and inclusive environments (Nelson, 2014). Since its initial development, UDL has evolved, but the "core principles and guidelines remain to provide multiple means of engagement, representation, and expression" (Meyer et al., 2014, p. 89).

In February 2024, we developed and taught a one-credit workshop titled *Trauma, Healing, and Resilience* for our institution's Diversity and Inclusion certificate using our instructional design framework. All assignments, lectures, and group activities were designed to develop trust, ensure safety, and actively took steps to reduce harm and avoid re-traumatization. In addition to front-end development, we (the instructors) collected daily anonymous reflections to assess learning and adapt the material to support learner interest and relevance. Two assignments from this course are prime examples of how the framework supports meaningful learning: the "Our Shared Space" activity and the "Lead It Forward" signature assignment.

Discussion

Clapper (2010) observed, "Emotions are a powerful tool for learning, and yet too rarely do we hear about the positive emotions resulting from learning experiences" (p. e11). This observation emphasizes a noteworthy gap we also detected in higher education instruction. Intentional instructional design is often overlooked, potentially exacerbating learners' previous negative learning experiences. The trauma-informed framework presented in this paper addresses this gap by fostering meaningful experiences that promote lifelong learning. This approach supports trainers in creating environments that treat people as whole beings in equitable and inclusive learning contexts. Formal pilot testing in multiple learning contexts is needed to determine framework effectiveness. This research contributes to the growing body of literature on trauma-informed education and provides a practical tool for trainers seeking to enhance learner engagement across settings.

References

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives: The classification of educational goals*. (1956). David McKay.

Bodfield, K., & Culshaw, A. (2024). 'It would be very strange to make an artificial cut off point at 18 that trauma suddenly isn't relevant'—Perspectives of trauma-informed practice in higher education. *Journal of Adult and Continuing Education*. https://doi.org/10.1177/14779714241308505

Branson, R. K., Rayner, G. T., Cox, J. L., Furman, J. P., & King, F. J. (1975). *Interservice procedures for instructional systems development* (Vols. 1–5). Center for Educational Technology, Florida State University. https://apps.dtic.mil/sti/citations/ADA019486

Carello, J., & Butler, L. D. (2014). Potentially perilous pedagogies: Teaching trauma is not the same as trauma-informed teaching. *Journal of Trauma & Dissociation*, *15*(2), 153–168. https://doi.org/10.1080/15299732.2014.867571

Carr-Chellman, A., & Bogard, T. (2023, May 25). *TI-ADDIE: A trauma-informed model of instructional design*. EDUCAUSE Review. https://er.educause.edu/articles/2023/5/ti-addie-a-trauma-informed-model-of-instructional-design

Clapper, T. C. (2010). Beyond Knowles: What those conducting simulation need to know about adult learning theory. *Clinical Simulation in Nursing*, *6*(1), e7–e14. https://doi.org/10.1016/j.ecns.2009.07.003

Donisch, K., Bray, C., & Gewirtz, A. (2016). Child welfare, juvenile justice, mental health, and education providers' conceptualizations of trauma-informed practice. *Child Maltreatment, 21*(2), 125–134. https://doi.org/10.1177/107755951663330

Gagné, R. M. (1985). *The conditions of learning and theory of instruction* (4th ed.). Holt, Rinehart & Winston.

Ginwright, S. A. (2022). *The four pivots: Reimagining justice, reimagining ourselves*. North Atlantic Books.

Gray, M. J., & Litz, B. T. (2005). Behavioral interventions for recent trauma: Empirically informed practice guidelines. *Behavior Modification, 29*(1), 189–215. https://doi.org/10.1177/0145445504270884

Holyoke, L., Maib, H. E., Gehrlein, T. (2022). *Infusing training with meaningfulness: An essential pairing for learning?* (ED632260). ERIC. https://files.eric.ed.gov/fulltext/ED632260.pdf

Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review*, *10*(1–2), 18–26. https://doi.org/10.1007/s13162-020-00161-0

Knowles, M. (1977). *Self-directed learning: A guide for learners and teachers. Association Press*.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (1998). *The adult learner: The definitive classic in adult education and human resource development* (5th ed.). Gulf Publishing Company.

Maib, H. E., Holyoke, L., & Gehrlein, T. (2022). *Trauma-informed practice: Designed for children, necessary for adults* (ED632249). ERIC. https://files.eric.ed.gov/fulltext/ED632249.pdf

Maib, H. E., & Holyoke, L. B., & Soria, K. M. (2023). *A systematic review of trauma-informed certificate programs* (ED649344). ERIC. https://files.eric.ed.gov/fulltext/ED649344.pdf

Marquart, M., & Creswell Báez, J. (2021). Recommitting to trauma-informed teaching principles to support student learning: An example of a transformation in response to the coronavirus pandemic. *Journal of Transformative Learning*, *8*(1), 63–74. https://jotl.uco.edu/index.php/jotl/article/view/433

Meyer, A., Rose, D. H., & Gordon, D. (2014). *Universal Design for Learning: Theory and Practice*. CAST Professional Publishing.

Merrill, M. D. (1994). *Instructional design theory*. Educational Technology Publications.

Muzik, M., Bocknek, E. L., Broderick, A., Richardson, P., Rosenblum, K. L., Thelen, K., & Seng, J. S. (2013). Mother–infant bonding impairment across the first 6 months postpartum: The primacy of psychopathology in women with childhood abuse and Neglect Histories. *Archives of Women's Mental Health*, *16*(1), 29–38. https://doi.org/10.1007/s00737-012-0312-0

Nelson, L. L. (2014). *Design and deliver: Planning and teaching using Universal Design for Learning*. Paul H. Brookes Publishing Co.

Nikulina, V., Spatz Widom, C., & Czaja, S. (2011). The role of childhood neglect and childhood poverty in predicting mental health, academic achievement and crime in adulthood. *American Journal of Community Psychology, 48*((3–4):), 309–321. https://doi.10.1007/s10464-010-9385-y

Porche, M. V., Fortuna, L. R., Lin, J., & Alegria, M. (2011). Childhood trauma and psychiatric disorders as correlates of school dropout in a national sample of young adults. *Child Development, 82* (3), 982–998. https://doi.10.1111/j.1467-8624.2010.01534.x

Purtle, J. (2020). Systematic review of evaluations of trauma-informed organizational interventions that include staff trainings. *Trauma, Violence, & Abuse*, 21(4), 725–740. https://doi.org/10.1177/1524838018791304

Stevens, J. E. (2018, August 12). *Spokane, WA, students' trauma prompts search for solutions*. ACEs Too High. https://acestoohigh.com/2012/02/28/spokane-wa-students-child-trauma-prompts-search-for-prevention/

Substance Abuse and Mental Health Services Administration. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach. https://store.samhsa.gov/sites/default/files/d7/priv/sma14-4884.pdf

Trauma Informed Oregon. (2023, December 15). *TIO blog: A focus on the trauma informed principle cultural, historical, and gender issues*. https://traumainformedoregon.org/a-focus-on-the-trauma-informed-principle-cultural-historical-and-gender-issues/

West, S. D., Day, A. G., Somers, C. L., & Baroni, B. A. (2014). Student perspectives on how trauma experiences manifest in the classroom: Engaging court-involved youth in the development of a trauma-informed teaching curriculum. *Children and Youth Services Review, 38*, 58–65. https://doi.org/10.1016/j.childyouth.2014.01.013

Williams Shanks, T. R., & Robinson, C. (2013). Assets, Economic Opportunity and Toxic Stress: A Framework for understanding child and educational outcomes. *Economics of Education Review*, *33*, 154–170. https://doi.org/10.1016/j.econedurev.2012.11.002

Exploring Perspectives of HyFlex Blended Learning with Adult Learners in Higher Education Environments: An Instrumental Case Study

Pamela D. McCray and Norman S. St. Clair
The University of the Incarnate Word

Abstract: Blended Learning (BL) is often used as a "catch-all" term describing the modern educational environment, which centers on using technology to integrate traditional face-to-face (F2F) and online paradigms in higher education for over fifty years. HyFlex is considered a subset of BL since it incorporates different modalities to support F2F learning through on-site and remote attendance and asynchronous options. Therefore, this instrumental case study explored the impact of BL HyFlex adoption factors on administrators, faculty, and graduate students at a private university in South Central Texas. The graduate student responses heavily weigh the findings, but the areas where faculty expressed different perspectives are discussed.

Keywords: blended learning (BL), HyFlex, Comprehensive Institutional Model (CIM), higher education institutions (HEIs), COVID-19 post-pandemic

This instrumental case study explores the efficacy or relevancy of the Comprehensive Institutional Model (CIM) in the post-pandemic BL HyFlex teaching and learning environment (McCray et al., 2023). The CIM is a conceptual framework developed to assist higher education institutions (HEIs) in addressing the COVID-19-induced challenges; it was constructed from over two years (2021-2023) of longitudinal pilot study data. The CIM offers detailed stakeholder recommendations to improve teaching effectiveness, encourage investments in reliable instructional technology and operational infrastructure, deliver graduate student academic support functions, and execute institutional sustainability actions across three institutional stakeholder groups: administrators, faculty, and graduate students.

Study Significance

The significance of the study is that in the post-COVID-19 environment, HEIs must reconsider their student value propositions, especially for nontraditional adult learners, and how they can effectively leverage technology, such as HyFlex, to remain viable (Cumming et al., 2024; Detyna et al., 2023; Guppy et al., 2022). The CIM's integrated framework includes the voices and priorities of relevant stakeholders to address the current challenges and to plan for future sustainability. Many scholarly articles provide guidelines for HEIs dealing with COVID-19-induced challenges, but few researchers have tested their advice in a real-world HyFlex teaching and learning environment. Lastly, the study's instrumental case study design supports the transferability of conceptual ideas, data collection and analysis processes, themes, and supporting documentation to inform other HEIs struggling with real-world operational and sustainability challenges. This paper is organized as follows: study background, methodology and research design, study findings that connect the research questions and critical themes, discussion of differing faculty perspectives, and recommendations to close the gap between student and faculty perspectives.

Study Background

The COVID-19 pandemic significantly impacted higher education, forcing institutions to rapidly transition from traditional face-to-face (F2F) learning to primarily online learning environments in 2020; some HEIs introduced limited blended learning options in 2021 (Cumming et al., 2024; Detyna et al., 2023). This sudden shift created significant challenges, leading to an imbalance in HEI's operational environments, disruption in classroom instruction, and additional workload for administrators and faculty in supporting this complex and uncertain environment (Detyna et al., 2023; Guppy et al., 2022). The original pilot study research aimed to explore the experiences and insights of key stakeholders (administrators, faculty, and graduate students) who pivoted to a graduate learning environment of online and blended strategies at one private University in South Central Texas. These findings were used to develop the CIM to help mitigate these challenges (McCray et al., 2023).

Methodology and Research Design

Design-Based Research (DBR) by Reeves (2006) was chosen as the study methodology because of its advantages in addressing real-world educational problems by integrating theory and practice. The DBR process was used to collect and analyze the study data simultaneously and to juxtapose this new post-COVID-19 data against the pilot study findings (McCray et al., 2023; Reeves, 2006). A qualitative instrumental case study design was selected because it supports exploring complex and significant problems in higher education by combining different types of research data (Merriam, 1998; Stake, 1995; 2010; Yazan, 2015; Yin, 2009). According to Baxter & Jack (2008), an instrumental case study focuses on specific issues, such as testing the relevancy of the CIM's recommended stakeholder interventions in the post-COVID-19 HyFlex environment.

Study Findings

The study data was collected using various methods and sources, including seventeen personal interviews, one focus group, classroom observations, course design audits, institutional metadata, and researcher reflections and observations. The researcher asked four primary research questions of all stakeholders (administrators, faculty, and graduate students) that were aligned to the CIM's four stakeholder intervention areas:

> (a) What are the perceptions and experiences of administrators, faculty, and graduate students of the blended learning factors that impact faculty readiness, acceptance, and adaptability in a HyFlex environment in the post-COVID era?
> (b) What are the perceptions and experiences of administrators, faculty, and graduate students on the best practices for effectively delivering course content and promoting graduate student engagement within a HyFlex learning environment?
> (c) How are the unique challenges and diverse needs of adult learners in supporting and balancing academic requirements with work/life responsibilities recognized by administrators and faculty in a HyFlex teaching and learning environment?
> (d) What are the perceptions and experiences of administrators, faculty, and graduate students on how the institution embraces innovation to address shifts in the educational landscape and to set clear expectations for participating in a HyFlex environment?

Key Themes

The study revealed four key themes: a) HyFlex faculty readiness, b) graduate student inclusion and engagement, c) the changing educational landscape, and d) the recognition of graduate students' diverse needs.

Theme 1: HyFlex Faculty Readiness

The successful implementation of HyFlex techniques demands comprehensive and ongoing faculty training, with consistent, institution-wide efforts to ensure uniformity and minimize student confusion (Noichun et al., 2024). Graduate students posit that faculty need adequate time to break old and build new habits, which is essential for HyFlex adoption and teaching preparation. The faculty must demonstrate technological proficiency using digital tools like Padlet and the Learning Management System (LMS) to organize course materials. Clear and consistent communication is vital, with faculty providing detailed course expectations, making syllabi and materials available before classes begin, and ensuring graduate students understand participation expectations.

Theme 2: Inclusion and Engagement

It is essential to make students consistently feel included, valued, and actively engaged in class discussions and activities (Cumming et al., 2024; Kim et al., 2024). Graduate students expect equity in learning and a similar learning experience regardless of their attendance modality. The success of HyFlex hinges on faculty expertise in engaging both online and in-person students simultaneously, which requires seamless transitions between instructional modes (Baker et al., 2024). Online students should not feel they missed out because they are remote; conversely, in-person students should not feel like online students have less accountability because some choose to keep their cameras off during class. Clear participation guidelines and accountability are essential to ensure that online and in-person students are equally engaged and meet class expectations. According to participant responses, some course formats, such as traditional lectures or theory discussions, may better suit the HyFlex environment.

Theme 3: Changing Educational Landscape

As the educational landscape evolves, there is an increasing need for learning models that integrate real-life experiences, emerging technologies, and creative ways of knowing (Lindqvist et al., 2024). Along with technology considerations, flexible educational models must include dynamic learning spaces that encourage knowledge's practical and creative application. Continuous reflection, adaptation, and the responsible integration of new approaches are crucial for faculty and graduate students to stay relevant and valuable.

Theme 4: Graduate Student Diverse Needs

Institutions should prioritize tailored support for graduate students that encompasses mentoring and tutoring resources, particularly for new and nontraditional students, to aid in their successful transition into academic programs and to develop essential digital literacy and technology skills.

Faculty must foster a continued sense of belonging through intentional community-building efforts between in-person and online graduate students.

Discussion

The study's themes support the relevancy of the CIM's recommended stakeholder interventions and the CIM's foundational theories of HyFlex Design Principles, Andragogy, Constructivism, Self-Efficacy, and the Technology Acceptance Model (TAM) (Beatty, 2019; Bandura, 1977; Davis, 1989; Knowles, 1973; Nickerson, 2024; Piaget, 1974; Vygotsky, 1978). Although the graduate student data heavily influenced the findings, administrator and faculty input was also reflected in the themes and supported by the findings. However, it is important to note that the perspectives of some faculty participants differ from the graduate student expectations reflected in the key conceptual ideas of Themes 1 and 2 concerning HyFlex skills training and attendance flexibility. However, faculty strongly endorsed and supported the conceptual ideas highlighted in Themes 3 and 4 for changing educational models and recognizing graduate students' diverse needs. These differences are discussed below.

Some faculty participants disagreed with taking the required training to deliver their classes in a HyFlex environment successfully; they preferred and focused on their on-site classes. A few faculty participants also pushed back on providing access to course material before the semester began; they prefer a more immersive class design that does not tether them to a prescribed syllabus. Similarly, some faculty participants had different perspectives on inclusion and engagement; they preferred on-site graduate classes instead of HyFlex to encourage class interaction and community building. Also, based on course content, some faculty posit that courses heavily focused on group work or complex concepts are better suited for in-person learning.

However, faculty participants were more vocal than graduate students concerning institutional support for a changing educational landscape encompassing flexible learning models and the development of creative learning spaces. A few faculty participants suggested that investments in emerging education models should receive the same priority and funding as technology infrastructure projects. Most faculty respondents indicated that they can be more proactive in building community with graduate students in their classes and become more aware of graduate student diverse needs. Several respondents suggested they could work more collaboratively with their peers to enhance cross-disciplinary learning opportunities for graduate students.

Recommendations to Close Perception Gaps

The following recommendations are provided to help close the gaps between the student responses and the areas where faculty expressed different perspectives. The first recommendation is to offer faculty financial incentives and course releases for adopting HyFlex teaching models (Cumming et al., 2024). A grant or stipend program could be established to reward faculty who design and implement HyFlex courses. The expectancy theory (Vroom, 1964) posits an individual's motivation is influenced by perceived rewards or recognition, such as encouraging faculty acceptance of HyFlex teaching (Sutton, 2024). The institution's departmental leadership should also communicate the benefits of HyFlex training in helping

faculty improve classroom facilitation and graduate-student interactions in multimodal classes. The examples from the current literature that connect HyFlex strategies with improved student engagement could provide insights (Boehm & Boerboom, 2023).

Additionally, it would be helpful to establish a sense of purpose and connection between faculty HyFlex adoption and student success by providing relevant graduate student examples, especially for the nontraditional student population juggling family and work responsibilities along with their graduate studies in the local institution (Penrod, 2022). For example, the feedback from this study could be shared in a departmental meeting, followed by an interactive discussion and brainstorming session on how to apply the findings. The self-determination theory (Deci & Ryan, 2008) asserts that people are more driven to engage in activities that fulfill their innate desires for autonomy, competence, and connection with others.

The third recommendation is to establish HyFlex communities of practice that support and encourage peer collaboration on how HyFlex pedagogy promotes innovative teaching (Samuel, 2021). HyFlex higher education community-based workshops could help faculty continually enhance their teaching practices, explore new technologies, and stay abreast of the latest HyFlex developments while building supportive mentoring relationships. The communities of practice theory (Wenger, 1998) contends that people learn more effectively with collaborative, socially supportive groups (Samuel, 2021). Lastly, institutions should establish HyFlex policies and provide clear guidelines on HyFlex training and teaching requirements to support a HyFlex program curriculum. They must ensure support resources are available to help faculty successfully execute in a HyFlex teaching and learning environment (Noichun et al., 2024). The organizational change theory (Kezar, 2001) supports the idea that faculty need to clearly understand the institution's performance expectations and have access to the appropriate resources to meet expectations and objectives.

In summary, the study's themes support the relevancy of the CIM's recommended stakeholder interventions and the CIM's foundational theories in the post-COVID environment. However, recent changes in the higher education environment raise concerns about federal educational oversight and funding. Therefore, additional research is needed to explore the impact of HyFlex teaching and learning in higher education as environmental variables shift and evolve.

References

Baker, S., Gunn Watkinson, M., Honeyman, F., Mowll, J., & Tyulkina, S. (2024). Rethinking student engagement for 'hyflex' teaching and learning in post-compulsory settings: acknowledging flexibility and agency needed for unplanned events. *International Journal of Lifelong Education, 43*(4), 432–447. https://doi.org/10.1080/02601370.2024.2359595

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, (84)*2, 191-215.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report, 13*(4), 544-559. https://doi.org/10.46743/2160-3715/2008.1573

Beatty, Brian J. (2019). Values and principles of hybrid-flexible course design. Hybrid-flexible course design29–35. https://edtechbooks.org/hyflex/hyflex_values.

Boehm, M., & Boerboom, S. (2023). Faculty experiences of HyFlex: An exploratory study. *Educational Research: Theory and Practice, 34*(2), 43-47.

Cumming, T. M., Han, C., & Gilanyi, L. (2024). University student and instructor experiences with HyFlex learning: A scoping review. *Computers and Education Open*.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319-340.

Detyna, M., Pizani, R. S., Giampietro, V., Dommett, E. J., & Dyer, K. (2023). Hybrid flexible (HyFlex) teaching and learning: Climbing the mountain of implementation challenges for synchronous online and face-to-face seminars during a pandemic. *Learning Environments Research, 26*, 145–159. https://doi.org/10.1007/s10984-022-09408-y

Guppy, N., Verpoorten, D., Boud, D., Lin, L., Tai, J., & Bartolic, S. (2022). The post-COVID-19 future of digital learning in higher education: Views from educators, students, and other professionals in six countries. *British Journal of Educational Technology, 53*, 1750-1765

Kezar, A. (2001). Understanding and facilitating organizational change in the 21st century. *ASHE-ERIC Higher Education Report*.

Knowles, M. S. (1973). *The adult learner: A neglected species*. Gulf Publishing.

Lindqvist, M. H., Mozelius, P., Jaldemark, J., & Cleveland, I. M. (2024). Higher education transformation towards lifelong learning in a digital era – a scoping literature review, *International Journal of Lifelong Education, (43)*1, 24-38, https://doi.org/10.1080/02601370.2023.2279047

McCray, P.D, Rada, V., Szeszko, S.A., Clair, N.S., Vichcales, K.B. (2023). Perceptions of Online Strategies and Digital Readiness in the COVID-19 Environment: An Instrumental Case Study. *In: Guralnick, D., Auer, M.E., Poce, A. (eds) Creative Approaches to Technology-Enhanced Learning for the Workplace and Higher Education. TLIC 2023. Lecture Notes in Networks and Systems, vol 767. Springer, Cham*. https://doi.org/10.1007/978-3-031-41637-8_

Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed.). Jossey-Bass.

Nickerson, C. (2024). John Dewey on education: Impact & theory. *Simply Psychology*. https://www.simplypsychology.org/dewey.html

Noichun, N., Kaewrattanapat, N., Khaengkhan, M., Suwanajote, N., Nookhong, J., & Pintuma, S. (2024). Readiness for the hyflex instructional modality implementation. Conference: *The 2024 International Academic Multidisciplined Research Conference*, Hokkaido, Japan.

Penrod, J. (2022). Staying relevant: The importance of incorporating HyFlex learning into higher education strategy. *Educause Review*. https://er.educause.edu/articles/2022/3/staying-relevant-the-importance-of-incorporating-hyflex-learning-into-higher-education-strategy

Piaget, J. (1974). *To understand is to invent*. Viking Press.

Reeves, T. (2006). Design research from a technology perspective. In J. van den Akker, K. Gravemeijer, S. McKenney, & N. Nieveen (Eds.), *Educational design research*, 52-66. Routledge.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Samuel, J. (2021, July 26). *HyFlex learning community. Assessment efficiency and effectiveness.* https://www.hyflexlearning.org/2021/07/26/assessment-efficiency-and-effectiveness/

Stake, R. E. (1995, 2010). *Qualitative research: Studying how things work*. Guilford Press.

Sutton, J. (2024). Victor Vroom's expectancy theory of motivation. *Positive Psychology.com* https://positivepsychology.com/expectancy-theory/

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

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity.* Cambridge University Press. https://doi.org/10.1017/CBO9780511803932

Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report, 20*(2), 134-152. https://doi.org/10.46743/2160-3715/2015.2102

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). SAGE.

Creating Spaces for Professional Networking and Growth: A Collaborative Inquiry Project with Immigrant Women

Norma Mercado, Cheri L. Hatcher, and Clarena Larrotta
Texas State University

Abstract: This article describes a collaborative inquiry creating spaces for networking and learning for professional immigrant women. There were two implementation stages: (1) a pilot study to identify a meaningful research focus, and (2) the creation of a *Comadres Profesionales Summit*, a collaboration between community members and university researchers. The aim was to promote personal growth, social and human capital, and pathways for career advancement. Data collection included interviews, qualitative questionnaires, field notes, and videos. The collaborative inquiry cycle (framing the problem, collecting evidence, examining evidence, sharing, and celebrating learning) guided the writing of the study findings, which are presented through four themes: (a) desire to belong, (b) increased confidence, (c) aspirations and needed skills, and (d) future plans.

Keywords: Collaborative inquiry, immigrant women, professional women

As a border state with large industrial and technological cities (e.g., Austin, Dallas, Houston) attracting professional individuals, one-sixth of Texas's total population are immigrants (American Immigrant Council, 2020). Over a quarter (26%) of adult immigrants had a college degree or higher in 2018 (American Immigrant Council, 2020). Furthermore, 3.1 million immigrant workers comprised 22% of the labor force in 2018. They were most numerous in construction, manufacturing, health care and social assistance, accommodation and food services, and retail trade (American Immigrant Council, 2020). A recent report stated that immigrants comprise 21.4% of Texas's labor, accounting for 29.4% of entrepreneurs, 28.4% of STEM workers, and 20.3% of nurses in the state (American Immigration Council, 2022). With over 23 million female immigrants to the United States, immigrant women play a valuable role in U.S. society and the economy. Over one-third of them, aged 25 and older, have a bachelor's degree or more education. In Texas, immigrant women account for 49.9% of the immigrant population (American Immigrant Council, 2022).

However, many professional immigrant women lack opportunities to advance their careers and network with peers. Upon migration, they lack access to appropriate resources for employment equivalent to their professional skills and credentials. Professional downgrading, lack of economic resources, culturally established gender roles, and other challenges prevent professional immigrant women from advancing their careers (Adversario, 2021; Ward & Batalova, 2023). A study by Adversario (2021) described occupational downgrading of internationally trained immigrants in terms of underemployment, a shift in status, language barrier, feelings of discrimination, and lack of inspiration at the new job due to a mismatch in the professional skills and credentials required. Additionally, Batalova and Fix (2021) reported an increase of 70% in college-educated adults in Texas between 2010 and 2019. They found that in 2019, of the underemployed college-educated adults in Texas, over 20% were immigrants. Creating pathways to further the professional and work opportunities for immigrants and

internationally trained women, in particular, is a crucial need in the nation. As professional women and immigrants, we decided to explore these barriers further and collaborate with local community members. The focal research question is: How can a collaborative inquiry project promote personal growth and social and human capital development to support professional immigrant women desiring pathways for career advancement?

Methodology

A collaborative inquiry study was conducted in two stages: (1) a pilot study to identify a meaningful research focus and (2) creating *Comadres Profesionales*, a collaboration between community members and university researchers. The goal of the collaborative inquiry (CI) project was to promote personal growth, social and human capital, and pathways for career advancement. As stated by Donohoo and Velasco (2016), in a collaborative inquiry (CI), "the participants identify and articulate their own learning needs; they engage in learning to deepen professional knowledge and refine skills…" (p. 6). In other words, study participants and researchers work together to achieve an outcome, in this case, create a networking group (Comadres Profesionales) to promote pathways to the career advancement of immigrant women.

According to Donohoo (2013), the stages of CI include (1) framing the problem, (2) collecting evidence, (3) analyzing the evidence, and (4) sharing and celebrating new understandings. First, framing the problem includes determining a meaningful focus, developing an inquiry line, imagining desired results, and formulating action. Second, collecting evidence refers to the data collection and may include narrative data such as dialogue, storytelling, and fieldnotes. Third, analyzing the evidence requires meaning making and looking closely at the experience through systematic steps such as identifying codes, patterns, categories, and themes. Fourth, sharing and celebrating new understandings take place through dissemination activities such as publication and conference presentations. The collaborators also consider the next steps by identifying additional learning needs and reflecting on what they learned.

Framing the Problem
This stage of the collaborative inquiry took place during the implementation of the pilot study, which consisted of a needs assessment to determine the focus of the actual study being reported in this article. Thus, interviews and an online questionnaire with eight professional immigrant women revealed several barriers and challenges they faced upon arrival and during their adaptation/resettlement process in the United States. Lack of mentoring and resources for pursuing their career paths in the new country, lack of opportunities to improve their English language skills and develop new professional skills (leadership, advocacy, communication), and the need for less complicated, less expensive pathways to higher education.

Collecting Evidence
This stage took place during the pilot study (interviews and a questionnaire) as well as during the implementation of the actual study, focusing on the present article (field notes, videos, and a questionnaire). Data collection included interviews, two questionnaires, field notes, and videos. During the pilot study, fifteen (15) women volunteered to answer an online questionnaire to document their perspectives regarding professional opportunities for immigrant women. Eight (8) women also volunteered to be interviewed and share their immigration stories. In particular,

they reported on the challenges they faced while trying to advance their professional status as immigrants in the United States. Based on these findings, the second stage of the collaborative inquiry took shape. Thus, for the second stage of the CI, data sources included field notes, videos, and a questionnaire. The researchers took the field notes. The researchers recorded videos capturing participants' stories as well. Finally, after the event, 32 participants responded to a qualitative questionnaire to evaluate the activity and for the researchers to be able to document the participants' perceptions of the initiative.

Analyzing the Evidence
Ollerenshaw and Creswell (2002) suggest five steps when conducting narrative analysis. (1) Audiotape the interviews and transcribe them. (2) Read the transcript to get a sense of the data. (3) Color-code the transcripts, paying attention to the information about the individuals involved and the questions to be answered. Then, organize the information into a table to group the coded elements. (4) Look at the setting, problem, physical actions, reactions, thinking, intentions, and the characters' emotionally driven goals and resolution. (5) Sequence the events by following a process that makes sense to the study, in this case, the collaborative inquiry cycle (e.g., framing the problem, collecting evidence, examining evidence, sharing, and celebrating learning).

Findings

This section presents study findings addressing the question, "How can a collaborative inquiry project promote personal growth and social and human capital development to support professional immigrant women desiring pathways for career advancement?" Thus, the major themes to discuss study findings are (a) Desire to belong, (b) increased confidence, (c) aspirations and needed skills, and (d) future plans.

Desire to Belong
This theme refers to the women's explicit need and desire to belong to a group of like-minded individuals working towards a common goal, their career advancement as professional immigrant women. Thirty-four women attended the event, which indicated a strong interest in this networking opportunity. They drove to San Marcos from other cities in Texas, such as San Antonio, Austin, and Houston. a participant reported: "The immigrant experience is not defined by nationality, culture, or even language differences. It is similar in terms of the struggles and successes." Responses from the onsite questionnaire revealed that most women needed a place and a group to belong to and connect with. One participant stated: "I want to be able to reinvent myself in the USA, my new home, and to learn from other women. I want to leave my fears away and be able to fulfill my professional dreams." Another wrote: "Getting to know other women in the same situation as me, who made it and now work here, has been inspirational. I hoped to network, create understanding, and meet people."

Increased Confidence
This theme reflects how occupational downgrading and other challenges to advance their profession can have on professional immigrant women's level of confidence as well the beneficial effect of participation in the collaborative inquiry. A key participant, Martha (pseudonym), embodied a clear example of gained confidence. Someone had snapped a photo of her as she was helping set up before the summit began. She had a broad smile like that of Lewis

Carroll's Cheshire Cat in Alice in Wonderland; her head was high, she walked confidently with her shoulders back, and she almost seemed to float in the photo. This was new posturing from Martha; when she first joined the group, she seemed to make herself small, sitting with her shoulders forward and holding her head slightly down, often averting steady eye contact. However, the photo did not represent the same person. The version of Martha in the photo was confident and proud.

One participant explained she was a school teacher in Mexico but worked at a local hotel cleaning hotel rooms. She spoke very little English, although she was enrolled in literacy classes. The summit provided English/Spanish translation through audio headphones for the portions delivered in English. Also, one activity was conducted entirely in Spanish. Without the delay of a translator, the school teacher found the courage to participate more fully. When asked for volunteers to share their stories with the larger group, she quickly raised her hand, took the microphone, and shared her immigration story in Spanish. As we cleaned up the room, two more women speaking in Spanish offered to make food for the next summit. One of them explained she had experience as a caterer in her country and offered to prepare the food for the summit at an affordable cost.

Aspirations and Needed Skills
This theme represents the different ideas and new initiatives to create educational pathways to support the group's aspirations to overcome challenges and continue the work supporting a larger group of professional immigrant women. The future planning included expanding the program into neighboring cities and towns and applying for additional grant funding to support the creation of a 501c3, Texas-based non-profit. The non-profit would serve internationally trained professional women through formal education and non-formal approaches. As a nonprofit, *Comadres Professionales* aims to help professional migrant Latina women achieve their career aspirations. Comadres Profesionales will create two new educational pathways for the target population, situated in formal and nonformal learning.

The first is a pathway situated toward formal learning. The plan is to offer microgrants to professional migrant women to help remove the financial barriers of transcribing their international transcripts, which can cost between $300-$500. The second is a pathway toward non-formal education through a leadership program offering new or complementary skill attainment to pursue their career aspirations. Comadres Profesionales is creating an iterative leadership program, offering professional migrant women an opportunity to acquire new or complementary skills covering (1) Advocacy and campaigning, (2) organizing and mobilizing, (3) media, public speaking, and messaging, (4) social media and digital communication/literacy, (5) facilitation and event management, and (6) leadership and network weaving. This program intends to inspire the target population to become community experts through an iterative process. In contrast, each new cohort trains the next generation of Comadres Profesionales, calling it "Comadre to Madrina." As we have outlined previously, the linguistic and cultural context of Comadre is a close friend or nearest a sister without being a sister. However, Madrina is a figure offering wisdom, guidance, role modeling, and support - nearest to a mother figure without being the mother.

Future Plans, from Comadres to Madrinas

This theme refers to the women's goals for the future and ideas for continuation and sustainability of the Comadres Professionales Group by becoming active participants who will mentor other immigrant women. Several participants expressed a strong interest in mentoring other professional immigrant women, hoping to support and guide them on their own journeys. Transitioning from a "comadre" to a "madrina" represents a shift from being a supportive peer to becoming an active mentor and guide. The dynamic between comadres and madrinas ensures that the supportive network continues to grow and thrive, creating a professional culture where women uplift and advocate for each other. This fosters a sense of leadership, solidarity, and inclusivity, ultimately empowering more women to succeed.

Sharing and Celebrating New Understandings
The need to continue the work and become agents of change became evident. The transition from "comadre" to "madrina" is about moving from words of encouragement to tangible actions that empower other professional women to achieve their full potential. As a "comadre," the relationship starts with mutual support, sharing experiences, and offering encouragement. This phase is about creating a bond of trust and understanding, where both parties feel comfortable discussing their challenges and aspirations. The transition to "madrina" begins when a "comadre" recognizes the potential in another woman who could benefit from her guidance. This involves discussing career goals, identifying skills that need development, exploring growth opportunities, and sharing professional networks. A "madrina" helps set clear, achievable goals and offers regular check-ins to provide accountability and support. This involves giving advice and actively helping the other woman navigate challenges and stay focused on her objectives. A "madrina" supports her peers' progress, celebrates her successes, and encourages her to become a mentor to others. The ultimate goal is to become independent, confident, and ready to take on a mentorship role, continuing the cycle of support within the community.

Discussion

This study set out to understand how a collaborative inquiry project can promote personal growth and social and human capital development to support professional immigrant women desiring pathways for career advancement. Using the research question as a guide, the study uncovered four significant themes that have been presented as study findings and include (a) desire to belong, (b) increased confidence, (c) aspirations and needed skills, and (d) future plans. The summit was a much-needed initiative and received an overwhelming response, with more than 34 women in attendance. The women showed confidence in retaking pathways to participation in their professional fields. This confidence was also manifested personally, realizing they have many talents and the capacity to overcome social and personal barriers. Many expressed that hearing the stories of others in similar situations gave them a sense of belonging and hope. The resilience and determination of professional immigrant women inspire other women to pursue their goals despite their challenges.

The collaborative project's implementation made it evident that the participants needed to transcend their current state of isolation to connect with others and act. Becoming *Madrinas* for other professional women going through similar experiences was identified as part of their plans to support others in their path toward professional advancement. In the literature, Lopez (1999) writes about *comadres* as a social support system, and Comas-Diaz (2013) describes the healing

power of this female bond. Creating a space where comadres can share their experiences and support each other as madrinas highlights a powerful transition into becoming active participants and agents of change. This shift moves from a collaborative partnership among mentors, as comadres, to a more nurturing and guiding role as madrinas. While comadres represent equals working together, madrina embodies someone who takes on a mentoring, supportive, and empowering role. As Comas-Díaz (2013) explains, comadres help other women empower themselves. This collaborative environment promotes learning, networking, and resilience.

Study findings also relate to women's ways of knowing. Mackeracher (2004) describes ways of knowing as "the importance of voice in learning and knowing as a reflection of the individual's self-concept and self-esteem, the importance of personal experience in knowing, different sources of knowledge, the nature of connected and separate procedures in learning, the need to keep passion connected to knowledge, and the experience of feeling silenced and disempowered" (pp. 156-157). In this case, voice can refer to the professional immigrant women's ability to reflect on their self-concept and held values and their ability to speak up and be heard to communicate their needs for career advancement and professional growth.

References

Adversario, J. (2021). Adult immigrant journeys: Occupational downgrading and continuously evolving selves. *Adult Learning, 32*(1), 5-16.

American Immigrant Council. (2020). *Immigrants in Texas.* Retrieved from https://www.americanimmigrationcouncil.org/sites/default/files/research/immigrants_in_texas.pdf

American Immigration Council. (2022). *New research shows Texas immigrants accounted for over 20 percent of workforce across several leading industries.* Retrieved from https://www.americanimmigrationcouncil.org/news/research-texas-immigrant-workforce

Batalova, J., & Fix, M. (2021). Leaving money on the table: The persistence of brain waste among college-educated immigrants. *Migration Policy Institute.*

Comas-Diaz, L. (2013). Comadres: The healing power of a female bond. *Women & Therapy*, *36*(1-2), 62-75.

Donohoo, J. (2013). Collaborative inquiry for educators: A facilitator's guide to school improvement. Corwin.

Donohoo, J., & Velasco, M. (2016). *The transformative power of collaborative inquiry: realizing change in schools and classrooms*. Corwin.

Lopez, R. A. (1999). Las comadres as a social support system. *Affilia*, *14*(1), 24-41.

Mackeracher, D. (2004). *Making sense of adult learning (2nd ed.).* University of Toronto Press.

Ollerenshaw, J. A., & Creswell, J. W. (2002). Narrative research: A comparison of two restorying data analysis approaches. *Qualitative inquiry*, *8*(3), 329-347.

Ward, N., & Batalova, J. (2023). Frequently requested statistics on immigrants and immigration in the United States. Migration Policy Institute. Retrieved from www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-immigration-united-states-202

Approaching First-Year College Students as Adult Learners: Investigating First-Year Seminar Instructors' Classroom Environments and Philosophies

Andrew E. Parzyck
Kansas State University

Abstract: This study explores how first-year seminar (FYS) instructors at four-year institutions in New England create meaningful adult learning environments for traditional-aged college students and apply adult learning principles. The research examines classroom practices and teaching philosophies using qualitative methods grounded in andragogy and psychological learning environments. Findings reveal that instructors emphasize motivation, prior experiences, trust, respect, enthusiasm, and empathy, reflecting a humanistic teaching approach. The study highlights valuable insights into bridging adult learning and student development, fostering collaboration and innovation in higher education pedagogy.

Keywords: adult learner, andragogy, college freshmen, first-year seminar (FYS), instructor

First-Year Seminar (FYS) instructors play a vital role in helping students transition to college by providing academic guidance and fostering personal growth. Coming from diverse professional backgrounds, including faculty, graduate teaching assistants, and student affairs professionals, these instructors bring unique perspectives that shape classroom environments and student outcomes (Murry & Wolf, 2016; Scanlon & Dvorak, 2019). While positive teaching philosophies foster inclusivity, motivation, and engagement, limited research has examined how instructors perceive traditional-age college students as adult learners or how they apply adult learning principles when working with this population (Meyers et al., 2019). This study examines how FYS instructors incorporate andragogical principles, such as self-directed learning, leveraging prior experiences, and collaborative approaches (Knowles, 1970, 1973, 1978, 1980). The research aims to offer actionable insights to enhance teaching practices, foster supportive learning environments, and promote student success. This paper will review the relevant literature, outline the research design, present findings, discuss implications for future practice, and conclude with a comprehensive summary of the study's contributions.

Background

The FYS Instructor
FYS instructors play a crucial role in helping students transition to college by offering academic support, fostering personal growth, and addressing academic and personal challenges (Murry & Wolf, 2016). These instructors come from diverse backgrounds, including faculty, adjuncts, graduate teaching assistants, and student affairs professionals, each contributing unique expertise to meet institutional goals and student needs (Scanlon & Dvorak, 2019; Swank & Whitton, 2019). Faculty provide academic rigor (Fidler et al., 1999) and can offer holistic support (Murry & Wolf, 2016; Scanlon & Dvorak, 2019). Instructors' attitudes and expectations shape classroom environments, with positive attitudes and high expectations fostering inclusivity, motivation, and

student success, while low expectations can hinder growth (Meyers et al., 2019). However, limited research exists on how these instructors view their traditional-aged students as adult learners or apply adult learning principles. Exploring this perspective could improve teaching practices and enhance the effectiveness of FYS.

Andragogy
Andragogy, introduced by Alexander Kapp in 1833 and further developed by Malcolm Knowles, emphasizes the unique needs of adult learners, focusing on self-direction, the integration of life experiences, and task-oriented, collaborative approaches (Loeng, 2017; Merriam & Baumgartner, 2020; Peterson & Ray, 2013). Unlike pedagogy's teacher-centered focus, andragogy prioritizes autonomy and relevance in learning clarity (Merriam & Baumgartner, 2020; Tennant & Pogson, 1995). Despite critiques about its empirical foundation, andragogy remains influential in adult education worldwide, shaping programs to align with learners' intrinsic motivations and readiness to learn (Knowles, 1970, 1973, 1978, 1980; Merriam & Baumgartner, 2020). In higher education, applying andragogical principles—such as practical, hands-on learning, collaboration, and personalized approaches—has increased motivation and deepened learning, although traditional college structures can present challenges (Allen et al., 2016). Communication is central to this approach, fostering dialogue, clear expectations, and active engagement (Moore & Shemberger, 2019).

Instructor Qualities for Teaching Adults in a Classroom Environment
Effective adult educators create positive learning environments by fostering trust, empathy, authenticity, confidence, humility, enthusiasm, and respect, as summarized in Brockett's (2015) TEACHER acronym. Trust and empathy build a supportive foundation, encouraging open communication, collaboration, and inclusivity, qualities that enhance student engagement and success (Brockett, 2015; Merriam & Bierema, 2014). Authenticity fosters genuine connections and mutual respect, creating a safe space for intellectual exploration, while confidence (Brockett, 2015; Brookfield, 2017), balanced by humility, inspires trust and collaboration (Brockett, 2015; Wlodkowski & Ginsberg, 2017). Enthusiasm (Brockett, 2015; Wlodkowski & Ginsberg, 2017) energizes the classroom, sparking curiosity, and respect for diverse perspectives nurtures a culture of intellectual growth (Brockett, 2015; Brookfield, 2017; Wlodkowski & Ginsberg, 2017). These qualities collectively empower students, promote engagement, and support meaningful, transformative learning experiences.

Research Design

This study utilized a basic qualitative research design (Merriam & Tisdell, 2016) to explore how FYS instructors integrate adult learning principles into their teaching. Two research questions guided this investigation: (a) If they do so in any way, how do FYS instructors craft their classroom learning environment to align with strategies for teaching adult learners? (b) How do FYS instructors' philosophy of teaching align with established learning principles? It examined how instructors craft learning environments and aligned their teaching philosophies with strategies for adult learners. Data collection involved (a) interviews, (b) observations, and (c) document analysis. The data were analyzed through three coding cycles: (a) provisional, (b) pattern, and (c) thematic. This qualitative study had 12 FYS instructors who participated. The instructors held a master's degree or higher and had at least two years of experience teaching

FYS courses at a four-year university in the New England region of the United States. To protect participants' identities, the names of the universities were not disclosed, and all participants were assigned gender-neutral names, ensuring confidentiality while capturing in-depth perspectives from experienced instructors.

Findings

The findings section highlights how FYS instructors design their classroom environments and teaching philosophies to align with adult learning principles. Key themes that emerged include respect, enthusiasm, empathy, trust, and the integration of prior experience. The study explored how FYS instructors crafted their classroom environments to align with strategies for teaching adult learners. Three central themes emerged from the data: respect, enthusiasm, and empathy.

Respect
Respect was a foundational element, demonstrated by instructors' attentiveness to students' diverse needs and developmental stages. Participants emphasized addressing students as adults, avoiding condescending language, and creating a non-judgmental environment. Observations revealed respectful practices such as privately addressing sensitive matters and welcoming late arrivals without public reprimand. Syllabi also reflected respect through policies that encouraged participation and accountability while fostering a supportive tone.

Enthusiasm
Enthusiasm played a significant role in creating positive classroom dynamics. Instructors exhibited passion for their teaching and sought to maintain student interest through varied methods like using guest speakers and interactive activities. Observations highlighted how instructors celebrated students' achievements and used creative approaches, such as playing music or sharing motivational quotes, to energize the classroom. These practices cultivated a sense of excitement and motivation among students.

Empathy
Empathy emerged as a critical theme, with instructors acknowledging students' challenges and offering flexibility and understanding. They provided space for students to reflect, revise assignments, and manage time effectively. Syllabi and classroom practices emphasized a commitment to students' well-being and success, reinforcing the importance of emotional support. Instructors' willingness to accommodate personal and health-related needs further demonstrated their empathetic approach, creating a compassionate learning environment for first-year students.

Teaching Philosophy
The study's second research question explored how FYS instructors' teaching philosophies align with established adult learning principles, focusing on the themes of trust and the importance of understanding of prior knowledge. These themes emerged as the most important, as participants not only emphasized their importance but also provided meaningful examples to support their justifications.

Trust

Trust emerged as a foundational element of humanistic educational philosophy, promoting student autonomy, self-awareness, and personal growth. Participants demonstrated trust by fostering open communication, transparency, and respect in their classrooms, creating an environment where students felt valued and empowered to take ownership of their learning. This trust was also evident in policies and practices that emphasized student accountability and responsibility, such as attendance guidelines that mirrored real-world professional expectations. Instructors highlighted trust as integral to their teaching approaches, reflecting it in classroom policies and interactions. Observations further revealed instructors' trust in students' capabilities, such as encouraging them to refer to the syllabus for answers or complete assignments independently without detailed guidance.

Prior Experience
The concept of prior experience also emerged as a critical element, aligning with andragogy (Knowles, 1970, 1973, 1978, 1980). Instructors emphasized helping students make sense of their experiences, particularly as they navigated the transition to college. Participants highlighted the importance of reflection and autonomy, such as through journaling assignments and open-ended prompts that encouraged students to explore topics relevant to their lives. This process allowed students to engage critically with material, develop their sense of agency, and recognize their role in shaping their educational journey. Teaching philosophies reinforced the transformative power of education. Observations revealed instructors consistently challenging students' thoughts and encouraging them to apply prior knowledge, fostering a deeper understanding of course material and its relevance to broader life contexts.

Discussion

The study explored how FYS instructors employ key qualities to create effective learning environments for adult learners, guided by (a) andragogy (Knowles, 1970, 1973, 1978, 1980) and (b) Brockett's (2015) TEACHER acronym, which outlines seven essential attributes: trust, empathy, authenticity, confidence, humility, enthusiasm, and respect. These attributes, rooted in adult education principles, help foster meaningful teacher-student relationships, promote engagement, and create supportive classrooms.

Trust emerged as a fundamental component, with instructors creating safe, supportive spaces where students could freely express themselves. Through verbal encouragement, flexible classroom policies, and assignments emphasizing self-trust, instructors fostered mutual respect and empowered students to engage confidently in discussions and collaborative activities. Classroom observations revealed that trust encouraged active student participation with minimal prompting, contributing to a dynamic learning environment.

Instructors also demonstrated empathy by recognizing and addressing students' emotions, challenges, and individual needs. This empathetic approach included providing flexibility in assignments, supporting time management, and accommodating personal circumstances. By creating inclusive spaces where students felt safe to share their thoughts without fear of judgment, instructors reinforced their commitment to students' success and well-being.

Enthusiasm played a pivotal role in motivating students and fostering engagement. Instructors

expressed passion for their subject matter and students' development, incorporating dynamic teaching strategies such as guest speakers, thoughtfully designed assignments, and motivational elements like inspirational quotes. This enthusiasm not only inspired students but also cultivated an environment conducive to creativity and critical thinking, as supported by previous research linking instructor enthusiasm to increased student engagement.

The quality of respect was evident in instructors' teaching practices and interactions. By valuing and validating students' perspectives, acknowledging their diverse backgrounds, and aligning assignments with learning objectives, instructors fostered inclusivity and mutual appreciation. Respect was further demonstrated through classroom policies and practices that prioritized students' needs while promoting accountability and participation.

Andragogy (Knowles, 1970, 1973, 1978, 1980) emphasizes that adults learn best when they connect new information to their existing knowledge and experiences, as these form the foundation for their learning, perspectives, and problem-solving abilities. FYS instructors recognized this principle and actively encouraged students to draw upon and celebrate their prior experiences through class discussions, journal reflections, and revisiting significant life moments. This personalized approach enhances students' success by making learning relevant and applicable to real-world contexts.

Finally, motivation emerged as a key theme intertwined with enthusiasm. Instructors employed engaging activities, dynamic teaching methods, and communal strategies like music to inspire students' curiosity and participation. These approaches supported the intrinsic motivation of students, aligning with adult learning principles that emphasize relevance, collaboration, and the pursuit of personal growth and achievement.

Implications for Practice
This study examined whether FYS instructors treat students as adult learners and proposed practical faculty development initiatives based on the findings. It recommends incorporating seminars on andragogy and learning environments into professional development programs, focusing on actionable strategies rather than theoretical concepts. Faculty development in the practice of andragogy can help instructors integrate such adult learning principles as fostering motivation, leveraging students' prior experiences, encouraging self-directed learning, and designing collaborative, inclusive courses. Additionally, seminars on learning environments should emphasize Brockett's (2105) TEACHER attributes—trust, empathy, enthusiasm, and respect—while also addressing authenticity, confidence, and humility to create supportive and engaging classrooms. By adopting these frameworks, institutions can empower instructors to enhance first-year students' transitions to higher education, fostering meaningful and relevant learning experiences that promote academic growth and engagement.

Conclusion

This study explored how FYS instructors at four-year institutions in New England construct adult-like learning environments, revealing a strong emphasis on motivation, prior knowledge, trust, respect, enthusiasm, and empathy—principles rooted in andragogy and Brockett's Psychological Learning Environment (2015). The findings indicate that instructors adopt a

humanistic approach, treating students as adult learners and prioritizing their academic and personal growth. By integrating adult learning principles, the FYS addresses the unique needs of first-year students and enhances educational outcomes. The research highlights the need for further study to support instructors in applying adult learning theories to their teaching practices. Additionally, this work bridges adult learning and student development, encouraging collaboration to improve educational experiences for diverse learners in higher education.

References

Allen, P., Withey, P., Lawton, D., & Aquino, C. T. (2016). Andragogical teaching methods to enhance nontraditional student classroom engagement. *I-Manager's Journal of Educational Technology, 13*(2), 47-59.

Brockett, R. G. (2015). *Teaching adults: A practical guide for new teachers.* Jossey-Bass.

Brookfield, S. D. (2017). *Becoming a critically reflective teacher* (2nd ed.). Jossey-Bass.

Fidler, P. P., Neururer-Rotholz, J., Richardson, S. (1999). Teaching the freshmen seminar: Its effectiveness in promoting faculty development. *Journal of The First-Year Experience, 11*(2), 59-74.

Knowles, M. S. (1970). *The modern practice of adult education: Andragogy versus pedagogy*. Association Press.

Knowles, M. S. (1973). *The adult learner: A neglected species*. Gulf Publishing Company.

Knowles, M. S. (1978). *The adult learner: A neglected species* (2nd ed.). Gulf Publishing Company.

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy. revised and updated*. Cambridge.

Loeng, S. (2017). Alexander Kapp—The first known user of the andragogy concept. *International Journal of Lifelong Education*, *36*(6), 629–643. https://doi.org/10.1080/02601370.2017.1363826

Merriam, S. B., & Baumgartner, L. M. (2020). *Learning in adulthood: A comprehensive guide* (4th ed.). Jossey-Bass.

Merriam, S. B., & Bierema, L. L. (2014). *Adult learning: Linking theory and practice.* Jossey-Bass.

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

Meyers, S., Rowell, K., Wells, M., & Smith, B. C. (2019). Teacher empathy: A model of empathy for teaching for student success. *College Teaching*, *67*(3), 160–168. https://doi.org/10.1080/87567555.2019.1579699

Moore, K., & Shemberger, M. (2019). Mass communication andragogy for teaching online adult learners. *Teaching Journalism & Mass Communication*, *9*(1), 35–40.

Murry, J. & Wolf, P. (2016). Faculty experience teaching in an interdisciplinary first-year seminar program: The case of the University of Guelph. *The Canadian Journal for the Scholarship of Teaching and Learning 7*(1), 1-19. https://doi.org/10.5206/chsotl-rcacea.20160.1.4

Peterson, C. M., & Ray, C. M. (2013). Andragogy and metagogy: The evolution of neologisms. *Journal of Adult Education, 42*(2), 80-85.

Scanlon, M. & Dvorak, K. (2019). Introduction to the special section: The importance of faculty development programs for teaching first-year seminar courses. *The Journal of Faculty Development, 33*(2), 5-10.

Swank, L. & Whitton, N. (2019). Providing structure, building community, and closing the loop: Faculty development in FYE courses. *The Journal of Faculty Development, 33*(3), 7-12.

Tennant, M., & Pogson, P. (1995). *Learning and change in the adult years: A developmental perspective*. Jossey-Bass.

Wlodkowski, R. J., & Ginsberg, M. B. (2017). *A comprehensive guide for teaching all adults: Enhancing adult motivation to learn.* Jossey-Bass.

Reframing Conflict Perceptions by Making Thinking Visible

Julie Rigsby
Trevecca Nazarene University

Abstract: The study examined how the process of studying various conflict resolution methods affected students' perceptions of conflict. The study employed a qualitative thematic analysis of weekly reflection assignments to capture shifts in students' perspectives on conflict. Findings revealed significant shifts in students' perceptions of conflict from viewing it as inherently negative to recognizing its potential as a catalyst for growth and change. These results underscore the value of reflective practices in leadership education and have implications for conflict management pedagogy, leadership development, and organizational behavior.

Keywords: conflict, structured reflection, leadership education, metacognition, adult education

Conflict is inherent in human interaction, yet its perception and management can significantly impact personal, professional, and societal outcomes (Runde & Flanagan, 2012). This study explores the effect of conflict resolution strategies in shaping students' approaches to conflict. By examining weekly reflections from undergraduate participants, this research investigates the shifts in thinking patterns as students develop critical conflict management skills. Recent literature emphasizes the importance of experiential learning and reflective practices in adult education (Chen, 2014; Chi & Wylie, 2014; Knowles et al., 2005). This study builds upon this foundation by integrating cognitive learning theories in conflict management education. By understanding how students' perspectives on conflict evolve through structured reflection and active learning, educators and practitioners can design more effective instruction to promote constructive conflict resolution skills in various contexts.

Background

Cognitive learning theory has changed our understanding of how individuals acquire, process, and retain knowledge. This review focuses on three aspects of cognitive learning theory: active processing, schema theory, and metacognition.

Active Processing

Active processing theory suggests that learning is not a passive reception of information but rather an engaged, constructive process. Chi and Wylie's (2014) work demonstrated that students learn more effectively when they actively engage with material rather than passively receive it. This theory aligns with Knowles et al.'s (2005) principles of andragogy, which emphasize the importance of self-directed learning and active engagement for adult learners. Chen (2014) noted that nontraditional adult students benefited from active learning approaches that acknowledge their life experiences and prior knowledge. This finding is supported by Livingston and Cummings-Clay's (2023) research on advancing adult learning through instructional practices

that acknowledge the unique challenges of adult learners. Their work underscores the importance of experiential and problem-centered learning approaches.

Schema Theory and Knowledge Construction

Schema theory, originally proposed by Bartlett (1932), explained how knowledge is organized and stored in long-term memory. Piaget's work on cognitive development introduced the fundamental concepts of schemas as mental frameworks through which individuals understand and interact with their environment (Flavell & Piaget, 1963). His theory discussed how schemas develop through processes of incorporating new information into existing schemas and modifying existing schemas to fit new information (Müller et al., 2015). Recent research has improved our understanding of how schemas grow and change. Sweller's (2020) study on cognitive load theory explained that learning to acquire and automate schemas is crucial for handling complex tasks. This finding is particularly relevant for adult learners, who come with a wealth of life experiences that shape their complex schemas and affect how they learn (Knowles et al., 2005). Chang (2019) contributed valuable insights into how reflection supports schema development, demonstrating that reflective learning practices help learners integrate new information with existing knowledge structures. This process is important in adult education, where learners must evaluate new learning against established beliefs and experiences.

Metacognition and Reflective Practice

Metacognition, or "what we know about what we know," is an indispensable skill in effective learning as it allows individuals to actively monitor, evaluate, and regulate their own cognitive processes (Halpern, 1998, p. 454). Flavell's (1979) work conceptualized metacognition as consisting of both knowledge about cognition and regulation of cognition. This framework has been extensively validated and expanded by subsequent research. Studies have consistently demonstrated the positive effects of metacognition on learning outcomes. For instance, Veenman et al. (2006) found that metacognitive skills contributed to learning performance independent of intellectual ability.

Prompting students to identify and correct misconceptions in beliefs and correct errors in problem-solving methods is crucial to the learning process. Critical reflection goes a step further, challenging the fundamental assumptions or schema upon which our beliefs are constructed (Livingston & Cummings-Clay, 2023; Mezirow, 1990). This type of reflection provides opportunities for students to use a critical approach to apply newly acquired knowledge and create new understanding. Yost et al. (2000) examined the role of critical reflection in developing metacognitive skills and discovered that structured reflective practices strengthen metacognitive awareness. Chang (2019) found structured reflections as a useful tool for promoting and documenting students' metacognitive development. Ritchhart et al. (2011) provided practical strategies for promoting metacognitive awareness and development. Their work emphasized the importance of creating opportunities for students to observe and reflect on their thinking processes.

Integration and Educational Implications

The interactions between active processing, schema theory, and metacognition create a framework for understanding learning across different contexts and age groups. Chen (2014) demonstrated how these components work together particularly well in adult learning environments, where learners' extensive life experiences can be incorporated through reflective and active learning strategies.

The research literature supports the significance of active processing, schema theory, and metacognition in adult education contexts. Recent works from scholars focusing on adult learning and reflection have contributed to our understanding of how these processes operate in different educational settings.

Methodology

The researcher used a qualitative design to code the common themes found in a weekly reflection assignment in six-week asynchronous online undergraduate course that was offered three times in 2023 (Braun & Clarke, 2006). The nature of this research exclusively involved the analysis of extant data from the course. The data under analysis consisted of weekly reflection prompts that were assigned in the course curriculum and were collected as a component of the educational process, not initially intended for research. This approach adhered to ethical guidelines for research involving the analysis of existing data where participants were not directly engaged by the research activities.

Participants were undergraduate students who engaged in weekly learning activities in a course on conflict management. The data source was the students' written responses to weekly reflection at the end of each week of the six-week course. The prompts asked students to complete the following sentences three times: "When I think about conflict, I used to think___, but now I think ___. My thinking changed because ____." This reflection strategy provided insights in the changes in thinking that occurred due to the engagement with the course content. The primary researcher retrieved the assignment files from the learning management system and removed all personal information from each document. Student reflections were coded by the researcher and another faculty member using an inductive thematic analysis to identify patterns, shifts, and developments in their thinking throughout the course. The data analysis illuminated changes in perceptions around conflict, awareness of multiple approaches to conflict, and the application of learned concepts to new situations. The responses to how the thinking changed were grouped into categories. When no new themes emerged after coding the responses from three course sections, it was confirmed that saturation was achieved. Final themes were reviewed by a peer faculty member uninvolved in the study to challenge assumptions and ensure coherence.

Major Themes

This analysis unveiled several significant themes that denoted changes in thinking following each week of instruction on cognitive strategies for dealing with conflict, as outlined by Runde & Flanagan (2012).

Evolving Perspectives on Conflict

Students demonstrated a marked shift in their perception of conflict. Initially viewing conflict as inherently negative, many transitioned to recognizing its potential for positive outcomes. One student noted, "I transitioned from thinking that all conflicts should be resolved to understanding that agreeing to disagree can sometimes be a viable approach." This change in perspective was accompanied by a growing appreciation for the importance of conflict resolution, with students suggesting that conflicts, when addressed properly, could lead to improvements and solutions. Furthermore, students began to view conflicts as valuable learning opportunities. They transitioned from seeing conflicts as unnecessary to understanding them as sources of insight into different perspectives and experiences. Another student mentioned, "I thought "conflict" was completely negative. Now I can see that conflict is a tool that, when used correctly, can bring about positive changes in many situations. Not all conflict situations are bad and positive outcomes are possible when people engage in conversations regarding the conflict."

Conflict Resolution Strategies and Skills

The analysis revealed that students increasingly acknowledged the role of self-reflection and personal growth in handling conflicts. They developed a more nuanced understanding of conflict responses, distinguishing between constructive and destructive approaches (Runde & Flanagan, 2012). This growth was also evident in students' increased confidence in addressing conflicts. As one student remarked, "I shifted from thinking that staying silent is an avoidance strategy to realizing that remaining silent can be counterproductive, and it's important to speak up in conflicts." Students showed significant progress in understanding and applying conflict resolution strategies. They embraced the concept of productive conflict, which involves open communication and mutual respect. As one student stated, "Now I think all conflict can be handled if we practice listening for understanding and empathy." The importance of effective listening and communication in conflict resolution became increasingly apparent in the responses throughout the course.

Leadership and Team Dynamics in Conflict Resolution

A notable shift occurred in students' perspectives on leadership and team dynamics in conflict resolution. They transitioned from viewing conflict resolution as primarily an individual responsibility to recognizing the importance of team-based approaches. Students also developed an understanding of conflict resolution as a crucial leadership skill, acknowledging the need for leaders to model effective conflict resolution techniques for their teams (Runde & Flanagan, 2012). A student reflected by saying,

> When I consider conflict, I used to think that I should stay out of other people's conflicts and let them work out their differences together. I thought I would just be interfering and possibly make things worse. But now I understand that as a Christian leader, it is not only important, but many times necessary for me to assist others in resolving their differences. Often, people in conflict just need someone to listen, to help them breathe, and to act as a middle voice of reason during conflict with another.

The research findings indicate that students gained a more sophisticated understanding of conflict in professional settings. They recognized the value of diverse perspectives within teams and the importance of healthy disagreement. As one student reflected,

When I consider conflict and change, I used to think all conflict was negative, but now I think differing views can be acknowledged and resolved in a constructive way. Healthy conflict is a collaborative process that leads to a resolution. It benefits the organization by improving performance and building morale among team members.

Conflict as an Opportunity for Change

Perhaps most significantly, students came to view conflict as a catalyst for change and transformation. They shifted from seeing conflict as an obstacle to understanding its potential for driving positive change. As one student said, "I shifted from thinking only bad things can happen to understanding that nothing will change if we don't have competition."

The research findings demonstrate an evolution in students' understanding and approach to conflict throughout the course. Students developed positive perspectives on conflict, recognizing its value in personal growth, team dynamics, and organizational change.

Discussion

These findings underscore the relationship between reflection and learning, as the course fostered an understanding of conflict resolution strategies. To cultivate metacognitive skills, students were required to document their thinking to see shifts in their understanding. While emphasizing critical thinking and metacognitive skills, students developed more nuanced, positive, and productive perspectives on conflict. These findings reiterate the importance of integrating reflective practices in conflict management education as they provide an avenue for students to actively engage with the content rather than passively receiving it. The results of this research have implications for educators and trainers in the areas of conflict management, leadership development, and organizational leadership.

Educators can integrate structured reflective exercises into conflict management courses to build students' critical thinking and metacognitive skills. For example, weekly reflective journaling might prompt students to analyze a recent conflict, identify their assumptions, and evaluate their resolution strategies, fostering self-awareness and adaptive thinking. Additionally, in-class activities like guided debriefs after role-playing exercises—where students articulate what worked, what did not work, and why—can deepen their understanding of conflict dynamics.

This study's emphasis on reflection and critical thinking has clear implications for leadership development programs. Trainers could adapt the approach by incorporating reflection into sessions where participants resolve simulated team conflicts and then journal how their decisions align with conflict management theory (e.g., TKI). A module might involve mediating a disagreement between team members, followed by a structured discussion or written exercise analyzing how self-awareness influenced their conflict response.

These recommendations offer practical strategies to incorporate reflective practices into conflict management education. By utilizing these strategies, educators and trainers enable students to leverage conflict as an opportunity for personal growth and to develop leadership competency.

References

Bartlett, F. C. (1932). *Remembering: A study in experimental and social psychology.* Cambridge University Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Chang, B. (2019). Reflection in learning. *Online Learning, 23*(1), 95-110. http://doi.org/10.24059/olj.v23i1.1447

Chen, J. C. (2014). Teaching nontraditional adult students: Adult learning theories in practice. *Teaching in Higher Education*, *19*(4), 406–418.

Chi, M. T., & Wylie, R. (2014). The ICAP framework: Linking cognitive engagement to active learning outcomes. *Educational Psychologist*, *49*(4), 219-243.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist, 34*(10), 906-911.

Flavell, J. H., & Piaget, J. (1963). *The developmental psychology of Jean Piaget*. Van Nostrand.

Halpern, D. F. (1998). Teaching critical thinking for transfer across domains: Disposition, skills, structure training, and metacognitive monitoring. *American Psychologist, 53*(4), 449–455. https://doi.org/10.1037/0003-066X.53.4.449

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2005). *The adult learner: The definitive classic in adult education and human resource development* (6th edition). Elsevier. http://site.ebrary.com/id/10127916

Livingston, M., & Cummings-Clay, D. (2023). Advancing adult learning using andragogic instructional practices. *International Journal of Multidisciplinary Perspectives in Higher Education, 8*(1), 29+. https://link-gale-com.trevecca.idm.oclc.org/apps/doc/A746559694/GIC?u=tel_a_tnu&sid=bookmark-GIC&xid=7918d554

Mezirow, J. (1990). *Fostering critical reflection in adulthood*. Jossey-Bass.

Müller, U., Ten Eycke, K., Baker, L. (2015). Piaget's theory of intelligence. In: Goldstein, S., Princiotta, D., Naglieri, J. (eds) *Handbook of intelligence*. Springerhttps://doi.org/10.1007/978-1-4939-1562-0_10

Ritchhart, R., Church, M., & Morrison, K. (2011). *Making thinking visible: How to promote engagement, understanding, and independence for all learners*. Jossey-Bass.

Runde, C. & Flanagan, T. A. (2012). *Becoming a conflict competent leader: How you and your organization can manage conflict effectively* (2nd ed.). Jossey-Bass.

Sweller, J. (2020). Cognitive load theory and educational technology. *Educational Technology Research and Development, 68*(1), 1-16.

Veenman, M. V., Van Hout-Wolters, B. H., & Afflerbach, P. (2006). Metacognition and learning: Conceptual and methodological considerations. *Metacognition and learning*, *1*, 3-14.

Yost, D. S., Sentner, S. M., & Forlenza-Bailey, A. (2000). An examination of the construct of critical reflection: Implications for teacher education programming in the 21st Century. *Journal of Teacher Education*, *51*(1), 39. https://link-gale-com.trevecca.idm.oclc.org/apps/doc/A59125227/AONE?u=tel_a_tnu&sid=bookmark-AONE&xid=34f5eee0

Advancing Equitable Assessment Practices for Holistic Learning

Janet Williams[1] and Maria Aceituno[2]
[1]*North Orange County Community College District*
[2]*North Orange Continuing Education*

Abstract: This paper explores the relevant literature on equitable assessment practices in higher education and defines equity and social justice. Highlighting the need for an organizational understanding of holistic learning, this paper highlights that equitable policies do not guarantee equitable practices. The paper also explores the limitations of Bloom's Taxonomy in creating observable, measurable outcomes that form the foundation for equitable assessment practices. Integrating alternatives to Bloom's Taxonomy, such as Adelman's Operational Verbs Lists (Adelman, 2015). Alternatively, Fink's Taxonomy of Significant Learning can aid higher education organizations in aligning curricula and assessments, expanding student equity efforts, and addressing systemic inequities.

Keywords: assessment, equity, social justice, student learning outcomes, adult education

This conceptual paper examines equitable assessment practices in postsecondary education, using relevant literature to establish a collective understanding of holistic learning practices and acknowledging that fair, equitable policies do not guarantee fair practices. Exploring alternatives to Bloom's Taxonomy, such as Adelman's Operational Verbs Lists (Adelman, 2015) and Fink's Taxonomy of Significant Learning (Fink, 2013; Paul et al., 2023), can aid in aligning curriculum and creating coherent programming, resulting in equitable assessment processes. Finally, this paper provides a framework for praxis and proposes strategies, such as incorporating authentic assessments and using alternative taxonomies to create observable, measurable outcomes.

Literature Review

Adult education practitioners must first examine the concept of equity to create equitable assessments. Equity often overlaps with social justice or the attribute of being socially just in the literature. Montenegro and Jankowski (2020) describe equitable assessment as a culturally responsive, student-focused process that challenges the status quo by addressing the impact of privilege, power, and oppression on student achievement. While many writers agree on its importance, multiple perspectives exist on achieving it (Cazden, 2012; Hanesworth et al., 2019; Stowell, 2004). Measuring student learning holistically through equitable assessments requires a shared understanding of equity as a concept, both in policy and practice. Fraser's Theory of Social Justice in the context of higher education seeks to provide redistribution in the form of access, recognition of what is taught, and representation in decision-making processes. The word fairness may come to mind when examining the concept of equity and assessments, but McArthur (2016) and Stowell (2004) caution against assuming that creating fair procedures will result in fair or equitable assessments. Instead, focusing on the coherence and alignment of the curriculum and programs can help ensure that instructors can equitably determine a student's proficiency level (Driscoll et al., 2021; Hanesworth et al., 2019; McArthur, 2016). Transparent,

easily communicated outcomes form the basis of equitable assessments (Adelman, 2015; Driscoll et al., 2021). While individual assessments occur at a course or program level, adult education practitioners should also remain mindful of the conflicting demands of providing individualized, equitable learning opportunities while assessing all students based on the same outcomes. However, when considering the long-term benefits of obtaining a degree or certification that go well beyond increased earnings to physical and mental well-being and intergenerational benefits (Bowman, 2022), equity and fairness become more clearly connected to social justice. Assessments play a critical role in student learning, persistence, and completion, and creating an institutional culture that examines the policies and practices associated with assessment with intentionality to address the advantages and disadvantages they may create or perpetuate (Henning et al., 2022) can help address some of the systemic inequities in higher education.

Approach

Observable, measurable outcomes provide a foundation for equitable assessment practices by providing a transparent expectation of what students will do to demonstrate proficiency. Practitioners may consider using Chickering and Gamson's Seven Principles of Good Practice in Undergraduate Education (1987), Carnegie Mellon Eberly Center for Teaching Excellence and Educational Innovation's Teaching Principles, and Glassick et al.'s Scholarship Assessed: Evaluation of the Professoriate below (Table 1) as frameworks for praxis (Barkley & Major, 2016). Assessment has become inextricably intertwined with accreditation (Driscoll et al., 2021), sometimes leading instructors to view it separately from instructional systems. However, (Barkley & Major, 2016) posit that adult education practitioners should possess pedagogical skills in addition to being discipline experts to help students demonstrate proficiency in the course's outcomes. Within this framework, this paper will provide adult education practitioners with practical strategies to incorporate evidence-based pedagogical and equitable assessment strategies into their classes.

Best Practices

Postsecondary education often places blame on the student for poor performance rather than examining systemic issues. However, many standard practices limit practitioners' ability to evaluate student learning effectively and equitably. Practitioners may consider incorporating multiple assessment types to provide a more holistic picture of students' mastery when developing assessments. For example, some students may experience anxiety in the context of timed tests but can demonstrate skills in other contexts. This approach also acknowledges the diverse skills and experiences that students bring with them (CAST, 2023; Maki, 2023). Driscoll et al. (2021) advocate for incorporating outcomes-based assessment that considers the range of ways that students learn and demonstrate skills.

Observable, measurable outcomes enable students to see the connection between instruction and assessment, encouraging engagement. Bloom's Taxonomy provides a hierarchy of skills for many adult educators as they develop learning outcomes. However, Bloom's Taxonomy may not effectively capture all aspects of the learning process (Newton et al., 2020; Stanny, 2016). Alternative taxonomies, such as Fink's Taxonomy of Significant Learning (Fink, 2013), may

provide verbiage to create observable, measurable outcomes that lay the foundation for developing equitable assessments that provide a holistic view of students' learning.

Table 1

Principles of Good Teaching from Three Syntheses

Chickering and Gamson (1987), "Seven Principles of Good Practice in Undergraduate Education"	Carnegie Mellon Eberley Center for Teaching Excellence and Educational Innovation, "Teaching Principles"	Glassick et al. (1997), Scholarship Assessed: Evaluation of the Professoriate
The seven principles of good practice are:	Effective Teaching Involves:	The characteristics of good scholarship of teaching include:
1. Encourage contact between students and faculty 2. Develop reciprocity and cooperation among students 3. Encourage active learning 4. Give prompt feedback 5. Emphasize time on task 6. Communicate high expectations 7. Respect diverse talents and ways of learning.	1. Acquiring relevant knowledge about students and using that knowledge to inform our course design and classroom teaching 2. Aligning the three major components of instruction: learning objectives, assessments, and instructional activities 3. Articulating explicit expectations regarding learning objectives and policies 4. Prioritizing the knowledge and skills we choose to focus on 5. Recognizing and overcoming our own expert blind spots 6. Adopting appropriate teaching roles to support our learning goals 7. Progressively refining our courses based on reflection and feedback	1. Clear goals 2. Adequate preparation 3. Appropriate methods 4. Significant results 5. Effective presentation 6. Reflective critique

(Barkley & Major, 2016, p. 3)

Arend (2021) noted the limitations of Bloom's Taxonomy, which include the implication of the hierarchical order of sequential learning. However, different types of learning can occur together, especially when considering students' lived experiences. Analyzing samples of Bloom's Taxonomy verb lists online indicated a lack of consensus (Newton et al., 2020; Stanny, 2016) about verb categorization. Stanny noted Adelman (2015) and Fink's (2013) work with operational verbs as a practical assessment of student performance. Fink (2013) emphasized the importance of aligning learning outcomes with activities and assessments rather than relating verbs to cognitive skill development. His Taxonomy of Significant Learning encompasses six areas that provide significant value to the learner by addressing multiple dimensions of learning:
- Foundational Knowledge

- o Understanding and remembering:
  - Information
  - Ideas
- Application
  - o Skills
  - o Thinking
    - Critical, creative, and practical thinking
    - Managing projects
- Integration
  - o Connecting:
    - Ideas
    - Learning experiences
    - Realms of life
- Human Dimension
  - o Learning about:
    - Oneself
    - Others
- Caring
  - o Developing new:
    - Feelings
    - Interests
    - Values
- Learning How to Learn
  - o Becoming a better student
  - o Inquiring about a subject
  - o Self-directing learners

Fink's Taxonomy of Significant Learning can also provide adult education practitioners with a systematic way to select assessments based on the type of learning (Barkley & Major, 2016).

Discussion

Engaging students as partners enables practitioners to reframe success, uncoupling it from grades and taking a more student-centered approach. In their survey of 228 students, O'Shea and Delahunty (2023) noted that over half defined success through other means than grades. Equitable assessment practices provide a holistic view of student learning and may address social inequities by promoting student engagement and completion. Exploring alternative taxonomies, such as Adelman's Operational Verbs and Fink's Taxonomy for Significant Learning, to develop observable, measurable outcomes that clearly articulate expectations for student learning performance can enhance adult education practitioners' ability to assess student learning. Multiple measures and authentic assessments aligned with these outcomes can help ensure students have adequate opportunities to master and demonstrate skills. Engage students as partners to learn how they measure success and provide additional insight into ways to address systemic inequalities and create inclusive and equitable assessments. These course-level strategies to develop equitable, socially just assessment systems present an opportunity for organizations to expand efforts to address disadvantages within the higher education system.

References

Adelman, C. (2015). *To imagine a verb: The language and syntax of learning outcomes statements* (No. 24). National Institute for Learning Outcomes Assessment.

Arend, B. (2021, April 30). *Bloom's Taxonomy: Benefits and limitations*. Intentional College Teaching. https://intentionalcollegeteaching.org/2021/04/30/blooms-taxonomy-benefits-and-limitations/

Barkley, E. F., & Major, C. H. (2016). *Learning assessment techniques: A handbook for college faculty*. Jossey-Bass.

Bowman, N. A. (Ed.). (2022). *How college students succeed: Making meaning across disciplinary perspectives*. Stylus Publishing.

CAST. (2023). *Universal design for learning in higher education*. UDL On Campus. http://udloncampus.cast.org/home

Cazden, C. B. (2012). A framework for social justice in education. *International Journal of Educational Psychology*, *1*(3), 178–198. https://doi.org/10.4471/ijep.2012.11

Driscoll, A., Shapiro, D. G. N., & Wood, S. (2021). *Advancing assessment for student success: Supporting learning by creating connections across assessment, teaching, curriculum, cocurriculum in collaboration with our colleagues and our students*. Stylus Publishing, LLC.

Fink, D. L. (2013). *Creating significant learning experiences: An integrated approach to designing college courses*. Jossey-Bass.

Hanesworth, P., Bracken, S., & Elkington, S. (2019). A typology for a social justice approach to assessment: Learning from universal design and culturally sustaining pedagogy. *Teaching in Higher Education*, *24*(1), 98–114. https://doi.org/10.1080/13562517.2018.1465405

Henning, G. W., Baker, G. R., Jankowski, N. A., Lundquist, A. E., & Montenegro, E. (Eds.). (2022). *Reframing assessment to center equity: Theories, models, and practices*. Stylus Publishing.

Maki, P. L. (2023). *Assessing for learning: Building a sustainable commitment across the institution*. Routledge.

McArthur, J. (2016). Assessment for social justice: The role of assessment in achieving social justice. *Assessment and Evaluation in Higher Education*, *41*(7), 967–981. https://doi.org/10.1080/02602938.2015.1053429

Montenegro, E., & Jankowski, N. A. (2020). *A new decade for assessment: Embedding equity into assessment praxis* (No. 42). National Institute for Learning Outcomes Assessment. https://www.learningoutcomesassessment.org/wp-content/uploads/2020/01/A-New-Decade-for-Assessment.pdf

Newton, P. M., Da Silva, A., & Peters, L. G. (2020). A pragmatic master list of action verbs for Bloom's taxonomy. *Frontiers in Education*, *5*. https://doi.org/10.3389/feduc.2020.00107

O'Shea, S., & Delahunty, J. (2023). How do we assess for "success"? Challenging the assumptions of success in the pursuit of inclusive assessment. In R. Ajjawi, J. Tai, D. Boud, & T. Jorre De S Jorre (Eds.), *Assessment for inclusion in higher education: Promoting equity and social justice in assessment* (pp. 167–177). Routledge Member of the Taylor and Francis Group.

Paul, R. M., Jazayeri, Y., Behjat, L., & Potter, M. (2023). Design of an integrated project-based learning curriculum: Analysis through Fink's Taxonomy of significant learning. *IEEE Transactions on Education*, *66*(5), 457–467. https://doi.org/10.1109/TE.2023.3307974

Stanny, C. J. (2016). Reevaluating Bloom's Taxonomy: What measurable verbs can and cannot say about student learning. *Teaching Sociology*, *6*(37), 1–12. https://doi.org/10.3390/educsci6040037

Stowell, M. (2004). Equity, justice and standards: Assessment decision making in higher education. *Assessment and Evaluation in Higher Education*, *29*(4), 495–510.

Collaborative Excellence: Enhancing Instructional Innovation Across Your Career

Janet Williams
North Orange County Community College District

Abstract: This paper examines ways adult education practitioners can develop innovative, inclusive, equitable instructional practices by integrating Instructional Design (ID) models and principles into their curricula and content development processes. A review of the relevant literature highlights the importance of creating a student-centered learning environment that adopts a proactive and collaborative approach to curriculum development and implementation. This becomes particularly important if the organization aims to scale the use of ID models and principles across programs. The authors define ID and highlight models that can help adult education practitioners create measurable, observable learning outcomes, develop aligned assessments, and choose active engagement instructional strategies.

Keywords: adult education, instructional design, instructional design systems, instructional design models, evidence-based practices

Creating inclusive and equitable learning environments requires adult education practitioners to continually innovate throughout their careers. Instructional design systems can help adult educators frame curricula and content development decisions within systemic and systematic processes. This approach not only supports continuous improvement and scalability of effective practices. This paper examines the relevant literature on creating student-centered learning environments by defining instructional design systems, discussing the importance of integrating these systems in higher education to enhance student engagement and success and providing examples of instructional design models. Practitioners can utilize these concepts to develop a heuristic for incorporating evidence-based instructional design principles at the course level.

Relevant Literature

Adult education practitioners must continually identify and integrate evidence-based practices into course design, instructional strategies, and assessment practices. Tagg and Barr (1995) advocated for a shift from teaching to learning in higher education nearly 30 years ago; however, moving from theory to practice may present challenges even as we champion inclusivity, engagement, and social justice. A proactive, systematic, and systemic approach to curriculum and content creation (Black & Moore, 2019) enables instructors to bring best practices to scale rather than retrofitting courses, which is ineffective, time-consuming, and often expensive (Fovet, 2021; Lowenthal et al., 2020; Schley et al., 2024) to meet student needs. However, scaling up best practices will require higher education to shift its understanding of learning to create, maintain, and continuously improve this student-centered approach (Fovet, 2021; Gould & Harris, 2019; Rogers-Shaw et al., 2018). Instructional designers define ID as a process, a science, and a discipline (Brown & Green, 2019, p. 6; Hodell, 2016, p. 383). Defining and using ID systems and common ID models enables adult education practitioners to identify, replicate,

and scale successful strategies.

Approach

Incorporating instructional design models or collaborating with instructional designers before approving courses and programs provides adult education practitioners with a proactive, systematic, systematic approach to creating inclusive learning environments. Generally, post-secondary educators enter the field as experts in their respective disciplines. However, unlike their K-12 colleagues, they may not have formal training in curriculum development or alignment of assessment and instructional practices. As practitioners explore specific strategies to incorporate into their course development, instruction, and assessment practices, Sathy and Hogan (2023) recommend three basic principles to keep in mind:

- Inclusive teaching is a mindset that requires practitioners to constantly question who may be left out because of an approach,
- Structure benefits most of our students but does not harm the students who do not require it, making it an inclusive practice,
- Too little structure leaves too many students behind. For example, cold calling and lectures do not provide adequate structure and may become gate-keeping practices that exclude students who could succeed if the instructor integrates other strategies.

Understanding Instructional Design Systems

Organizations that want to create and scale up systems that support incorporating instructional design models and principles must develop a shared understanding of the discipline and process. During the COVID-19 pandemic, ID became a common topic, resulting in educators who were unfamiliar with ID to erroneously associate it with online instruction. However, ID models and principles apply to all learning modalities, and the discipline of ID goes back much further than the pandemic. During World War II, instructional design systems created by educators and psychologies enabled the military to train thousands of soldiers quickly and effectively (Vovides & Lemus, 2018). This systematic approach to instructional design did not appear in the United States higher education system until the 1960s when Syracuse, Michigan State, U.S. International University, and the University of Southern California began to teach ID systems through a college consortium. Indiana University later joined these organizations, and their work later culminated in the Instructional Development Institute (IDI). Higher education institutions hired over 30,000 instructional designers in the 1990s to support the increase of online learning opportunities due to the rapid advancement of technology. Despite ID's long history and relatively recent introduction into higher education processes primarily to support online learning and educational technology (Sink, 2014), practitioners should remember that these systems and principles remain modality agnostic.

Instructional Design Models

Instructional design models frame the process of "analyzing, producing, and revising intentional learning contexts" (Branch & Dousay, 2015, p. 15). The ADDIE model serves as a visual representation of the connection between each design step. The instructional design process begins with thoroughly analyzing the learners and learning environment, then designing,

developing, and implementing the learning opportunity. Evaluation forms the central element of each step, with revisions occurring when needed to continuously improve the instructional content, strategies, and assessments and ensure learner success. The core elements of the ADDIE model, Analyze, Design, Develop, Implement, and Evaluate, can also be found in other ID models. Many adult educators, particularly online instructors, may recognize the Understanding by Design or Backward Design model (Wiggins & McTighe, 2005). With all ID models, practitioners must focus on aligning every instructional element to create equitable, inclusive learning opportunities. Though not an ID model, Universal Design for Learning (UDL) provides another framework for making student-centered decisions when designing courses. UDL helps practitioners set clear learning goals, anticipate, and proactively mitigate barriers in the learning environment without compromising rigor (Black & Moore, 2019). At the heart of each course, the learning outcome drives all assessment, instructional strategy, and content development decisions.

Best Practices

When implementing instructional design principles at a course level, adult education practitioners should first focus on the learning outcome or what students should be able to do at the end of the course. These outcomes must be objectively evaluated to determine whether students have achieved the desired level of mastery. Finally, practitioners must decide how to help students acquire the desired skills by choosing appropriate instructional strategies.

Effective Learning Outcomes

Learning outcomes form the basis for all assessment, instructional, and content decisions. Adelman (2015) articulated several characteristics of well-written outcomes, beginning with a complete statement containing an operational verb that refers to events or specific actions. He clarified the distinction between operational and active verbs as observable and measurable. While verbs like recall or recognize may be active, they cannot be observed and, as a result, cannot be measured. Outcomes must clearly state the competence and proficiency the student will demonstrate while enrolled at the institution. Writing effective objectives requires thoughtfulness and consideration of all variables. The ABCD method creates a four-step framework that requires the creator to think through the audience (A) or student population, the behavior (B) or skill acquired because of instruction, the condition (C) under which they will demonstrate the behavior or skill, and degree (D) of proficiency considered acceptable (Brown & Green, 2019). These measurable, observable outcomes enable practitioners to use formative and summative assessments to evaluate learners' performance objectively.

Assessing Student Learning

UDL enables adult education practitioners to think about formative and summative assessment design as they initially develop the course and content. Inclusive assessment practices include formative assessment opportunities to help students understand areas where they may need additional support and allow the instructor to provide appropriate instruction before the summative evaluation (Black & Moore, 2019). As instructors, we must provide frequent, clear, actionable feedback so students know exactly what they should learn or do to succeed in the

course. Grades and comments like good job or nice work, do not provide the information necessary to improve performance.

Providing exemplars and rubrics helps students understand what they must do to demonstrate mastery. Fovet (2021) notes the importance of providing clear, concrete descriptions of assignment evaluation criteria and their connection to the course outcomes. Utilizing the institution's learning management system (LMS) to provide this information can reduce the instructor's workload and students' psychological burden, resulting in a more inclusive, equitable learning environment.

Instructional Strategies

Smith and Ragan (2019) developed the expanded events of instruction to aid instructors as they choose appropriate strategies for each instructional segment based on whether the requisite information should be generative (student-generated) or supplantive (provided by instruction). Other considerations include whether the practitioner can adjust instructional strategies to meet student needs and how it can create an inclusive, collaborative environment. Active instructional strategies encourage student engagement and skill acquisition. Provide students with opportunities to speak as much as possible rather than passively taking in information from a lecture. Keeping in mind that more structure is better (Sathy & Hogan, 2023), clearly define expectations for collaboration and participation in small group discussions. Allow students to respond anonymously through apps or notecards to enable students who might not participate verbally to engage in activities. Other inclusive instructional practices include integrating technologies students already use, providing presentations in advance so students can familiarize themselves with the content, provide alternatives to note-taking, which may prevent some students from actively attending to the content (Fovet, 2021; Lowenthal et al., 2020). Learner feedback should also inform whether instructional strategies should be continued, refined, or replaced. Most importantly, we must challenge ourselves to teach beyond our comfort zone to help students succeed.

Discussion

Exploring ways to increase the integration of instructional design models and principles in higher education curricula and content development and adoption processes can improve student outcomes. While these ID concepts have existed for some time and have been embraced by the private sector and military, higher education has not fully leveraged them to support all students regardless of modality, level, or discipline. Creating systems to support innovative practices that can occur by scaling ID systems and principles requires a proactive, collaborative effort across the institution. Adult education practitioners can integrate ID principles through measurable, observable outcomes at a course level and align them with assessment and instructional strategies. This alignment enables instructors to incorporate inclusive, equitable assessment and instruction practices and increase student outcomes. As educators, we must always keep student success at the forefront of all curricular and instructional decisions.

References

Adelman, C. (2015). *To imagine a verb: The language and syntax of learning outcomes statements* (No. 24). National Institute for Learning Outcomes Assessment.

Black, J., & Moore, E. J. (2019). *UDL navigators in higher education: A field guide*. Cast.

Branch, R. M., & Dousay, T. A. (2015). *Survey of instructional design models* (5th ed.). Association for Educational Communications and Technology.

Brown, A. H., & Green, T. D. (2019). Instructional goals and objectives. In *The essentials of instructional design* (3rd ed., pp. 103–117). Routledge.

Fovet, F. (2021). *Handbook of research on applying universal design for learning across disciplines: Concepts, case studies, and practical implementation*. IGI Global.

Gould, R., & Harris, S. P. (2019). *Higher education and the ADA*. ADA National Network.

Hodell, C. (2016). *ISD from the ground up: A no-nonsense approach to instructional design* (4th ed.). ATD Press.

Lowenthal, P., Greear, K., Humphrey, M., Lowenthal, A., Conley, Q., Giacumo, L., & Dunlap, J. (2020). Creating accessible and inclusive online learning: Moving beyond compliance and broadening the discussion. *The Quarterly Review of Distance Education*, *21*, 1–21.

Rogers-Shaw, C., Carr-Chellman, D. J., & Choi, J. (2018). Universal design for learning: Guidelines for accessible online instruction. *Adult Learning*, *29*(1), 20–31. https://doi.org/10.1177/1045159517735530

Sathy, V., & Hogan, K. A. (2023, November 30). How to make your teaching more inclusive. *The Chronicle of Higher Education*. https://www.chronicle.com/article/how-to-make-your-teaching-more-inclusive/

Schley, S., Cawthon, S. W., Marchetti, C. E., & Atkins, S. W. (2024). From access to inclusion: A faculty learning community curriculum. *The Journal of Faculty Development*, *35*(3), 44–52.

Sink, D. L. (2014). Design Models and Learning Theories for Adults. In E. Beich (Ed.), *ASTD handbook for workplace learning professionals* (pp. 181–199). ATD Press.

Smith, P. L., & Ragan, T. J. (2019). A framework for instructional strategy design. In *Instructional design* (3rd ed., pp. 407–422). Wiley Jossey-Bass.

Tagg, R., & Barr, J. (1995). From teaching to learning: A new paradigm for undergraduate education. *Change*, *November/December*, 12–23.

Vovides, Y., & Lemus, L. R. (2018). *Optimizing instructional design methods in higher education*. IGI Global.

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). ASCD.

Changing the Path of Graduate Students: Mentoring for Human Flourishing Through Psychosocial Support and Reflection

Rachel Wlodarsky
Cleveland State University

Abstract: The COVID-19 pandemic upended nearly every aspect of life, from the personal to the professional; in essence, it threatened many individuals' well-being. One group continues to be affected; rising academic demands and stressors are impacting the mental health of graduate students. Understanding how those who have embraced the disequilibrium present during (and after) crises, along with research focused on care, reflection, and learning, may be the best way to promote the well-being and personal and professional growth of faculty mentors and their graduate students and would be beneficial in bridging the current gaps between graduate student well-being and academic progression. By adopting this approach, mentors can help shift graduate students' experiences toward greater well-being.

Keywords: mentoring, adult learning, graduate students, psychosocial support, reflection

Crises like the COVID-19 pandemic can significantly disrupt all facets of life, deeply impacting many individuals' well-being. According to the World Health Organization (2004), well-being is the presence of a state in which the individual realizes his or her own abilities, can cope with normal stresses of life, can work productively and fruitfully, and can contribute to his or her community. One of the many populations negatively impacted by the pandemic was graduate students within the context of higher education.

I propose changing how we think about faculty mentoring and interactions with graduate students in higher education to better serve this population moving forward. A focused review of the literature on mentoring during and after the pandemic, which may introduce new and innovative mentoring methods and encourage individuals to reconsider the purpose of mentoring, is presented. In addition, a research-based and developmentally informed model of reflection for mentoring is introduced. With reflection, a more holistic approach to mentoring may emerge, which would incorporate perspectives and processes that acknowledge and promote caring and nurturing interactions and healthy coping mechanisms for stressors (crisis). This could potentially build and maintain resilience and encourage growth and change for faculty and graduate students in higher education settings.

Background

While a mental health crisis is argued to be occurring nationwide for all populations, the graduate student population (master's and doctoral students) has been shown to be six times more likely to experience anxiety and depression than the general population. Drawing upon depression scales and anxiety scales, Evans et al. (2018) found 35% higher anxiety and 33% higher depression in graduate students than in the general population, suggesting that graduate

school culture and demands are likely negatively affecting students' mental health. More recently, one in five college students experienced one or more diagnosable mental health disorders (Zhai & Du, 2020). Graduate students may be particularly vulnerable since research and academic expectations are more intense. Interestingly, when asked who graduate students would consult if they felt that their health was being affected by their academic stress, 91% stated that they would discuss concerns with a friend, but only 48% stated that they would mention it to their academic advisor (Mousavi et al., 2018).

Recognizing the evolving needs of graduate students, this manuscript presents a conceptual framework designed to transform faculty mentoring practices in higher education. By introducing a research-based and developmentally informed model of reflection for well-being (Wlodarsky, 2014), I aim to foster a more supportive and holistic mentoring environment. At the core of this model is the *Event Path*, a reflective model that prompts faculty and graduate students to reimagine mentoring as a process that prioritizes well-being. In addition, strategies for institutions to provide broader support to graduate students are also discussed.

Approach

The theoretical frameworks that have guided this work include Noddings' (1984, 2005) ethic of care, Selke and Wong's (1993) mentoring-empowered model, and Wlodarsky and Walters' (2014) *Event Path Model*, which is a pathway for reflection. This literature was selected for their shared emphasis on holistic, developmentally informed, and reflective approaches to mentoring, providing a robust foundation for reconceptualizing faculty mentoring in higher education.

For Noddings (1984), care involves being receptive, related, and committed to students' needs. Selke and Wong's (1993) mentoring-empowerment provide a developmental framework for graduate student mentoring, which incorporates existing knowledge of graduate student advisement, principles of educational mentoring, and Erikson's stages of human development (Erikson, 1994). Both Noddings (1984, 2005) and Selke and Wong (1993) noted the nature of caring relationships and the crucial role their development has in promoting not only academic achievement but also in supporting well-being.

Wlodarsky and Walters' *Event Path Model* (2014) introduces a vital reflective component, enabling mentors and mentees to critically examine and adapt their practices to prioritize well-being. By synthesizing these perspectives, this analysis aims to construct a model that moves beyond traditional mentoring paradigms, fostering a more supportive and transformative experience for graduate students.

Best Practices

From our mentoring experiences during the pandemic and recent literature, we have learned that compassionate mentorship matters. When mentorship is viewed as a developmental relationship, mentors consider how they can support students beyond traditional supervisory and advisory activities. Below are shifts that can be made within the mentoring relationship to place well-being at the forefront of mentoring.

Focus on Psychosocial Support for Graduate Students

According to the Inter-Agency Network for Education in Emergencies (2023, June 19), psychosocial support refers to the processes and actions that promote the holistic well-being of people in their social world. Psychosocial support aims to help individuals recover after a crisis has disrupted their lives and to enhance their ability to return to normality after experiencing adverse events. To facilitate returning to normality and a sense of well-being, faculty can reframe mentoring around concepts of caring and nurturing.

Traditionally, the concept of care has been marginalized in higher education even though it is a "deeply fundamental value" (Held, 2006, p.17). Held argued that care is the actions, reactions, and decisions individuals engage in to maintain their well-being and the actions, reactions, and decisions that individuals receive from others to grow and experience positive well-being.

In a study by Woloshyn et al. (2019), professors acknowledged the individuality of students' life experiences and circumstances and believed that developing rapport and positive relations with graduate students was foundational to supporting their psychosocial well-being. In part, such relationships evolved when professors expressed "sincere interest in students' in-school and out-of-school lives, considered extenuating and exacerbating factors that could influence academic performance, and respected individuals' unique learning goals and objectives" (p. 404).

Briscoe (2019) argued that students' professional and educational development takes precedence in mentorship processes; however, emotional preparation for managing the profession's demands is as fundamental as professional and educational knowledge. Thus, it is important to move psychosocial development to the forefront of mentorship processes. Mentees' psychosocial functioning and well-being underscore their ability to successfully engage in academic studies and fulfill professional demands. Furthermore, nurturing and attending to mentees' psychosocial development demonstrates a genuine ethic of care and concern that can foster individual well-being while serving as a model for mentees entering the profession.

Operationalize Reflective Mentoring for Graduate Students

The *Event Path Model* can assist faculty and graduate students in reframing mentoring to include interactions that nurture and care for the overall well-being of mentees (and their mentors). Mentoring through reflection allows adults to grow and develop. The components of the *Event Path Model* include an event, cognitive and affective processing, tool(s), change point, and possibly a new event. The importance of an **event** as the motivational stimulus for reflection cannot be overstated and is the conceptual bedrock that allows a discussion of learning in or through practice, as opposed to learning about practice in a depersonalized manner (Wlodarsky & Walters, 2014). For instance, the mentor can start a conversation by asking the mentee to think about stressful events (crises) that have left a mark on them. The mentor may pose the following questions to help the mentee clarify described life events: "What key events have challenged you? How might these life events contribute to your personal and professional choices now? How might you harness the power of these life events (crises) to your own psychosocial well-being?" (Wlodarsky & Walters, 2014, pp. 69-70).

Examining the roles of a graduate student, events might take the form of struggles with work-life balance, prioritizing varied responsibilities, or various societal stressors. Once an event has been introduced, the mentor and mentee will **cognitively and/or affectively process** that event allowing a sense of awareness and knowing to emerge. In short, individuals "think about" their stressful events/experiences for some period of time. To support mentees' processing of life events, inquiry about the mentee's willingness and commitment to unraveling the event may need to be broached by the mentor. Questions include "What are the stressors and/or emotions connected to the event? How might the mentee deal with these so that it doesn't hinder the cognitive and/or affective process?" Analyzing emotional layers existing within those events can be productive.

In addition, the mentor should probe for any missing and/or inaccurate information (Wlodarsky, 2018c). **Tools** facilitate the cognitive and affective processing of an event. It is critical to search out what reflective tools are available and suitable. In other words, mentors and mentees should ask themselves what tool(s) would be most appropriate and helpful to processing the event (Wlodarsky, 2009). Such tools include but are not limited to journaling, critical questioning, peer/student feedback, daily/weekly reports, self-help/advice books, and personal friends. For example, if the mentor and mentee were reflecting on the event of *struggling to prioritize varied responsibilities*, critical questioning by the mentor may be particularly helpful for determining what responsibilities should be prioritized over other responsibilities. In this case, cognitive and affective processing occurred by way of critical questioning.

Mentors and mentees must also bear in mind that learning and development through reflection results in **change**, and change can be challenging. Many of us, perhaps because of disposition or personality, embrace change. For others, change is fraught with emotional tension. It is stressful in a negative way, and it is, consequently, resisted. This reality highlights the importance of the reciprocal and non-hierarchical relationship between mentor and mentee. In addition to focusing on psychosocial support and operationalizing reflective mentoring, there is a need for institutional support as part of the success plan for graduate student well-being.

Institutional Support for Graduate Student Well-being

Mentor Training

Institutions of higher education should consider providing support, for example, funding for faculty mentors to participate in various trainings. This may include training that focuses on mental health, diversity, crisis/conflict management, adult learning, and any other training that may benefit graduate students' holistic well-being. These types of training would provide faculty with the knowledge and skills to mentor their graduate students, using a well-being emphasis that compliments the importance of their academic achievement.

Grant Accommodations to Mentees

It is important for university administration to acknowledge the mental health concerns of the graduate student population and, to support their mental health, consider affording them academic accommodations when needed. The willingness to accommodate students independent

of direction from the university appears consistent with the notion that graduate students are self-directed and self-aware learners. These practices demonstrate an ethic of care (Noddings, 2005) on the part of the faculty mentors, which has the potential to facilitate rapport and trusting relationships with graduate students.

Other ways in which professional staff and faculty might provide accommodations are by coaching students and providing scaffolded instruction for task completion. For instance, writing centers and/or faculty may discuss with students academic readings, shape literature reviews, edit written materials, and assist in task- and time-management activities (Woloshyn et al., 2019).

Include Graduate Student Mentorship in Reward Systems

Graduate student mentorship could be included in faculty reward systems. This would motivate and encourage faculty to engage in mentorship, promoting and sustaining graduate student well-being and academic achievement.

Discussion

Innovative mentoring approaches introduced during and after the COVID-19 pandemic have encouraged reexamining mentoring's purpose. Embracing the disequilibrium of crises through reflection and learning can bridge gaps between graduate students' well-being and academic progress. This manuscript presents mentoring as a reciprocal relationship that nurtures well-being, meaningfulness, and satisfaction for both mentors and mentees in higher education.

Although well-articulated, the best practices mentioned would benefit from further research. I suggest conducting studies to measure how well the *Event Path Model* improves graduate student well-being through mentoring. Research focused on which institutional supports (training, accommodations, rewards) might best aid graduate student well-being would also be helpful. We know psychosocial support varies for diverse graduate student groups; therefore, conducting research to better understand such diverse needs and how to meet them through mentoring would be an interesting next step for graduate student well-being.

References

Briscoe, P. (2019). Virtual mentor partnerships between practising and preservice teachers: Helping to enhance professional growth and well-being. *International Journal of Mentoring and Coaching in Education, 8*(4), 235-254. https://doi.org.10.1108/IJMCE-02-2019-0023

CFS-O (2017). *Supporting graduate student mental health.* Canadian Federation of Students. http://cfsontario.ca/wp-content/uploads/2017/07/Factsheet-Graduate MentalHealth.pdf

Erikson, E. (1994). *Childhood and society*. Norton.

Evans, T., Bira, L., Gastelum, J., Weiss, T., & Vanderford, N. (2018). Evidence for a mental health crisis in graduate education. *Careers and Recruitment, 36*, 282-284.

Gould, J. (2021). How Covid-19 changed scientific mentoring. *Nature Careers Podcast.* https://doi: 10.1038/d41586-021-02570-y

Held, V. (2006). *The ethics of care: Personal, political, and global*. Oxford University Press.

Inter-agency network for education in emergencies (2023, June 19). *Psychosocial support.* https://inee.org/eie-glossary/psychosocial-support

Mousavi, M., Sohrabpour, Z., Anderson, E., Stemig-Vindedahl, A., Golden, D., Christenson, G., Lust, K., & Bühlmann, P. (2018). Stress and mental health in graduate school: How student empowerment creates

lasting change. *Journal of Chemical Education, 95*, 1939-1946. https://doi.org/10.1021/acs.jchemed.8b00188

Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. University of California Press.

Noddings, N. (2005). *Caring in education.* In M. Smith, M. Doyle, & T. Jeffs (Eds.), The Encyclopedia of Informal Education. www.infed.org/biblio/noddingscaringineducation.htm

Selke, M., & Wong, T. (1993). The mentoring–empowered model: Facilitating communication in graduate advisement, *NACADA Journal, 13* (2), 21-26. https://doi.org/10.5032/jae.2012.01005

Wlodarsky, R., & Walters, H. (2014). *Reflection and the college teacher: A solution for higher education*. Information Age Publishing.

Woloshyn, V., Savage, M., Ratkovic, S., Hands, C., & Martinovic, D. (2019). Exploring professors' experiences supporting graduate student well-being in Ontario faculties of education. *International Journal of Mentoring and Coaching in Education, 8*, 397-411. https://doi.org/ 10.1108/IJMCE-02-2019-0028

World Health Organization. (2004) *Mental health: Strengthening our response.* https://www.who.int/news-room/factsheets/detail/mental-health-strengthening-our-response.

Zhai, Y., & Du, X. (2020). Addressing collegiate mental health amid COVID-19 pandemic. *Psychiatry Research, 288*, 1-2. https://doi.org/10.1016/j.psychres.2020.113003

Im/Possible Selves of the Identity of Graduate Students

Yuan Zhang and Jonathan E. Taylor
Auburn University

Abstract: Possible Selves theory, introduced by Markus and Nurius (1986), explores individuals' ideas of what they might become, what they would like to become, and what they fear becoming. This paper examines the theoretical foundations of Possible Selves theory and its implications for identity development, particularly among graduate students. It reviews foundational theories, outlines a research approach involving peer-reviewed journals from 2013 to 2023, and discusses key themes in graduate students' identity development, such as identity tensions, self-doubt, social identities, agency, mentorship, and discursive engagement. The paper concludes by highlighting the importance of supportive environments and equitable structures in fostering identity development.

Possible selves encompass the cognitive representations individuals have about their desired future selves (ideal selves) and their feared future selves (feared selves). According to the theory of Possible Selves (Markus & Nurius, 1986), these future-oriented self-representations significantly influence individuals' motivation, goal setting, decision making, and overall well-being. The purpose of this paper is to explore the theoretical and paradigmatic foundations of Possible Selves theory and its implications for identity development, particularly among graduate students. This paper is structured into several key sections. The Background section explores the foundational theories that underpin Possible Selves theory. The Methodology section details the research approach, including a review of peer-reviewed academic journals published between 2013 and 2023. The Major Themes section examines key themes in literature on graduate students' identity development. Finally, the Discussion section synthesized the findings and encouraged reflection on practical implications, highlighting the importance of supportive environments and equitable structures in fostering identity development among graduate students.

Background

Markus and Nurius (1986) defined possible selves as "individuals' ideas of what they might become, what they would like to become, and what they are afraid of becoming" (p. 954). It specifically "pertains to how individuals think about their potential and about their future" (Markus & Nurius, 1986, p. 954). The theoretical and paradigmatic foundations of Possible Selves theory are deeply rooted in various influential perspectives.

Drawing from Gestalt psychology, which emphasizes the holistic perception of psychological phenomena (Asher, 2003), the Possible Selves theory acknowledges the holistic nature of self-concept. This theoretical perspective builds upon the work of early Gestalt psychologists (e.g., Koffka, 1924; Köhler, 1925; Wertheimer, 1923). It considers how individuals' perceptions of

their future selves are influenced by their current self-concept, social interactions, and cultural contexts. This holistic and contextual understanding is essential for comprehending the complexity of identity development.

The Possible Selves theory also incorporates insights from Piaget's (1952) theory of cognitive development, highlighting how individuals' conceptualizations of their future selves evolve over time. As cognitive abilities develop, individuals become better equipped to envision and plan for their future, which is a key aspect of identity development. In addition, the Possible Selves theory aligns with Erikson's (1968) concept of identity exploration and commitment. For Erikson, identity is "a subjective sense of an invigorating sameness and continuity" (p.19); Identity formation involves a dual process of reflection and observation, occurring across all levels of mental functioning. In this process, individuals evaluate themselves based on how they believe others perceive and judge them, comparing themselves to others and to meaningful social typologies. At the same time, they assess others' judgments by reflecting on their own self-perceptions and how they measure up to relevant social types (Erikson, 1968). As individuals explore different possible selves, they experiment with various roles, behaviors, and identities. This exploration is a critical part of identity development, allowing individuals to commit to certain identities that resonate with their values, beliefs, and aspirations.

Furthermore, Vygotsky's (1978) sociocultural theory informs Possible Selves theory by emphasizing the role of social interactions and cultural contexts in shaping individuals' self-conceptions and future aspirations. Identity development is seen as a socially mediated process, where interactions with others and cultural norms influence how individuals envision their possible selves.

In The Principles of Psychology, William James (1890/1981) introduced the concepts of the "empirical self" and the "me" self, focusing on individuals' perceptions of their own characteristics and identity (Asher, 2003, p. 49). The Possible Selves theory expands on James's ideas by considering individuals' perceptions of their potential future selves, including both desired and feared selves.

Over time, the concept of possible selves has transitioned from a theoretical construct to a practical framework with significant implications for educational psychology. Researchers have utilized possible selves to predict risky behaviors in adolescents (Stein et al., 1998), facilitate professional identity development (Mehdizadeh et al., 2023), assess college students' mental health (Penland et al., 2000), and explore subjective well-being (Creech et al., 2014). Possible Selves theory offers a comprehensive framework for understanding identity development by focusing on future-oriented self-concepts, motivation, exploration, holistic perception, developmental progression, social influences, and individual agency. It highlights how individuals' visions of their future shape their current behavior and identity formation (Markus & Nurius, 1986). During graduate school, students navigate through significant transitions, explore new roles, and carve out their professional identities. The theory of Possible Selves illustrates the importance of envisioning future selves in guiding identity development. This theory provides a valuable framework for understanding the experiences of graduate students, as well as a valuable tool for examining how their perceptions of their future selves influence their motivation, goal-setting, and academic behaviors.

Methodology

Possible selves reflect "how individuals think about their potential and about their future" (Markus & Nurius, 1986, p. 954). They represent enduring goals, aspirations, motives, fears, and threats, providing specific self-relevant form, meaning, organization, and direction to these dynamics. Markus and Nurius (1986) emphasize that an individual's sociocultural background, historical context, exposure to media symbols, and immediate social interactions all contribute to the pool of possible selves. As a result, our possible selves, which encompass both aspirations and fears, are often shaped by societal factors.

A narrative literature review method was employed to explore the concept of possible selves in graduate student identity development (Baumeister & Leary, 1997; Greenhalgh et al., 2018). This approach allows for a flexible and holistic synthesis of diverse sources and perspectives, providing a broad understanding of the topic and prompting reflection for practitioners (Collins & Fauser, 2005; Sukhera, 2022). The research involved peer-reviewed academic journals published between 2013 and 2023, accessed through the EBSCO Database. Keywords such as "possible selves," "self-perception," "identity construction," "experiences or perceptions or attitudes or views or feelings or qualitative or perspective," and "graduate students or doctoral students or master's students" were used in the search process. Titles and abstracts were reviewed to determine the relevance of each article to the research topic. The full texts of selected articles were then assessed to ensure they met the search criteria. The review included various types of studies, such as qualitative, quantitative, mixed methods, meta-analyses, and theoretical papers, with the hope to achieve a comprehensive understanding of the topic from multiple perspectives. The analysis and synthesis process involved a) organizing the literature by grouping the selected sources into themes or categories, b) summarizing the key findings from each group of studies, and c) synthesizing the findings to create an integrated overview of the current state of knowledge.

Major Themes

Markus and Nurius (1986) emphasize the role of individual experiences in shaping possible selves. The development of graduate student identity is influenced by a complex interplay of personal, social, and institutional factors. Several key themes were identified in the literature on graduate student identity development.

Agency and Autonomy in Identity Development
Graduate students' own agency and autonomy are vital in their identity-construction process. Students' active participation and commitment are necessary to develop their professional identities (Teeuwsen et al., 2014). Autonomy in navigating their career paths adds to their sense of agency and identity (Buss, 2018; Buss & Avery 2017; Jaeger et al., 2017).

Challenges of Self-Doubt and Imposter Syndrome
Many doctoral students struggle with self-doubt and feelings of inadequacy, often referred to as imposter syndrome. Students described their journey of learning to do research and developing a research identity as a precarious adventure, often feeling like imposters (Coryell et al., 2013). They reported going through stages of self-doubt and feeling they lacked the necessary skills to

be ideal scholars (Stewart et al., 2013; Foot et al., 2014).

Mentorship and Advisor Relationships
Mentorship plays a critical role in the identity construction of graduate students. Equitable access to mentors and organizational support for mentoring is essential for broadening the range of recognized possible selves (Griffin, 2020). Positive relationships with advisors can provide access to additional opportunities and support, facilitating identity development (Gopaul, 2019; Johnson, 2015).

Role of Discursive Engagement and Affinity Groups
Engagement in intellectual exchanges and alignment with affinity groups are crucial for students to feel recognized as scholars. Writing and academic support groups provide a sense of community and shared practice, fostering identity development (Butler et al., 2014). Participating in peer review, receiving feedback from faculty, and engaging with scholarly communities at conferences helps students develop their scholarly identities (Ai, 2017; Rockinson-Szapkiw et al., 2017).

Identity Tensions and Integration
Graduate students often experience tensions between their pre-existing identities and their emerging identities. This tension can be particularly pronounced for students from underrepresented backgrounds. Social identities, such as race, gender, and class, significantly impact on the identity construction process for graduate students. Systems of power, such as racism and sexism, influence students' beliefs about their possible paths in higher education and their ability to envision themselves as future scholars (Williams et al., 2018). Students of color and women often face additional challenges, which can hinder their identity development (Hinojosa & Carney, 2016; Lawrence, 2017).

Discussion

Graduate students develop various identities shaped by their social roles and activities within specific contexts (Holland & Lachicotte, 2007). The way students seek to understand their own experiences and future paths by observing others aligns with the concept of possible selves, which highlights that self-conceptions are fundamentally social (Markus & Nurius, 1986). Various personal, social, and institutional factors influence graduate students' identity formation and their ability to persist in their educational pursuits (Fong et al., 2017; Grund & Senker, 2018; Ivcevic & Kaufman, 2013; Perez et al., 2014). How individuals perceive themselves in relation to their academic achievements, how their academic performance shapes their sense of self, and how external factors such as support systems, learning environments, and socio-economic status influence academic outcomes are all critical considerations (Fong et al., 2017; Fryer, 2015; Liu et al., 2015). Additionally, systems of power, problematic academic structures, and breaches of trust can obstruct doctoral students from effectively envisioning their future selves in academia (Williams et al., 2018).

As Markus and Nurius (1986) convey, "possible selves have the potential to reveal the inventive and constructive nature of the self," while also revealing how "the self is socially determined and constrained" (p. 954). The concept of possible selves highlights the ongoing and dynamic nature

of constructing future goals. Students' experiences and interactions within their training environments play an important role in shaping their self-perceptions and aspirations. It is essential to understand possible selves within the broader societal context, as these environments may often influence students' beliefs about their (im)possible paths and not always support one's envisioned future.

References

Ai, B. (2017). Constructing an academic identity in Australia: An autoethnographic narrative. *Higher Education Research & Development*, *36*(6), 1095–1107. https://doi.org/10.1080/07294360.2017.1303459

Asher, J. W. (2003). The rise to prominence: Educational psychology 1920-1960. In Zimmerman, B. J., & Schunk, D. H. (Eds.), *Educational psychology: a century of contributions* (pp. 189-205). L. Erlbaum Associates.

Baumeister, R. F., & Leary, M. R. (1997). Writing narrative literature reviews. *Review of general psychology*, *1*(3), 311-320. https://doi.org/10.1037/1089-2680.1.3.311

Buss, R. R. (2018). Using action research as a signature pedagogy to develop EdD students' inquiry as practice abilities. *Impacting Education: Journal on Transforming Professional Practice*, *3*, 23–31. https://doi.org/10.5195/ie.2018.46

Buss, R. R., & Avery, A. (2017). Research becomes you: Cultivating EdD students' identities as educational leaders and researchers and a "Learning by Doing" meta-study. *Journal of Research on Leadership Education*, *12*(3), 273–301. https://doi.org/10.1177/1942775116674463

Butler, B. M., Burns, E., Frierman, C., Hawthorne, K., Innes, A., & Parrott, J. A. (2014). The impact of a pedagogy of teacher education seminar on educator and future teacher educator identities. *Studying Teacher Education*, *10*(3), 255–274. https://doi.org/10.1080/17425964.2014.956716

Coryell, J. E., Wagner, S., Clark, M. C., & Stuessy, C. (2013). Becoming real: Adult student impressions of developing an educational researcher identity. *Journal of Further and Higher Education*, *37*(3), 367–383. https://doi.org/10.1080/0309877X.2011.645456

Collins, J. & Fauser, B. (2005) Balancing the strengths of systematic and narrative reviews. *Human Reproduction Update*, *11*(2), 103–104. https://doi.org/10.1093/humupd/dmh058

Creech, A., Hallam, S., Varvarigou, M., Gaunt, H., McQueen, H., & Pincas, A. (2014). The role of musical possible selves in supporting subjective well-being in later life. *Music Education Research*, *16*(1), 32-49. https://doi.org/10.1080/14613808.2013.788143

Erikson, E. H. (1968). *Identity, youth, and crisis* (1st ed.). W.W. Norton.

Fong, C. J., Davis, C. W., Kim, Y., Kim, Y. W., Marriott, L., & Kim, S. (2017). Psychosocial factors and community college student success. *Review of Educational Research*, *87*(2), 388–424. https://doi.org/10.3102/0034654316653479

Foot, R., Crowe, A. R., Tollafield, K. A., & Allan, C. E. (2014). Exploring doctoral student identity development using a self-study approach. *Teaching & Learning Inquiry*, *2*(1), 103–118. https://doi.org/10.2979/teachlearninqu.2.1.103

Fryer, L. K. (2015). Predicting self-concept, interest, and achievement for first-year students: The seeds of lifelong learning. *Learning & Individual Differences*, *38*, 107–114. https://doi.org/10.1016/j.lindif.2015.01.007

Gopaul, B. (2019). "Nothing succeeds like success": Doctoral education and cumulative advantage. *The Review of Higher Education*, *42*(4), 1431–1457. https://doi.org/10.1353/rhe.2019.0071

Greenhalgh, T., Thorne, S., & Malterud, K. (2018). Time to challenge the spurious hierarchy of systematic over narrative reviews? *European journal of clinical investigation*, *48*(6), e12931. https://doi.org/10.1111/eci.12931

Griffin, K. A. (2020). Rethinking mentoring: Integrating equity-minded practice in promoting access to and outcomes of developmental relationships. In A. Kezar & J. Posselt (Eds.), *Higher education administration for social justice and equity: Critical perspectives for leadership* (pp. 93–110). Routledge.

Grund, A., & Senker, K. (2018). Motivational foundations of self-control and mindfulness and their role in study–leisure conflicts. *Learning & Individual Differences*, *68*, 72–84. https://doi.org/10.1016/j.lindif.2018.10.007

Hinojosa, T. J., & Carney, J. V. (2016). Mexican American women pursuing counselor education doctorates: A narrative inquiry. *Counselor Education and Supervision*, *55*(3), 198–215. https://doi.org/10.1002/ceas.12045

Ivcevic, Z., & Kaufman, J. C. (2013). The can and cannot do attitude: How self-estimates of ability vary across ethnic and socioeconomic groups. *Learning & Individual Differences*, *27*, 144–148.

https://doi.org/10.1016/j.lindif.2013.07.011

Jaeger, A. J., Mitchall, A., O'Meara, K., Grantham, A., Zhang, J., Eliason, J., & Cowdery, K. (2017). Push and pull: The influence of race/ethnicity on agency in doctoral student career advancement. *Journal of Diversity in Higher Education*, *10*(3), 232–252. https://doi.org/10.1037/dhe0000018

James, W. (1981). *The principles of psychology*, Vol.1. Harvard University Press. (Original work published in 1890)

Johnson, W. B. (2015). *On being a mentor: A guide for higher education faculty*. Routledge.

Koffka, K. (1924). *The growth of the mind*. Kagan, Paul, Trench, Trubner.

Lawrence, A. M. (2017). (Dis)Identifying as writers, scholars, and researchers: Former schoolteachers' professional identity work during their teacher-education doctoral studies. *Research in the Teaching of English*, *52*(2), 181–210. https://doi.org/10.58680/rte201729379

Liu, E. S. C., Ye, C. J., & Yeung, D. Y. (2015). Effects of approach to learning and self-perceived overall competence on academic performance of university students. *Learning & Individual Differences*, *39*, 199–204. https://doi.org/10.1016/j.lindif.2015.03.004

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, *41*(9), 954–969. https://doi.org/10.1037/0003-066X.41.9.954

Mehdizadeh, M., Pourhaji, M., & Derakhshan, A. (2023). Evolution of communities of practice, realignment of possible selves, and repositionings in EFL teacher professional identity development: a longitudinal case study. *The Language Learning Journal*, 1-13. https://doi.org/10.1080/09571736.2022.2163685

Penland, E. A., Masten, W. G., Zelhart, P., Fournet, G. P., & Callahan, T. A. (2000). Possible selves, depression, and coping skills in university students. *Personality and individual differences*, *29*(5), 963-969.

Perez, T., Cromley, J. G., & Kaplan, A. (2014). The role of identity development, values, and costs in college STEM retention. *Journal of Educational Psychology*, *106*(1), 315–329. https://doi.org/10.1037/a0034027

Piaget, J. (1952). *The origins of intelligence in children*. International Universities Press.

Rockinson-Szapkiw, A. J., Spaulding, L. S., & Lunde, R. (2017). Women in distance doctoral programs: How they negotiate their identities as mothers, professionals, and academics in order to persist. *International Journal of Doctoral Studies*, *12*, 49–72. https://doi.org/10.28945/3671

Stein, K. F., Roeser, R., & Markus, H. R. (1998). Self-schemas and possible selves as predictors and outcomes of risky behaviors in adolescents. *Nursing Research*, *47*(2), 96-106. https://doi.org/10.1097/00006199-199803000-00008

Stewart, S., Deal, K. L., Bowlby, N., Hubain, B., & Hunt, C. (2013). Who am I? An exploration of role identity formation and socialization throughout the U.S. doctoral process. *Journal of Student Affairs, 22*, 77–84.

Sukhera, J. (2022) Narrative reviews: flexible, rigorous, and practical. *Journal of Graduate Medical Education*, *14*(4), 414–417. https://doi.org/10.4300/jgme-d-22-00480.1

Teeuwsen, P., Ratković, S., & Tilley, S. A. (2014). Becoming academics: Experiencing legitimate peripheral participation in part-time doctoral studies. *Studies in Higher Education*, *39*(4), 680–694. https://doi.org/10.1080/03075079.2012.729030

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

Wertheimer, M. (1923). Untersuchungen zur Lehre von der Gestalt II, *Psychol. Forsch [Laws of organization in perceptual forms]*, *4*, 301-356.

Williams, M. S., Brown Burnett, T. J., Carroll, T. K., & Harris, C. J. (2018). Mentoring, managing, and helping: A critical race analysis of socialization in doctoral education. *Journal of College Student Retention: Research, Theory & Practice*, *20*(2), 253–278. https://doi.org/10.1177/1521025116657834

Developing the Researcher Within

Kyle Znamenak and Laura Holyoke
University of Idaho

Abstract: We examined a select group of R1 and R2 Doctor of Philosophy programs in education, focusing on core courses, research courses, dissertation structures, required credits, program structures, and experiential learning opportunities. A comparative analysis of ten institutions revealed commonalities in dissertation credit requirements but diverges in credit structuring, with R2 institutions offering more structured dissertation courses. R1 institutions emphasized core research courses, while R2 institutions provided increased flexibility through elective options. Despite the recognized benefits of enhancing research self-efficacy and skills, the implementation of structured experiential learning opportunities was inconsistent across programs. This study underscores the need for further research into how program structures influence long-term outcomes, such as publication success and career advancement.

Keywords: Doctor of Philosophy, researcher, self-efficacy, scholar, dissertation

Doctor of Philosophy (PhD) programs in Education play a vital role in developing future researchers and scholars. However, significant variations exist in program structures, research opportunities, and support mechanisms across doctoral programs, potentially influencing student outcomes such as retention, research engagement, and career success. In this study, we explored the distinct approaches employed by doctoral programs to foster emerging scholars, focusing on program structure, including research courses, dissertation requirements, support systems, and experiential learning opportunities.

Background

In 2023, over 11,000 education students earned their doctorates, primarily from R2 research institutions. The Carnegie Classification distinguishes R1 institutions, characterized by very high research activity, from R2 institutions, which exhibit high research activity and professional doctorate institutions (The Carnegie Classification of Institutions of Higher Education (n.d.). On average, individuals complete their educational doctorate in 5.6 years (National Center for Science and Engineering Statistics, 2024). For PhD students, a solid understanding of research methodology may significantly increase their success in completing doctoral programs.

Research Self-Efficacy & Research Courses

Self-efficacy pertains to an individual's belief in their ability to successfully perform tasks or achieve goals. This belief is rooted in past successes (mastery experiences), observing others' successes, verbal encouragement, and managing emotional states. A student's personal success is the most substantial source of efficacy, followed by observing others' achievements (Bandura, 1997). Research self-efficacy refers to a student's confidence in completing research-related tasks such as planning, analyzing, and writing research (Bieschke et al., 1996). Low confidence

in these abilities may lead to avoiding research tasks, as students tend to shy away from challenging their beliefs when they expect to struggle (Bieschke et al., 1996). Conversely, higher levels of research self-efficacy correlate with increased interest in research and research knowledge. PhD students engaged in research activities, including publishing articles, demonstrated higher scores on research self-efficacy measures compared to those not involved in such activities (Lambie et al., 2014).

Coursework may also influence an individual's research self-efficacy. Niehaus et al. (2018) conducted interviews with 17 early career scholars. They found that research methods coursework and the process of dissertation writing were essential facilitators of research self-efficacy. However, extracurricular (informal) research opportunities, faculty and peer mentoring, and the overall research culture of the program also influenced students' development (Niehaus et al., 2018). Dyck et al. (2020) explored developing intentional research opportunities through a one-credit hour, three-semester experiential/immersion PhD course in an R2 nursing program where students worked on faculty research projects. Student discussion post-analysis suggested the course enhanced collaborative learning to increase research-related knowledge, skills, and attitudes.

Dissertation Structures

The structure of a dissertation, whether following a traditional format or a three-manuscript model, may also influence success in doctoral programs. A study comparing dissertation formats in a nursing cohort revealed significant differences in publication outcomes. Among those who chose a traditional five-chapter format, 41.3% never published in peer-reviewed journals; the average time to publication was 1.4 years with a standard deviation of 2.1 years. In contrast, 100% of graduates who chose an alternative format published their findings in a peer-reviewed journal, with an average time of less than one year and a standard deviation of 1.1 (Smaldone et al., 2019). Their comparison suggests that alternative dissertation formats may enhance publication rates and reduce time to publication for doctoral graduates, potentially impacting their early career trajectories (Smaldone et al., 2019).

Embedded dissertation courses are a standard feature in EdD programs, supporting the compressed three-year timeline by integrating research with coursework (Perry et al., 2020). While these courses have shown promise in EdD programs, their potential impact on PhD students, who typically follow more independent timelines, remains largely unstudied. Exploring the application of courses that guide students through stages of dissertation writing could provide valuable insights into whether structured support enhances PhD success.

Conceptual Framework

Our analysis focused on key constructs: research self-efficacy, research knowledge, program structure, and experiential learning. Research self-efficacy, a student's confidence in executing research tasks (Bieschke et al., 1996), significantly enhanced research interest and knowledge (Lambie et al., 2014). Previous studies indicate that dissertation work, research methods courses, and mentorship foster this confidence, while structured, hands-on research experiences further develop research competencies (Dyck et al., 2020; Niehaus et al., 2018).

Institutions

The comparative analysis included ten institutions. Of these, 70% were classified as R1 (very high research activity) and 30% as R2 (high research activity). Program delivery methods varied: 20% offered completely online programs, 30% hybrid, and 30% in-person, and the remainder provided options for both online and in-person delivery. Cohort-based models were available at 30% of the institutions. Regional distribution was as follows: West (40%), Midwest (30%), Northeast (20%), and South (10%). The programs focused on higher education, organizational learning, and specialized areas like learning technology, diversity, and leadership education. Figure 2 provides an overview of the institutions, including their research status, cohort model availability, delivery, focus area, and region.

Figure 1
Conceptual Framework
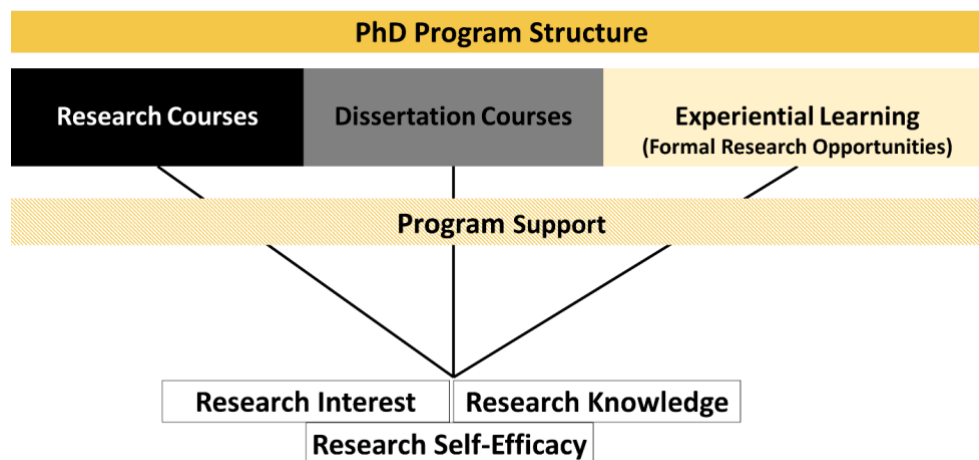
Results

The comparative analysis revealed key patterns, averages, and differences across programs, highlighting several institutional trends and gaps. Table 1 presents each institution's research status, total program credits, dissertation credits (and their percentage of total credits), research credits, and the percentage of research credits relative to the total program credits. Structured dissertation credits refer to intentional courses integrated into the curriculum for dissertation work, while unstructured credits typically involve independent work coordinated between students and their major professors.

A descriptive statistical comparison of R1 and R2 institutions revealed that R2 programs allocated 22–29% of their curriculum to dissertation work, averaging 24%. While R1 programs showed a wider range (10%–40%) but maintained a similar average of 25%. This comparison suggests no substantial difference in doctoral dissertation credit allocation between very high (R1) and high (R2) research activity institutions. However, the structure of dissertation credits differed. R1 programs averaged 15 unstructured credits and less than 2 structured credits, whereas R2 programs averaged 10 unstructured credits and 6 structured credits. This finding

implies that R2 institutions in our sample may offer more structured dissertation courses, potentially providing more intentional support for students completing their dissertations.

A descriptive statistical comparison of R1 and R2 institutions revealed distinct patterns. R1 institutions averaged 15 credits for core research courses and fewer than 2 credits for elective research courses. R2 institutions averaged 10 credits for core research courses and 5 credits for elective research courses. This finding suggests that R1 institutions may emphasize required core research courses, while R2 institutions may offer more flexibility in elective research course options. These findings should be interpreted cautiously due to the small sample size. Further comparisons with larger samples and additional outcome variables are necessary for more definitive conclusions.

Table 1
Comparison of Institutions

University	Research Status	Total Credits	Dissertation Credits	% Dissertation	Research Credits	% Research
Appalachian Technical U	R2	67	15 Unstructured	22%	24 Quant.	36%
Coastal State University	R1	53	5 Unstructured	10%	16	30%
Evergreen State College	R1	60	24 Unstructured	40%	15	25%
Green Valley University	R1	60	9 Unstructured 3 to 9 Structured	25%	18	30%
Harbor City University	R2	62	9 Unstructured 6 Structured	22%	12 Avg.	20%
High Plains Institute	R2	51	9 Unstructured 6 to 9 Structured	29%	15	29%
Mountain Ridge College	R1	91	12 Unstructured 1 Structured	14%	15	16%
Plainsland University	R1	63	15 Unstructured	24%	18	29%
Prairie View Institute	R1	60	12 Unstructured 3 Structured	25%	18	30%
River State University	R1	89	30 Unstructured 3 Structured	37%	18	20%

Many programs lacked experiential learning activities in their program structure. Still, several programs did incorporate such activities. Appalachian Technical University offered 12 credit hours of data science courses and embedded field experience in five courses to apply data science skills to real-world problems. Coastal State University emphasized applied internships and field research, requiring at least six structured dissertation research credits focused on addressing higher education challenges. Evergreen State College paired students with faculty advisors who shared similar equity-driven research interests and required on-campus attendance

twice a year, including preparation for conference presentations. Green Valley University included three to six credits of dissertation seminars and a simulated presidential cabinet experience.

The sample demonstrated diverse approaches to structuring doctoral experiences:
- Harbor City University: Shared cohort for EdD and PhD students, with the degrees differing only by one course.
- High Plains Institute: Mandatory in-person attendance for four consecutive semesters.
- Mountain Ridge College: Required a world language component.
- Plainsland University: Minimum six credits of on-campus summer research seminars.
- Prairie View Institute: Three specializations with shared core and discipline-specific requirements.

These findings indicate a lack of consistency across programs in dissertation courses, research courses, experiential learning components, and unique features. This variability resembles a "Wild West" landscape where institutions independently define their paths without standardized guidelines.

Conclusion & Discussion

In this study, we used a comparative analysis to explore the differences between R1 and R2 doctoral educational programs, focusing on research courses, dissertation credits, program support structures, and experiential learning opportunities. Our findings indicate that many programs lack structured formal experiential learning opportunities, which can enhance research self-efficacy. Some programs incorporated experiential learning through internships, field research, real-world project development, and conference presentations. Additionally, certain programs featured unique components, such as data science integration.

Our analysis revealed significant variations in research and dissertation requirements among R1 and R2 institutions, with few commonalities observed. Key findings include: R1 institutions emphasized mandatory core courses in research-focused curricula. R2 institutions offered greater flexibility through a wider range of research electives. We were limited by the accessibility to online information on student support systems (e.g., faculty mentoring), which hindered the comparison of support systems across programs. Additionally, the absence of outcome variables (e.g., years to program completion) precluded assessment of structural elements' effectiveness in PhD programs. These limitations underscore the need for further research to comprehensively evaluate doctoral program structures and their impacts on student outcomes.

Our findings on program structure imply that PhD programs can enhance research self-efficacy, interest, and knowledge by incorporating intentional research activities beyond traditional research courses. These activities may include research apprenticeships, project-based research courses, and research internships. Research courses can be designed to support students at various phases of research projects. Introductory courses may help in early phases, such as conducting a literature review. Advanced courses during later stages could include data analysis and interpretation. However, this intentional scaffolding presents logistical challenges in matching a student's research knowledge to project phases due to the availability of projects at appropriate stages for student development. Additionally, exploring the use of structured

dissertation courses may assist students in completing their dissertations. Structured dissertation courses may facilitate "feeding two birds with one seed" while addressing faculty workload concerns. However, further research is needed to determine the impact of course structure overall student development.

Future Research

Future research should explore the structural elements addressed in this study, focusing on program outcomes like time to graduation, publications, and post-graduation employment. Such data would provide valuable insights into how program structures influence long-term academic and professional success. Additionally, examining the impact of structured versus unstructured dissertation credits and courses can shed light on how different program models support the development of emerging scholars. Future research can also examine the combination of these factors, their role in facilitating research self-efficacy, research interest, and research knowledge, and how it may mediate program outcomes such as academic publications and program completion.

References

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.

Bieschke, K. J., Bishop, R. M., & Garcia, V. L. (1996). The utility of the research self-efficacy scale. *Journal of Career Assessment, 4*(1), 59–75. https://doi.org/10.1177/106907279600400103

Dyck, M. J., Novotny, N. L., Blakeman, J., Bricker, C., Farrow, A., LoVerde, J., Nielson, S. D., & Johnson, B. (2020). Collaborative student-faculty research to support PhD research education. *Journal of Professional Nursing, 36*(3), 106–110. https://doi.org/10.1016/j.profnurs.2019.11.002

Lambie, G. W., Hayes, B. G., Griffith, C. Limberg, D., & Mullen, P. R. (2014). An exploratory investigation of the research self-efficacy, interest in research, and research knowledge of Ph.D. in education students. *Innovative Higher Education, 39*, 139–153. https://doi.org/10.1007/s10755-013-9264-1

National Center for Science and Engineering Statistics. (2024). *Survey of Earned Doctorates: 2023*. National Science Foundation. https://ncses.nsf.gov/surveys/earned-doctorates/2023#analysis

Niehaus, E., Garcia, C. E., & Reading, J. (2018). The road to researcher: The development of research self-efficacy in higher education scholars. *Journal for the Study of Postsecondary and Tertiary Education, 3*, 1–20. https://doi.org/10.28945/3950

Perry, J. A., Zambo, D., & Crow, C. (2020). *The improvement science dissertation in practice*. Myers Education Press.

Smaldone, A., Heitkemper, E., Jackman, K., Joanne Woo, K., & Kelson, J. (2019). Dissemination of PhD dissertation research by dissertation format: A retrospective cohort study. *Journal of Nursing Scholarship, 51*(5), 599–607. https://doi.org/10.1111/jnu.12504

The Carnegie Classification of Institutions of Higher Education (2024, December 4). *About Carnegie Classification*. https://carnegieclassifications.acenet.edu/