Workforce Development

Micro-credentials, Badges, and CEUs

47th Annual Conference

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Held Online and In-Person

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What is AHEA?

The purpose of the Adult and Higher Education Alliance (AHEA) is to help institutions of higher education develop and sustain learning environments and programs suitable for adults.

AHEA does this by:

- Providing a forum for professional educators to share resources and information about alternative degree programs on a national and international level.
- Stimulating practitioner research, thereby contributing to the integration of theory and practice, and promoting the improved quality of our efforts.
- Serving as a vehicle for cooperative consultation and collaboration among professionals in the field.
- Integrating the interests and concerns from a variety of areas within adult higher education including distance, international, and liberal education.
- Promoting the rights of adult students.
- Influencing institutional and public policies concerning the principles of quality practice applied to adult education.
- Promoting cultural diversity and multicultural perspectives and maintaining that commitment through the incorporation of such perspectives into the policies, procedures, and practices of alternative degree programs for adults.

Letter from the Editors

Dear Reader,

We are pleased to present the Proceedings of the 47th annual conference of the Adult and Higher Education Alliance (AHEA), held online and in person in March 2023. We wish to extend special thanks to the AHEA Board of Directors, members, and contributors. Without their support, this publication would not be possible.

As always, the AHEA Board of Directors provided continuous support for the mission of AHEA through their outreach, service, and perseverance. To the members of the Adult and Higher Education Alliance, we do what we do because of you, and you are the backbone of AHEA's growth, networking, and collaboration. Thank you for your membership and participation in our organization and at our conference each year.

To those who contributed papers for these Proceedings, thank you for contributing to this document and expanding our collective knowledge. Through your research, theory, and practice collected in this document, we can strengthen our efforts to educate and serve adult learners in a variety of contexts. We appreciate your service to the larger community of professors, educators, and practitioners. Thank you.

AHEA is always looking for ways to contribute to our shared endeavor of educating adults. Please share your feedback; we look forward to hearing from you. Enjoy your reading of the variety of engaging topics related to Adult and Higher Education.

Thank You,

Patricia and Kemi

Welcome from the AHEA President

On behalf of the Adult Higher Education Alliance, welcome to the proceedings of the 47th AHEA Annual Conference.

The conference theme this year, Workforce Development: Micro-credentials, Badges, & CEUs, is based on the book *Teaching and Learning for Adult Skill Acquisition: Applying the Dreyfus and Dreyfus Model in Different Fields* (Mangiante & Peno, Eds.), highlights that— perhaps—the more things change, the more they stay the same. In other words: how do we *really* help adults learn the knowledge, skills, and abilities that they need to navigate the world? As in years past, this is a fitting conversation for us, as adult educators, to have.

It is an honor to serve as the president of the AHEA, as it is to collaborate with your colleagues who serve on the AHEA board of directors. Thank you again for your attendance and, if applicable, contribution to these proceedings.

Matthew W. Lonam, Ph.D.

President, AHEA (2022-23)

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Investing in Adult Learners and Creating Learning Environments that Nurture a Sense of Belonging

Mary Kelly and Wytress Richardson

Abstract

Creating community in a classroom or cohort provides the sense that the student is not traveling alone but has support and companionship on the learning journey. We have found that in order for adult students to thrive and persist in an academic environment, they need to feel a sense of belonging. Many adult students arrive at our doors carrying educational trauma from their past experiences along with an assortment of prior successes and failures. The psychological distress from prior learning experiences resulted in a student's failure to thrive and persist. According to Parker Palmer (2003), "You don't have to be a psychologist to recognize that real belonging is one of the pillars of a life of meaning and purpose." Therefore, we find value in investing in the creation of environments that nurture belonging.

Introduction

Historically, the United States educational system was not designed for the success of Black and Brown students. In higher education, the persistence rates amongst Black, Hispanic, and Indigenous populations who enter and graduate from college are at lower rates than White and Asian students, according to the U.S. Department of Education (2019). Without adequate wrap-around hard and soft supports, the chances of a student's academic persistence fail. We employ that it is essential to create spaces in academia for all students to feel as though they belong in the educational environment to thrive, and then students can embody true success.

Nurturing Belonging

According to Parker Palmer (1999), you don't have to be a psychologist to recognize that real belonging is one of the pillars of a life of meaning and purpose. Abraham Maslow famously held that after shelter, food, and water, belonging was one of the keys to a life of self-actualization. (Maslow, 1943, p. 42). Others have argued that Maslow was wrong: belonging is at least as important as shelter, food, and water. (Palmer, 1999) It seems to us that this is not just something that is good for us but something we were designed for.

In our combined over forty-year experience with adult learners in higher education, we have seen a great deal of educational trauma. Many adult students arrive at the doors of higher education institutions with an assortment of prior successes and failures in the educational system; however, the psychological distress from school experiences need not result in a student's failure to thrive and persist. Creating a sense of community in a classroom or cohort provides the sense that the student is not traveling alone but has support and companionship on the learning journey. We

have found that for students to thrive and persist in an academic environment, adult learners and all students need to feel a sense of *belonging*. To affect persistence and promote thriving in the classroom, students would be served by intentionally fostering this experience.

According to researcher Brene Brown (2020), we belong where we are embraced for who we are. She describes the difference between fitting in and belonging: "The thing is that we are wired to be a part of something bigger than us so deeply, that sometimes we will take fitting as a substitute, but fitting in is the greatest barrier to belonging because fitting in says, 'be like them to be accepted.' Belonging says, 'This is who I am. I hope we can make a connection," (Brown, 2020, p. 16).
A sense of belonging at school means feeling a sense of acceptance. Brown's work, along with that of Palmer and many others, suggests that belonging can be facilitated by creating an open atmosphere in the classroom (Palmer, 1999, p. 55). This happens when students are encouraged (and this behavior is modeled) to share their stories - and how what they are learning relates to their own lives and experiences in a safe and accepting environment. According to Theologian Jack Shea, "It's only in listening to someone else's story, that I can enter into a life that isn't my own" (Shea, 2018, p. 2)). It is human nature that when we feel welcomed, respected, and develop a sense of belonging, we are more apt to return to the setting or endeavor than when those factors are not present. When adults decide to resume their education after years of being out of school, they usually bring with them the expectations and connotations of whatever their previous educational experiences were like.

Cultivating a sense of belonging from the moment a prospective adult learner comes through the doors or calls is an important persistence strategy. Building community calls for fostering connections among people. Activities and processes that help students and staff get to know one another build trust and camaraderie. This is especially important for new students. One of the strategies found to foster a sense of belonging in adult education settings is group learning (cohorts). In studying the stages of development of adult literacy learners at three sites, Robert Kegan and his fellow researchers found that adult learners benefited greatly from a group learning environment. (Kegan, 1994). Although Kegan's research presented three very different cohort designs, most participants highly valued their sense of belonging in the group and benefited substantially from their cohort experiences. "Our participants show us that cohort experiences seem to facilitate academic learning, increased feelings of belonging, broadened perspectives, and, at least by our participants' report, learner persistence." (Drago-Severson, Helsing, Kegan, Popp et al. 2001, p. 2). We want to point out, however, that although a cohort program, which allows an extended period for students to connect with one another in continuous coursework together, is a valuable way to promote belonging, these ideas can be integrated into even individual courses with adult learners, and belonging can happen quickly - having a truly fruitful impact on students' well-being and success.

Philosopher Emily Eshfahani Smith posits that a "meaningful and fulfilling life comes down to 4 basic pillars, Belong, Purpose, Stepping Beyond Yourself, and Storytelling". (Hack Spirit, 2023, p. 3). Smith's research reveals that belonging comes from being in relationships where you're valued for who you are intrinsically and where you value others as well. But some groups and relationships deliver a cheap form of belonging; you're valued for what you believe, for whom you hate, not for who you are. "True belonging springs from love", she says. "It lives in moments among individuals, and it's a choice -- you can choose to nurture belonging with others". (Hack Spirit, 2023). For many people, belonging is the most necessary source of meaning: the bonds you have with your family and friends - and perhaps for adult learners, your classmates on the journey of higher education.

Greg Boyle, author, and founder and director of Homeboy Industries, the world's largest gang-intervention and rehabilitation program, is committed to "discovering the gift of who each person is" (Boyle, 2011, p. 34), and then to invite people to "live in each other's hearts - and then hope that people will not only discover their gift and their own goodness but that they'll live out of that place with each other because as human beings, we're just astoundingly hard on each other. 'I need a belonging place' is what a homie said to me once. It's a belonging place, where nobody is outside of that sense of belonging. The result is human connection, tenderness and belonging. (Boyle, 2011, p. 34).

Boyle contends that we want to let people know that they are valuable, not by proving that they're valuable, but by being valued. "We do this by treasuring and cherishing people…being caring adults who pay attention". Boyle believes that this is the "antidote to just about everything" (Boyle, 2011, p. 34). As teachers and mentors, we embrace this notion and stress its fundamental importance to the atmosphere we create with our adult students.

The Role of the Teacher

In *The Courage to Teach*, Parker Palmer says that "Good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teacher. In every class I teach, my ability to connect with my students, and to connect them with the subject, depends less on the methods I use than on the degree to which I know and trust my selfhood–and I am willing to make it available and vulnerable in the service of learning" (Palmer, 2007, p.51). Palmer shares that in every story he has heard, good teachers share one trait: a strong sense of personal identity infuses their work. "Good teachers join self, subject, and students in the fabric of life because they teach from an integral and undivided self; they manifest in their own lives, and evoke in their students, a "capacity for connectedness." (Palmer, 2007, p. 53). We draw from this wisdom in our conviction that as teachers we must be willing to share our own stories and allow our own vulnerability into our

classrooms. To encourage and support an environment of belonging we must participate fully as fellow human beings - who also desire to belong!

Practices and Outcomes

Introductions and icebreakers set the stage for more ongoing community building. Teachers can self-disclose information about their own lives to build relationships with students as well as create time and space in the classroom for students to share about their lives outside of the school environment. Fun, low-pressure activities can be designed to let students and teachers get to know each other and start to form trusting relationships. We believe that storytelling is the most valuable tool to begin this process of bonding.

The U.S. Department of Education National Center for Education Statistics (2019) attributed a sense of belonging to an increase in the number of students who do the following:

- let staff know the reasons for their absences,
- communicated with staff about their need to stop out,
- noticed and expressed concern for fellow classmates' absences and sometimes called them,
- showed interest in and support for classmates meeting their goals,
- had lively conversations before class and during breaks,
- stayed late after class to do schoolwork together, and
- showed appreciation for each other.

Our experience has proven the value of the investment of our time and energy in nurturing our students' experiences of feeling that they are part of a community and that they truly belong. We have continually seen the positive outcomes of increased commitment to one another. When adult students come to know and care about one another as fellow human beings, there is often a surprising and wonderful consequence of their feeling invested in the success of their classmates. We then see an increased desire for and ability to progress in their own individual academic accomplishments! We believe that being in a relationship is of the utmost importance to persistence and thriving. Again, this connection happens through openness. We cannot stress more ardently the value of modeling and encouraging storytelling.

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Wytress Richardson is an associate professor and chairs the Applied Behavioral Science program at National Louis University. She leads a faculty team empowering undergraduate adult learner to degree completion success. Her focus areas are diversity and inclusion, spiritual direction, restorative justice, and racial healing circles. Richardson's interdisciplinary education in Organizational Leadership, Human Services Administration, and Applied Behavioral Science equips her to create resilient settings where individuals and organizations can thrive.

The Complex Nature of Workplace Development

Xenia Coulter and Alan Mandell

Abstract

Higher education is in crisis, and colleges see small-scale workplace training that result in badges and certificates as an important source of renewed revenue and relevance. We argue that this remedy is counterproductive. Education is more than teaching workplace skills, and employers value (and need) the broader skills associated with liberal arts study. The current crisis is due to our continued over-emphasis upon information delivery. Instead of providing the educative experiences that teach students how to ask (and seek answers to) their own questions, work collaboratively, and look for new problem solutions, our current model asks them to rely upon authoritative resources rather than their own competencies in dealing with real world demands.

As long-time adult educators, we have become alarmed at the new direction our universities seem to be taking in response to a steady and significant reduction in college student enrollments (Binkley, 2023). Commentators are increasingly suggesting that college graduates do not have the skills employers expect (Wingard, 2022) and given its high cost, that a college degree may no longer seems useful (Lederman, 2023). If true, it seems obvious that to address this set of problems, colleges must do a better job of preparing students for work. And the bandwagon into which many colleges are currently jumping is the world of explicit workplace skill development, represented by smaller and concrete skill training that culminates, not in college credits for which students are registered for a prescribed period of time, but in frameable certificates or wearable badges that represent easily measurable outcomes. From our point of view, this new venture simply takes us further in the direction of doing what we know is already not working.

The world is changing under our feet – and that is the world our students need to be prepared for, and the world for which employers are desperately seeking new workers. It does not help our students to spend four years memorizing existing knowledge that might not even be useful by the time they graduate. It also does not help our students if they do not know how to apply their learning to situations not already described in their textbooks or teacher lectures (which they have dutifully studied). Employer after employer cites the need for workers who show flexibility, analytical skills, innovative thinking, resilience in the face of uncertainty, among other so-called "soft" skills [Finley, 2021). In other words, training for certificates and badges may be sufficient for students seeking routine work, but it is not the kind of learning that prepares a student to contribute to company growth, community sustainability, or creative responses to the accelerated changes we now face. In truth, an excessive amount of training for certification, which prescribes concretely

exactly what one must learn, actually discourages independent thinking, questioning, or reflections outside of the proverbial box. The way to earn that certificate as quickly as possible is to ensure that whatever learning takes place matches exactly the rubric created by an outside authority. This is not the direction we believe that higher education should take.

There are other dangerous outcomes that can result from an undue emphasis upon the kind of skill learning colleges are now seeking to promote. To the extent that many of these badges and certificates can be earned through courses offered online, students find themselves relatively isolated as learners. As a result, such learners acquire a view of education as a solitary endeavor that does not require any exposure to alternative, often conflicting ideas and different perspectives that populate – perhaps even define – most institutions of higher education. Thus ironically, these students become even *l*ess inclined to seek enrollment in the very traditional institutions that are now seeking to create these easy-access courses in order to achieve the exact opposite.

Much more potentially dangerous, however, a preoccupation with the delivery of badges or certificates requires an across-the-board form of standardization, which, as John Dewey originally argued, is antithetical to the demands of growth and progress (1916). Indeed, it is diversity that enables our societies to respond effectively to constant and unpredictable change. To be flexible in the face of change and able to move in not yet realized new directions, we must encourage, not discourage, variation, innovative thinking, and openness to new ideas. Moreover, diversity is the hallmark of a democratic society. Not only do our universities need to support and stimulate variable skills and new ways of thinking, colleges and universities are critically important for offering experiences that teach us all how to appreciate and even embrace the uniquely varied interests, competencies, and goals of our species. At its core, this goal is what any institution that claims to play a critical part in sustaining our democratic ideals must espouse.

Humans are, after all, much more than their profession or their work – another point that Dewey elucidated in detail (1916). They are family members, hobbyists, spiritual beings, artists, craftspeople, athletes, community members, political activists, inventors, and, of course, dreamers. Throughout history, the academy has struggled to acknowledge the many facets of humanity and to provide more than simple preparation for particular professions. Starting after World War II, schooling beyond high school began to be regarded as an important step, not just for those who were wealthy, who sought to be scholars, or who needed the required background for careers in medicine, the law or engineering, but for everyone. Unfortunately, faculty members were – and we would argue still are today – not properly prepared for such a universal objective. Trained in specific areas of scholarship, faculty have operated largely on the belief – rather than on evidence – that exposure to a variety of scholarly areas of study, will, somewhat as a byproduct, promote maturity in

thinking and action well beyond the university. But as knowledge has grown exponentially in every discipline, faculty have gone to increasing lengths to make sure students receive as full and accurate a coverage of their discipline as possible. As many teachers will point out, a course term is simply too short to give students the opportunity to ask and explore their own questions or even consider the relevance of what they are learning to each person's individual interests. There is simply too much information that must first be ingested.

And yet, memorizing disciplinary information does not appeal to, nor does it help, students whose interests and skills do not include, for example, the intricacies of the social or physical sciences, or whatever discipline the instructors seek to cover. Again, from Dewey, to be meaningful, subject content must be "contextualized" (Kliebard, 2006, see in particular, p. 115) that is, associated with a setting that the student already knows. And of course, today's college teachers, who have even less time to know their individual students, can hardly be expected to figure out ways of connecting their discipline to as many different contexts as there are students in their class. Even so, such individualization, as formidable it may first appear, can be achieved if its importance is recognized. If it is set aside, however, because it seems too difficult to undertake (or completely irrelevant as in the case of studying to earn a badge), students learn to treat the textbook (or any published text) as the final word, to second-guess what might be on the exam, and to become expert in giving to teachers what they demand. And, as many employers complain, the degree held by an average new graduate is evidence not necessarily of mature and flexible thinking, but that he or she has learned how to be a good student (see, e.g., Fenstermacher, 2006), which is not what employers are looking for at all.

The Association of American Colleges and Universities (AAC&U) routinely surveys employers about "what really matters" to them when hiring new employees. One recent report (Finley, 2021), based upon interviews with around 500 employers from more than 18 different industries, found that while more than 55% believed these college-level skills to be "very important," less than 40% found that graduates were "very well prepared" in:

- Critical thinking skills
- Ability to analyze and interpret data
- Ability to apply knowledge/skills in real-world settings

The five most important "mindsets and aptitudes" these same employers thought graduates should possess were:

- Drive/work ethic
- Ability to take initiative
- Self-confidence
- Persistence
- Self-awareness

And, one has to wonder whether these attributes, much less the three previous skills, would necessarily result from spending four years learning to follow directions, to believe in the textbook, and take as gospel whatever teachers say. And the same question can be raised from the results of an earlier survey by Hart Research Associates (2015), also sponsored by the AAC&U, which listed the most important experiences the employers they interviewed want their college graduate hires to have:

- "Broad" learning regardless of major or field of study
- Proficiency in skills and knowledge that cut across majors
- An emphasis on applied learning (e.g., internships, applied learning projects)

Initially described by Arum and Roksa (2011), is the College Learning Assessment (CLA) test that appears to measure the very skills that employers say they seek, namely, the ability:

- to analyze and interpret data,
- to think critically, and
- to apply their thoughts and conclusion to a real-life problem.

In examining the test results from a number of colleges, the authors were very disappointed to discover that graduating students did not demonstrate significantly higher scores than entering students. More recently the *Wall Street Journal* (Belkin, 2017) published the comments made by the colleges and universities who participated in the Journals' review of a somewhat updated form of the CLA (called the CLA+). There were a few colleges whose seniors did do significantly better than first-year students: Plymouth State University, and two California State Universities -- in Sacramento and Northridge. But for the rest, the results were again very disappointing – and in the (somewhat defensive) comments by the university officials, they complained about methodological issues – that longitudinal measurements would have more validity than comparing classes, that the samples available were too small, that the responses were difficult to grade – in order to minimize the results. But in truth, if indeed our colleges are overly focused upon information delivery rather than broad intellectual development, these results are not at all surprising. Thus, given that a program of concrete skill training is actually an even more concentrated form of forced ingestion of knowledge, we have every reason to expect that if higher education institutions move in that direction, college graduates will continue to disappoint their future employers.

Clearly, the idea of universal higher education is in dire straits. Also clearly, the time is *now* for colleges to revitalize their commitment to and appreciation for the goals and purposes of higher education that extend beyond simple workplace development. And then, administrators and faculty need to look closely and critically at whether current practices in college are actually meeting those goals. In a recent article about the current crisis in law enforcement (Smith, 2023), the author argues that one critical step to improve police practices would be to require aspiring law enforcement personnel to earn a college degree. As he puts it:

> I'm all for expanding opportunity for American workers who didn't go to college. But policing seems like a special case because it's about much more than wages and work – it's about public safety and the legitimacy of U.S. institutions. Being able to sit through some lectures on Plato and do a bit of algebra homework shouldn't be a requirement to get a decent good-paying job in the US, but it seems like a pretty low bar for people who are responsible for deciding when to deal out violent death to citizens on the street (Smith, 2023, para. 21).

What we are arguing in essence is that we should not lower the bar by focusing even more upon everyday policing skills – the ability to shoot accurately, to use new technologies of surveillance, to put people into proper body-holds, to write correct police reports – but to do more Plato-type studies – human development, social policy, ethnic studies, philosophy of morality, democratic concepts – and even math studies (see, e.g., Finkel, 2015 who shows how, if properly taught, such studies can help students improve their reasoning as well as evaluation skills). If higher education reneges on exposing students to key human questions, where will people (and not only future police officers) learn the complex skills necessary to negotiate the disrupting changes our evolving world presents? Unless teachers relinquish their preoccupation with information-delivery and find effective alternatives that stimulate the higher order thinking skills that employers seek and society needs, our democratic society will continue to slide back into a world where people behave much like students are expected to behave in college – believing what they are told and looking to authority for easy answers to difficult questions.

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How the Pandemic Changed Education
From the Students of the Pandemic

Janet Grayson Chappell

Abstract

The pandemic changed the way of life and education. What was once identified as non-traditional education, is now beginning to be viewed as traditional education. Institutions and organizations are adopting the non-traditional method for education, training, and basic communications and interactions. Due to the pandemic, online instruction became the sole method of continuing education across all educational sectors and levels. And now, more and more colleges and universities have adopted the use of the non-traditional educational method (online). During the pandemic, data was collected to identify the state of students during the pandemic era per the online non-traditional method of education. The data collected identified the top reasons how the pandemic changed education, what the #1 actions needed from faculty, and what can be done to address the changes.

Keywords: Pandemic, support, direction, communication, accessibility

Introduction

Creating an adult-focused online experience can be based on several practices associated with a conducive online learning environment that includes an opportunity to learn, participate in active engagement, and meet the needs of the students for successful completion. During the pandemic, the listed practices played a crucial role in providing the education each student enrolled to accomplish, with pivots in the learning experience for some, and the modality for others. Either way, institutions, and faculty had to identify how to move forward with creating and providing an adult-focused online experience. In most instances, educational experiences include the five basic components of the adult learning theory, which include *self-concept, experience, readiness to learn, orientation to learning, and motivation to learn* (Friel, n.d.). Therefore, the study identifies how the pandemic changed education, explores what can be done to help with the changes, and discusses how to successfully move forward post-pandemic. The practical practices will help to create more opportunities to learn, encourage more engagement, and meet the needs of the students.

Opportunity to Learn

In literature, it identifies, the opportunity to learn was limited and/or diminished during the pandemic (Glantz & Gamart, 2020). Therefore, adjustments must be made in order to bring about learning opportunities for the student population. Therefore, providing the opportunity and environment to learn, feedback was collected from the students to bring about enhanced experiences to foster the readiness to learn and provide orientation to learn. The classroom must yield an

environment conducive to creating an adult-focused online experience. The student population was surveyed to *identify how the pandemic changed education*. Pre-selected options included: *affordability, increased drop rate, low enrollment, and decrease in grades.* Of the four selection options, the students identified how the pandemic changed education in their eyes including changes in *grades and enrollment*.

The online modality yields some concerns for the overall successful learning opportunities due to increased isolation, learning barriers, distractions, and the lack of motivation, time management, and proper equipment (Zahnies, 2020). Therefore, the online modality functions and activities must change, to meet more of the identified needs of the online adult learners. With the opportunity to learn is a concern, institutions and faculty must be able to incorporate more effective best practices to foster the opportunity to learn. As the students were polled with the question: *which would you select as the top reason how the pandemic has changed education*? The results presented: *a decrease in grades and low enrollment*. The following are some best practices to consider and apply *to maintain enrollment numbers, stabilize retention numbers, and provide flexible grading assistance*. Students identified they were concerned with their grades and not being able to maintain the level of completion as he/she dealt with how the pandemic changed their way of life. So as a faculty member, it is important to foster a caring, flexible, and conducive learning environment that will aid in maintaining enrollment with financial support and other services i.e., health and wellness, and increased grade averages with flexible classroom due dates, assignment assistance, tutoring assistance with more faculty availability, and direction.

Active Engagement/Interaction

The student population was surveyed to *identify what was the number one action needed from faculty*. Pre-selected options included: *acknowledgment, calming space/efforts, communication, direction, and support*. Of the five selection options, the students identified the needs of the faculty body to aid in successfully completing his/her courses and degree included: *support, direction, and communication.* The three results are all part of creating a caring environment that fosters the opportunity for students to successfully matriculate through his/her academic program. Outreach for the faculty can include motivational and encouraging support via individual direct messages, emails, phone calls, face-to-face interactions, and basic availability as needed per the student needs to cover program curriculum requirements. Per Bora (2023), it is time for professors to change the cycle of communication and offer a more gentle and safe space to communicate with students. Providing extra care initiatives to students, it allows for faculty to identify with the known concerns for assistance and needs of the students as well as offer transparency and open-door communications, which will allow students to successfully matriculate through his/her program.

Meeting Specific Needs

As faculty, it is important to meet the needs of all students. By creating a caring conducive learning opportunity and environment, students can more effectively move forward with his/her educational pursuit(s). The student population was surveyed to see *what can be done per specific student feedback* and the solutions were provided on what faculty and institutions can do to create a learning experience that is more in tune with the student's personal and professional well-being. Per Zahneis & June (2020), faculty and institutions can incorporate a ton of practical best practices to foster the needed learning environment and opportunity to learn for the many students in need. The best practices can include but are not limited to the following:

What Faculty Can Do:

1. Offer more support
2. Accessibility
3. Communication

What Institutions Can Do:

1. Financial support (provide more)
2. Health/Wellness Services (wellness checks)
3. Degree Extensions
4. More student involvement/communications
5. Overall, more support

As faculty and institutions continue to provide educational services to the many students enrolled, a more caring conducive learning environment, experience, and opportunity are going to have to be incorporated to recreate the balance post-pandemic and foster the successful completion of courses and degrees for the many students. Therefore, the three key practical practices explored should be considered and applied to create a more precise adult-focused experience. The three practical practices include providing an *opportunity to learn, facilitating active engagement, and meeting specific student needs*. As identified by Friel (n.d.), educational experiences must include the five basic components of the adult learning theory, which include s*elf-concept, experience, readiness to learn, orientation to learning, and motivation to learn*. This study identifies how to create a more caring conducive adult learning environment and experience that contributes to enhanced growth and development for the students, faculty, and institutions post-pandemic.

Results

The result of the study provides data on how to move forward with identifying with and addressing the needs and concerns of students experiencing life post pandemic and attempting to complete his/her courses and degree via the non-traditional method of education (See Fig.1). In addition, the data identifies how faculty and institutions should incorporate more student support, engagement, communications, and transparency in student's educational journey. Students identify with how his/her concerns are addressed with personable care and attention. Therefore, it is only proper to afford an opportunity for students to experience lessons on how to successfully navigate certain situations in the mist of change. So, with the changes identified for the faculty and institutions, students should be able experience a more student-centered educational learning experience with more personable engagement and communications (See Fig.2). According to Bora (2023), professors must be able to recognize the feelings of their students and assist with navigating the challenging times and experiences.

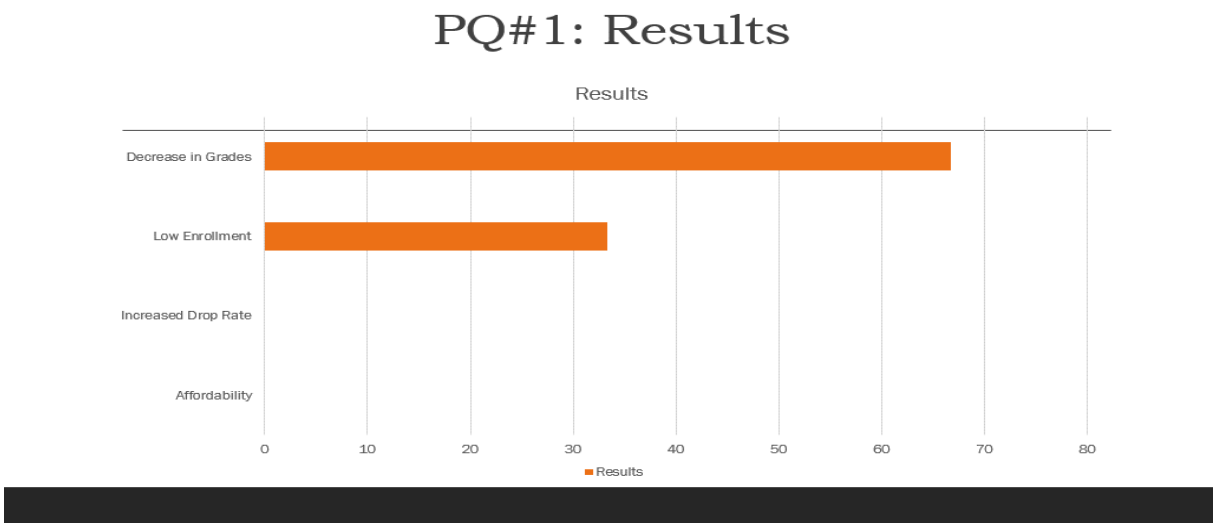

Fig. 1 Top Reasons How the Pandemic Changed Education

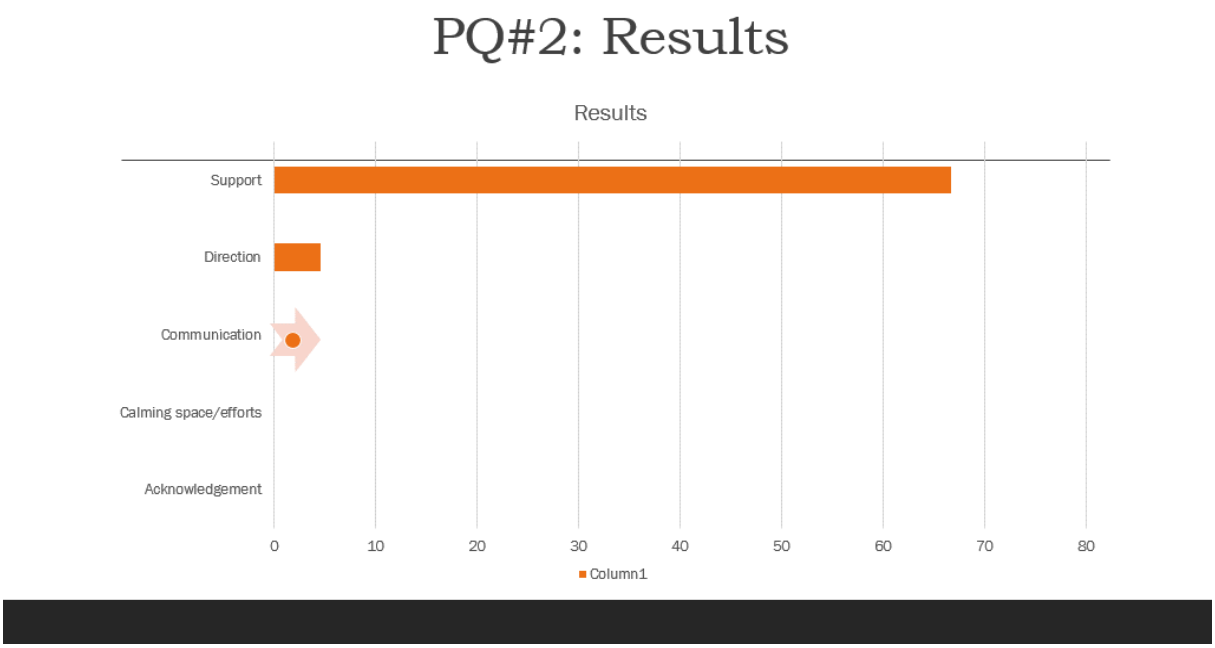

Fig. 2 Top Actions Needed from Faculty

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Writing on the Job: Authorship, Ethics, and Agency

Carolyn (Collie) Fulford

Abstract

Adults who write as part of their professional responsibilities often do so without full control over the purposes, styles, revisions, and uses of their work product. In most professions, ownership of workplace writing resides with the employer. Yet workplace writers feel ownership of their writing and take responsibility for its consequences, even when their authorship is constrained.This paper draws on interviews with employed adult undergraduate and graduate students at a historically Black university, revealing insights about authorship, ethics, and agency gained through workplace writing experiences. Recommendations for adult-inclusive instruction based on this knowledge hold promise for helping such students —and their less experienced peers—discern possibilities for writing with ethical agency in their professional lives.

Keywords: adult students, professional writing, authorship, ethics, agency

One day in 2010, I started a new unit about procedural writing for my technical writing class by explaining that being able to write guides, manuals, and other instructions was powerful knowledge because of its potential to transform an employee from user to maker, from learner to trainer. I spoke about instructional writing's value not only for employers but also for writers because it can lead to pay raises and new positions. "But it doesn't always work like that," commented one of my students. She was a Black woman who had been laid off from an office manager position recently. She explained that she had done what I advocated. She had written a handbook and trained another person, only to have that person be promoted over her. Years later during an interview, another experienced Black professional corroborated my student's experience of having her writing undervalued. Or more precisely, her writing was valued, yet it disproportionately benefited management. Celinda Bailey explained that she had worked for years in local government without significant promotion. The contrast between the pay and respect afforded to her and that of the managers who benefited from her expertise was especially irksome to her:

It was frustrating, and a lot of jobs got put on me which were managerial positions, but the credit was always given to the [other] person…. [My work] has promoted them and made them look good. … I have produced the paperwork, done the accounting figures, performed the budgets, and did the grant writing. I have all those skills, but I didn't have the paperwork to follow up with it.

These two adult students raise important questions about authorship and ethics in workplaces. Who owns the writing they do on the job? And how are workplace authors treated within institutions? Their stories furthermore suggest a pattern of Black

women being under-compensation for skilled writing. Adult students can offer critical standpoints as workplace insiders, and they can thus provide real-world nuance to classrooms that purport to teach about professional life.

They also offer correctives to prevailing assumptions about the direction that knowledge flows. Higher education often operates as if the flow is one way: knowledge is introduced in college to be applied and further developed in professional life after graduation. We are bathed in a cultural belief that school comes before work. We see this rhetoric epitomized by phrases like "college to career," and "market readiness" that appear on our university web pages, public discourse, and even our scholarship. Consistent with this prevailing ideology, I originally taught professional writing with an explicit college-to-career orientation. My courses were informed by Beaufort's work on transfer theory (1999, 2007). Beaufort's research identifies problems college graduates encounter as they transition from college to careers. She recommends methods for teaching writing that maximizes the transfer of relevant learning from school to work.

Similar frameworks are now a dominant strand in contemporary writing curricula, and I do not downplay their value. However, the school-to-career presumption drowns out other realities and fails to fully integrate adult students and their multidimensional, multidirectional knowledge. When the direction of school-to-work is inverted, or when career and college coexist, as they must for many adult students, one size does not prepare learners for the other. Instead, under the right conditions, academic and professional life can be mutually informing sites of learning. Working adult students offer us valuable insight into how they negotiate complex considerations of authorship, ethics, and agency when they are writing on the job.

Methods

The findings for this paper are informed by forty-two interviews conducted with thirty adult students across academic disciplines and employment sectors about their writing experiences. Of these thirty participants, two-thirds are women, and more than two-thirds are Black. Their ages range from mid-20s to 59 years old with two-thirds in their 30s and 40s. This range plus the distribution across academic disciplines is representative of the adult student population at North Carolina Central University, a public historically Black university. In addition, half of the interviewees are undergraduates aged 25 and older. Half are graduate students aged 30 and older.

Table 1

Profiles of Thirty Adult Student Participants across Academic Disciplines

	Social Sciences	Applied Professions	Arts & Humanities	Sciences	TOTAL
Women	6	12	1	1	20
Men	2	6	1	1	10
Black/Af Am	5	13	2	1	21
White	3	3		1	7
Asian American		1			1
Mixed race		1			1
Age 25-29	2	2	1		5
Age 30-39	3	4		2	9
Age 40-49	2	8	1		11
Age 50-59	1	4			5
Undergraduate 25+	7	5	2	1	15
Graduate & professional 30+	1	13		1	15
TOTAL	8	18	2	2	30

The complex personal, educational, and workforce histories of these students defy reduction onto a table. Their job histories are particularly complex, with many students reporting three or more significant changes in employment sectors. For example, one undergraduate social work major in his forties had worked in auto mechanics, teaching, social services, and elected public service.
All participants were interviewed using a semi-structured interviewing protocol adapted from Seidman (2019). They were asked what, how, and why they write on the job, in school, for themselves and their communities. Almost all chose to be represented with their real names.

To mitigate my cultural biases as a white researcher, I rely on race-conscious feminist methodologies (Ratcliffe, 2005; Rosenberg, 2015; Fine, 2018; and Shelton, 2020). These include engaging in co-interpretation with participants, a practice that regards participants as experts about their own lives (Ivanič, 1998; Micciche & Carr, 2011; Berry, Hawisher & Selfe, 2012; and Roozen & Erickson, 2017). Collaborating with adult undergraduate researchers as insiders to the participant population further contributed to the integrity of the project (Fulford, 2022).

Results

Three themes—authorship, ethics, and agency—emerged during the inductive analysis of participants' discussion of workplace writing situations. Questions of authorship include: Who wrote this? Who owns this? How is authorship determined, communicated, negotiated, and felt? To analyze ethics, I asked: How are writers treated? What consequences does their writing have? What are the benefits? Harms? For whom? Regarding agency, I ask: Who initiates writing on the job? How do workplace authors negotiate control over the style, content, and purposes of their writing? These themes are not exclusive. Two or all three may overlap in a writing situation. Such thematic layering is indicative of the complexities of writing on the job.

Authorship

My union recently sent an email reminding instructors that we own the intellectual property rights for our course designs. Academics are outliers in that our writings are generally regarded as belonging to us. However, in most other fields, employees' writing is regarded as work-for-hire; it belongs to the entity that pays the writer's wages (Brandt, 2015). Working adult students help us peer into gray areas of authorship, including workers' feelings of ownership about their writing. A scenario shared by Sheri Moss, a student in the public administration graduate program, shows authorial conflict during a handbook revision at a social services agency where she worked:

> With the internship handbook that we just completed...my biggest challenge was... I was told that this was my baby. This is something I'm going to be working on, and I started working on it. Well, my team lead went behind me, and she did a carbon copy, but she had everything off-key. It was off-centered and she left some things out. I was discouraged about it. I was really upset about it. .... After, we had to sit down, and our director went back over it and told her exactly what she wanted…I got that done.

Moss's statement, "This was my baby," could be interpreted as a desire to take full ownership of her writing. However, she identifies as part of a team: "We write constantly. We just submitted our very first newsletter for the agency. I had a part in that." She also seeks guidance to ensure she's doing what needs to be done. "I don't just sit down and start writing right away, I … research first, and I ask questions of how my director may want certain things instead of just stepping out there and writing," she says. Workplace authorship in hierarchical organizations requires a sophisticated understanding of the culture of each site to make sense of how textual production is normally treated. When does a colleague or director need to be consulted? Is this a solo or team project? Once a document leaves one author's hands, how much should they expect it to be changed by others?

Moss and other participants indicate how normal it is to form personal attachment to writing done on the job. Having a sense of ownership is part of taking responsibility for documents and their effectiveness. These feelings complicate the legal distinctions that make workplace writing the property of employers.

Ethics

Focusing on ethics allows us to examine how writers are treated at work. We can also analyze the effects of workplace writing from an ethical standpoint. The situations raised in the introduction, in which Black women professionals describe insufficient credit for their written work, indicate some of the most important ethical considerations around writing on the job: *How are writers treated in the workplace culture?* Furthermore, although I've coded Sheri Moss's experience as an example of the authorship theme, her description of authoring an internship manual simultaneously points to ethical concerns. When she took responsibility for writing that document, the differing ways her team lead and director treated her and her writing are open to ethical analysis. Moss felt "discouraged" and "upset" when her authority to complete the manual was undermined. Emotions like this help us detect when a situation raises ethical concerns regarding authorship.

Professionals in this study also demonstrate an acute awareness of the ethical consequences of their writing. This is exemplified by a scenario shared by an undergraduate social work student. Lloyd Holton's on-the-job writing experience came from employment at multiple social service agencies, five years of teaching in the Detroit public schools, and service as a local elected official. The writing situation he raises arose while serving as lead author on a program funding proposal during a social services internship. Holton's aim was to gain funding for a program to reduce recidivism among incarcerated men.

> And one way that I see that being done is by making sure that the individual that's returning home is prepared with the intervention and resources to help not just keep them on their feet but help them grow and prosper in a way to be a better father or better son or better uncle, whatever shoes they are filling.

An ethical orientation to the individuals he serves is evident in Holton's holistic positioning of them. He describes them as family men with responsibilities and the capacity to "grow and prosper." Holton indicates that this program is "important because felons come out and it's hard for them to get opportunities." Holton also took care with how he expressed the difficulties the men might face and their responses to these challenges:

> They even offer training courses for men at whatever age to … help them deal with whatever issues they deal with or ... I mean, not issues. I shouldn't say that. Help them deal with reactions they may have pro-actions and reactions. So that was all part of putting the proposal together.

Holton's conscious rewording from "issues" to "pro-actions and reactions" suggests he is navigating ethical word choices in speech and writing. These choices may reflect his social work training both on the job and in his degree program, as well as his personal approach to treating others with dignity. It is an example of ethical alignment between the writer, their organization, and their profession.

Agency in Relation to Authorship and Ethics

It is possible to analyze agency independently from the other themes, but it frequently co-occurs with ethical issues or questions of authorship or both. Such intersections are evident in the teaching scenario offered by De'Von Carter, a law student and cybersecurity expert who took a side gig at ITT Technical Institute for five years. ITT Tech was a private for-profit that closed in 2016 after the US Department of Education ceased to guarantee loans for students enrolled there. The scenario Carter shares demonstrate the ethical and authorial struggles that principled workers at these institutions face. Carter explained the context for adjunct instructors:

> In those jobs, the PowerPoints were supposed to be provided, because they're adjunct positions. …. There, the curriculum is already developed. You walk in, they hand you a book, they hand you a thumb drive with lessons on it, and they say, "Go." And the problem with that is that most of their stuff was incorrect or outdated or it just didn't apply anymore.… Most of the … adjunct instructors there would end up having to basically fix PowerPoints or just build new ones. …They weren't making us do it, it just needed to be done.

Here we see an example of two dimensions of ethics. First, *how are writers treated on the job?* At this for-profit institute, Carter and his colleagues are treated differently from faculty at other kinds of institutions. Adjunct instructors there appear not to be regarded as writers at all, at least not of curriculum and lessons. The writing they perform to correct the curriculum is outside of their contractual duties and therefore unremarked, unauthorized, and unrewarded. Yet for Carter's sense of professional integrity, the writing is necessary because the other ethical dimension evident in this situation is *what are the consequences of the writing?* Or, rather, *what are the consequences of NOT writing?*

Carter's rewrite of an outdated, canned curriculum is an ethical act of unauthorized authorship because he perceived that he would be misinforming students unless he wrote new materials: "It just needed to be done." The ethical problem he confronts is amplified by realizing the costs students bear. "When I found out how much those students were paying to go there, …it made me want to teach them better. It made me want to work harder for them." He represents his moral obligation to his students as exceeding his contractual obligations to the employer. Carter demonstrates agency by determining that the prescribed curriculum fails his standards for ethical teaching, and he authors new materials accordingly.

To the extent that any organization behaves ethically, it is because of the agency of individual workers within it. Yet the routine extraction of ethical labor that is evident

in this example and others in this study is disturbing. Professionals regularly compensate (without full compensation) for ethical deficiencies of organizations when they go the extra mile for the people their employers purport to serve. This is the kind of real-world scenario worth unpacking with students as we debrief about their prior professional experiences while preparing them for others.

Conclusion

Previously, I criticized the prevalence of college-to-career discourse because it fails to account for the work histories and educational trajectories of adult students. To be clear, most of the participants in this study enrolled in degree programs in hopes of meaningful career development. They wanted their return to formal education to result in a return on their investments of attention, time, and money. I am not advocating for us to abandon practical outcomes. However, we can develop more inclusive ways of acknowledging that college is but one site of knowledge production for many of our students.

To practice adult inclusivity, we can invite students to draw upon expertise learned elsewhere. We can discuss realistic professional scenarios that reflect adults' prior knowledge—for the whole class's enrichment. We can select texts and create assignments that assume students may be starting from a place of knowing. Those are ways that faculty can use *our* agency to author more ethical learning experiences.

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I Do Not Understand: The Urgency of Health Literacy Training

Joyvina K. Evans

Abstract

Preparing learners for the healthcare and public health industry is paramount. While providing administrative and clinical education/training is essential, it is vital to ensure that learners know the health literacy levels of the population they serve and work to improve their health literacy levels. An estimated 80 million adults have limited or low health literacy (Prince et al., 2018). These adults need help understanding and using health information containing jargon and technical words. Research shows that improvements in health literacy result in decreased ER visits, increased patient satisfaction, and better health outcomes.

Keywords: Health Literacy, Health Curriculum

Health literacy is defined as the possession of the knowledge and literacy skills needed to make an informed health-related decision. Health literacy often needs to be clarified with reading levels and literacy levels. While there is a correlation, they are all fundamentally different. There are many definitions, but at the core of health literacy are the common elements regarding the ability to obtain, understand and use health information to make informed decisions regarding health and treatment that will significantly impact health outcomes (Sorensen et al., 2012). Low and limited health literacy levels are associated with higher emergency room visits, medication errors, and an increased mortality rate. Studies have demonstrated that people with limited health literacy struggle with medication adherence, communicating effectively with health providers, and understanding diagnosis and treatment (Wood et al., 2023). Determining patients' health literacy level can illuminate their understanding of their health conditions and lead to more appropriate health decisions and outcomes.

According to a report by Milken Institute, approximately 88% of adults in the United States need better literacy to navigate the healthcare system. This includes maneuvering through insurance companies, pharmacies, hospitals, and outpatient clinics. People with lower and limited health literacy are more apt to miss doctors' appointments and have decreased continuity of care. Additionally, they need help understanding their diagnosis, treatment, and reading prescription medications (Lopez, Kim, and Sacks, 2022). The data shows that Hispanic populations have the lowest health literacy rates. Additionally, those who speak only English at home have higher health literacy rates. From a socioeconomic status, higher health literacy rates are linked to people who have higher income and education levels (Lopez, Kim, and Sacks, 2022).

Health Literacy Education

Training and educating healthcare students and those involved in patient care is important to improve health literacy rates and quality of life. Universities are responsible for producing health care professionals who are competent and prepared for the health care industry. Massey (2017) reports that more health professional educators are beginning to integrate health literacy education into their curricula. Creating a stand-alone health literacy course or, at minimum, incorporating health literacy training into the health curriculum ensures that future employees are well-equipped to communicate with diverse populations.

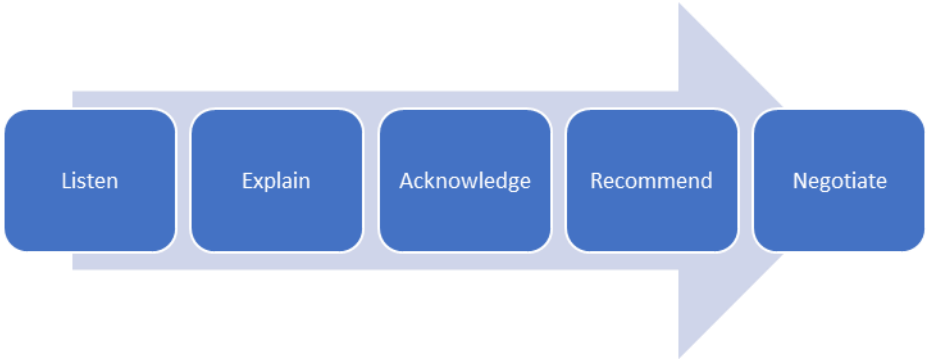
The health curriculum should include the following components:

1. Educating health students and faculty and helping them to build their health literacy skills. This will include cultural sensitivity training and discussion on cultural and linguistic norms for communicating with diverse populations.
2. Communication and training regarding writing and communicating information in a way the patients can understand. This may include avoiding medical jargon and technical terms.
3. Organizational leaders must be aware of the need to build health-literate organizations. Leadership must ensure that the directional signs in the hospital are easy to read and understand.

LEARN Model

The LEARN model is a model used for cross-cultural communication. It helps build mutual understanding among healthcare professionals and patients. The LEARN model should be taught to students. This is a great way to prepare them for cross-cultural communication and to help assess patients' health literacy levels.

The components of the LEARN model are:



Listen refers to the health care professional assessing the patient's understanding of their condition. This is an excellent opportunity to ensure they know the condition, understand the cause and symptoms, and adequately understand the treatment. It

is essential that patients are comfortable answering questions and that there is patience and empathy from the health care professional. The next step is to explain the condition in simple terms. Acknowledge is the third step of the model. This involves acknowledging the differences between the patients' and healthcare professionals' views. It is essential to share similarities and differences. During this time frame, healthcare professionals should ensure that they continue to use easy-to-understand terms and even consider sharing examples. The next step is to recommend a treatment plan. During this step, the healthcare professional should explain the treatment options. The benefits and risks should be discussed. Again, the patients and their families should have adequate time to ask questions and have their questions answered satisfactorily. Giving the patients and family members time to consider the options and schedule a follow-up appointment may be necessary. The last step of the model is to negotiate or reach an agreement regarding the treatment plan. The treatment should be understood and fit with the patient's perceptions of healing.

Conclusion

Establishing greater health literacy training is necessary to improve health outcomes and help patients understand their health conditions and treatment options. Prioritizing creating a new course or including health literacy in current courses must be considered. Educators must also be able to design the curriculum effectively and determine reliable methods to evaluate student understanding. The recommendations aim to increase the health literacy understanding of students. By increasing the knowledge and awareness of healthcare professionals, individual health literacy levels can increase the ability of the healthcare systems to meet the needs of all people served.

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A Case Study of Noncredit to Credit Pathways in Community Colleges

Amy Grzybowski

Abstract

A high school diploma is no longer the path to financial stability; a person needs at least a postsecondary degree or credential to earn a median income (Carnavale, et al. 2019). Community colleges need to work to create opportunities for all students to attain a certificate or degree. This study examines two public community colleges that have both noncredit and credit pathways. The purpose of this qualitative case study was to explore the process that stakeholders in two community colleges describe to design and implement clearly articulated pathways for students. The findings will contribute to the field of higher education and policy by assisting institutions with a tool to create a framework to design and implement noncredit-to-credit pathways.

Keywords: noncredit; community college; career pathways

Introduction

Three-fifths of community college students are enrolled in noncredit programs, however, sometimes these programs may result in limited opportunities for career advancement (Bragg & Krismer, 2016; Jacobs & Dougherty, 2006). There are low transfer rates between students who complete noncredit programs and degree-granting programs (Xu & Ran, 2020). One solution to low transfer rates are career pathways. They support a "vertically and horizontally integrated system of workforce training that stretches from noncredit adult education through the baccalaureate" (Jacobs & Dougherty, 2006, p. 60).

Community colleges offer workforce development programs that are separate from the academic side of the community college (Friedel, 2008; Jacobs & Dougherty, 2006). This organizational disconnect is one reason why it is difficult for noncredit programs to seamlessly transition a student into a credit-articulating program. Many students that enter noncredit programs at community colleges are low-income, immigrants or English language learners, or displaced workers (Jacobs & Dougherty, 2006). Students often start a noncredit program because of their flexible scheduling, lower cost, their remedial opportunity, and provide the skills needed to get a job (Arena, 2013; D'Amico, 2017; Ryder & Hagedorn, 2012; Van Noy et al., 2008).

Objective

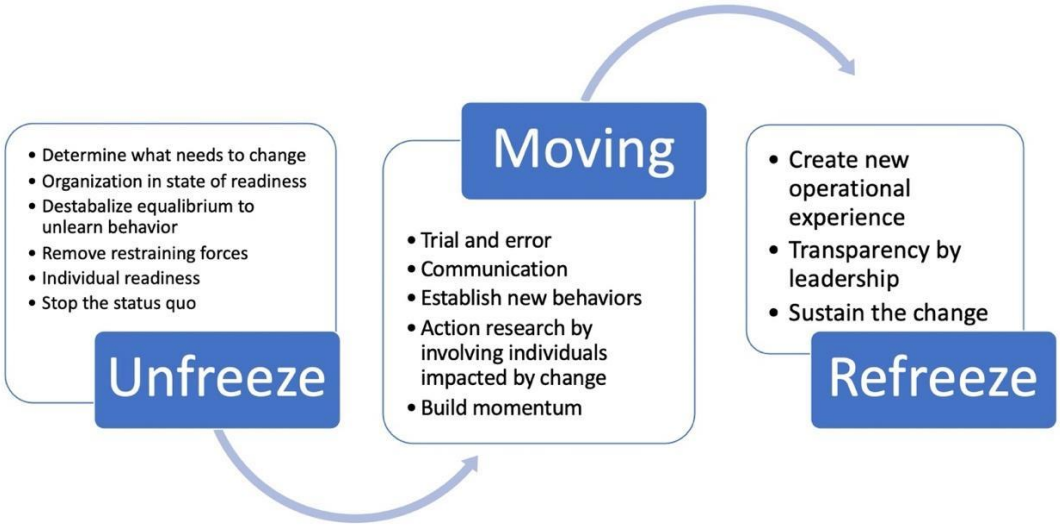
The results of this multiple-case study could provide a framework for how institutions can design and implement noncredit to credit pathways (NC-CP). The purpose of this qualitative case study is to explore the process that stakeholders in two community colleges describe to design and implement clearly articulated pathways for students to move from noncredit to credit programs that will allow them to attain a certificate or degree.

Theoretical Framework and Review of Literature

The theoretical framework for this research study is organizational change theory. Higher education institutions must incorporate change to satisfy the learners, the community, and their employer partners (Nordin, 2012). Lewin (1947) argues in his theme of Group Dynamics, that one must focus on the group, instead of the individual to elicit change. This is especially true in a community college setting where the pressures of other faculty members may make it difficult for individual faculty to be more innovative. Lewin's (1947) three-step change model, on the other hand, highlights process and planned changes which requires a phase of unfreezing, changing, and then refreezing (Hussain et al., 2016). See Figure 1 for a depiction of Lewin's three-step change model with the synthesized information.

Figure 1

Lewin's Three Step Change Model



(Armenakis & Harris, 2009; Burnes, 2004; Choi & Ruona, 2011; Hussain et al., 2016; Nordin, 2012; Schein, 1996; Self & Schraeder, 2008; Visual Paradigm, 2023)

Review of Literature

The review of the literature illustrated that there are benefits of noncredit to credit programs for individuals, the workforce, and community colleges. A noncredit program may be the motivator for a student who may not otherwise have ever attended a community college or provide an opportunity for adult students focused on gaining skills to get a job. (Jacobs & Dougherty, 2006). Postsecondary credentials also increase lifetime earnings, and career advancement, and make a student more competitive in the workforce (Bishop, 2019, ESG, 2020; Van Noy et al., 2008). Workforce divisions are often the units within the college that are entrepreneurial, innovators, and most engaged with community partners and industry (Baker, 2013). Noncredit programs are also an opportunity for community colleges to pilot new

programs before taking them through the lengthy curriculum review process (Van Noy et al., 2008).

Research also illustrates that there are three main obstacles for community colleges to create NC-CP: a disconnect across organizational systems, concerns of program review, and unreliable funding sources (D'Amico et al., 2014; ESG, 2020; Ganzglass et al., 2011; Jacobs & Dougherty, 2006; Price & Sedlak, 2018; Van Noy et al., 2008). Some community colleges have a separate noncredit or workforce division, and some integrate these programs into the credit-bearing divisions of their institution. There is not a systematic way for faculty to review and align competencies in noncredit programs to those that are taught in credit-bearing coursework often due to a lack of organizational alignment and the measurement of seat time by accrediting agencies (Ganzglass et al., 2011; Price & Sedlak, 2018). Similarly, some noncredit programs may consist of competencies combined from several which makes it difficult for faculty to review coursework, for students to know what they have earned for competency, and for employers to understand the difference between the non-credit program and similar credit-articulating courses (ESG, 2020). Lastly, there is no consistent formula or guaranteed funding source to aid in the development and implementation of noncredit programs and students are not eligible for federal student aid (D'Amico et al. 2017; D'Amico et al., 2014; ESG, 2020; Grubb et al., 1997; Jacobs & Worth, 2019; Van Noy et al., 2008).

Methods

The purpose of this qualitative case study was to explore, in-depth, the process that stakeholders at two different community colleges used to describe how they designed and implemented NC-CP and the obstacles and facilitators to the process. According to Merriam (1998), case studies can "solve practical problems… arising from everyday practice" (p. 29), "illustrate the complexities of a situation" (p. 30), and "explain the reasons for a problem" (p. 31). Two community college systems with governing boards were selected as contrasting cases because of their size and experience with noncredit-to-credit pathways. This case study utilized qualitative research methods such as participant interviews and content review of websites, organizational charts, meeting minutes, and policy documents related to each institution's noncredit and credit programs and pathways. One is a small community college system, referred to in this study as Small Community College (SCC) system, with approximately 13,400 students and less than five colleges, while the other, referred to as Large Community College (LCC) system, has approximately 39,200 students and more than fifteen colleges. They both have noncredit programs and were in different phases of implementation.

The researcher utilized purposeful sampling to identify participants at each institution including both administrators and faculty engaged in the NC-CP process, as well as employers who are collaborating in the process. Ultimately, seven administrators and/or faculty and three employer partners were interviewed from each case. There was a total of 20 participant interviews, 10 from each case. Each case was

initially examined on its own and subsequently, a cross-case analysis was conducted between the two cases and a program-level logic model was produced.

Findings and Discussion

Both cases were selected because they were markedly different. However, both cases examined have extensive workforce divisions within their systems and focus heavily on employer-driven opportunities to support the economy as well as ensure their students graduate with certificates and degrees that put them into the workforce. Even though both community college systems have differing NC-CP offerings, they both have experienced similar paths to provide these opportunities to students. The two cases that were explored in this research had similar themes that emerged in the findings. Both cases revealed the following themes: student characteristics/considerations, organizational considerations, obstacles, and facilitators. Some of the sub-themes are highlighted below. This cross-case analysis will synthesize the findings across the themes and explore their general similarities and differences.

Student Characteristics Versus Student Considerations

The data that was presented from SCC was much more focused on the makeup of the student that attended a credit versus a noncredit class. The interview participants mentioned that students in noncredit programs tended to be returning adults, unemployed or underemployed or English Language Learners (Davaasambuu et al., 2020; Xu & Ran, 2020). At LCC however, the data revealed much more information about student considerations. For example, several interview participants highlighted that the students were attending noncredit programs to get a job (Davaasambuu et al., 2020). The outcome of the program was the focus less on the type of student enrolling.

Organizational Considerations

Standardization. SCC did not appear to have much data relating to standardization because the size of the system allows policies and procedures to be implemented across the system in a fairly seamless process. LCC, however, acknowledged that each college within the system does it differently. They are all independently accredited and therefore they do not operate as a system. This was represented in how each college is organizationally set up with workforce and academics, how noncredit to credit opportunities are implemented, and how the colleges use computer software to track workforce and academic students.

Silos Between Academic and Workforce Division. Next, SCC acknowledged the silo that occurred between the academic and workforce division and the website lists academic programs separate from workforce programs. LCC, on the other hand, has some of their community colleges where the workforce division lives within academic affairs, however, it is still not a seamless operation. However, if you review any program listed on the individual websites, it leads you directly to workforce opportunities and outcomes. The language for academics and the workforce is illustrated so that a student thinks they are seamless.

Leadership. Both system participants agreed that leadership is important in implementing noncredit-to-credit pathways. They both acknowledged transparency both understanding the priorities of leadership and participants discussed their regular meeting cadence between the workforce and academia to mitigate any potential roadblocks.

Speed of Academia. Both cases indicated if there was a need for employer-driven training they were piloted within the workforce division because of the time it takes to go through the academic curriculum review process. Both appear to have limited opportunities to appear before the curriculum review and LCC is also further complicated because all of the colleges in the system have to approve the curriculum and not just the college looking to hold the course. Once approved, the accrediting body has to also approve the new program and to the Council of Postsecondary for final approval.

Alignment of Programs. SCC expressed concern with aligning the noncredit programs so that when it matriculated it counted toward specific coursework on the credit side, however, because of accreditation the college has to ensure the competencies align. This was not noted as much of a concern with LCC mostly because many of what would be traditional noncredit programs had already been translated to credit offerings.

Obstacles

Faculty. In both cases, there was a resounding note about faculty buy-in. Some words used to describe this by the participants were "mindset" and "thinking differently." However, both cases identified faculty understanding as a bigger obstacle that if addressed could yield positive results. Both cases acknowledged that it is not always faculty trying to be obstinate but cognizant of the requirements of the accrediting body that causes the pushback.

Program Alignment and Degree Requirements. Both were concerned with the rigor of NC-CP. However, SCC was also worried about the program alignment. Particularly, what does the noncredit course count towards in a degree program? LCC felt that the awarding of partial credits was complicated because similarly if a student matriculated how would the partial credit fit into the program of study?

Employer Considerations. This was identified in both cases. There were two major concepts that both cases argued. First, many employers do not care if a program has credit associated with them and are more focused on competencies. Second, if the employer is to fund the program through tuition reimbursement, many of these policies require credit to be associated with the program, and therefore noncredit programs would not be eligible.

Facilitators

Faculty. Both cases felt strongly that faculty buy-in is also a facilitator. If the workforce division includes faculty from the beginning, the faculty is able to understand what the employer needs, why it may or may not fit into an existing

program and help champion the effort. SCC also indicated it was important to have someone who would lead the development and implementation of an NC-CP to ensure the project made it through each required step.

Program Development and Review. Both community college systems also indicated the ease at which they could establish noncredit programs for employers in the workforce divisions within their institutions. This allows them to pilot programs, be flexible, and be responsive to employer needs. This also allows for an evaluation period of a program before bringing it through curriculum review.

Cross-Case Summary

Overall, the themes of student characteristics or considerations, organizational considerations, obstacles, and facilitators were somewhat similar between the two cases. The themes were consistent and continued to support the theoretical framework and the review of the literature. There were some differences between the two cases, much of which was likely due to the size of the organization and an organizational change that LCC experienced in its merger in the early 2000s. They also do not all have the same organizational structure for the workforce and academics. SCC does not experience as much complexity in the approval process, nor do they deal with obtaining buy-in from multiple community colleges.

Conclusion and Recommendations

The two cases explored illustrated how these two community colleges design and implement NC-CP. Though both colleges were at different levels of implementation, enough information was gleaned to provide input for other colleges to learn how to best consider implementing NC-CP on their campuses. If community colleges consider all opportunities in providing credit, where applicable and acceptable by accreditation, they will be able to provide opportunities for students who may not have otherwise considered further postsecondary attainment.

Community colleges need to implement several measures to help students successfully transition from a noncredit program into a credit pathway. From an internal perspective, **community college presidents should collaborate with both academic affairs and workforce divisions**, regardless of where they are in the institution. This constant communication will make it natural for individuals that work in the workforce division to include academics when meeting with employer partners. This synergy will help in creating the necessary buy-in and understanding from faculty.

Next, **community colleges should implement policies and actions that have recruiters, or someone designated from the college, speak to every cohort of students in a noncredit program about future opportunities at the community college**. Most noncredit students are enrolled in their current program to get a job or upskill in their current job. They are not necessarily thinking about their next step and likely do not know what their opportunities could be because of the program they may be participating in. This is an opportunity for the college to share the potential credit value of their current program and applicable pathways if a student were to

continue on in their educational path. It also lets each student in the room know that they are welcome at the college as a student.

Lastly, **if a noncredit program cannot be directly articulated into a credit pathway, each noncredit program at the community college should be provided an academic crosswalk for prior learning credit** so that if a student returns as a matriculating student, the student is aware of the credit potential. It should not be on each individual student to request this review. Community colleges need to reduce barriers to student completion of degrees.

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Creating a Dynamic Industry Partnership Across K-12 and Higher Education

Nancy Martin & Amy Grzybowski

Abstract

In a unique public-private partnership, the State of Rhode Island supported the growth of an employer partner who needed to hire thousands of individuals over more than a decade. To support this effort, they established a collaboration that included K-12, higher education, and state government to meet the demand. One initiative built a higher education center that houses adult education, workforce development, and higher education courses in one building. Programs are delivered by nonprofits, industry partners, and both public and private institutions of higher education to meet the initial employer partner as well as others. This collaboration created a self-sustaining model that has helped thousands of people reach postsecondary attainment.

Keywords: workforce development, industry partnerships, collaboration

Introduction

Nationwide employers are having difficulty finding the skilled workforce they need. In New England we are experiencing a decline in the working-age population, and employers are experiencing the Great Resignation. Even before the pandemic, public schools were experiencing "a 3% decrease in student enrollment in first through fifth grades by fall 2019" (Bransberger, 2023, p. 1). The culmination of the workplace norm changes from the pandemic, the Baby Boomers reaching and surpassing retirement age, and the shrinking working age population, has forced employers to rethink their hiring and retention practices to meet the demands of their industry. In Rhode Island, state government, private industry, higher education and K-12, have all come together to create a robust industry driven pathway for the Rhode Islanders to support current hiring demands, as well as a sustainable model to foster decades of interest in local maritime manufacturing occupations.

The Solution

In 2016, the State of Rhode Island and General Dynamics Electric Boat (GDEB) developed a strategy for the workforce pipeline that GDEB needed (Office of the Governor, 2016). GDEB employed 3,500 and was preparing to increase to 5,500 by 2030 at its Rhode Island facility, not including the projected growth at the Connecticut facility. GDEB has been designing and constructing the nation's nuclear submarines since 1952 and will be responsible for 78 percent of the construction of the newest Columbia-class submarine (Harper, 2021). Between GDEB's Rhode Island facility and its Connecticut facilities, they had a goal of hiring, onboarding, and retaining over 10,000 employees over the next 10 years at that time. To meet this demand, GDEB had to implement a long-term sustainable strategy to address the shortage of skilled workforce in Rhode Island, Connecticut,

and its region to not just support GDEB, but also to support their supply base. As the word spread of this increased demand, state officials, state agencies, public and private institutions, as well as many non-profit organizations reached out to help. GDEB in collaboration with the State of Rhode Island took the first step to organize those different entities and strategized.

The State embraced one of GDEB's core values: "Value each other… We benefit greatly from everyone's knowledge, hard work, dedication, and willingness to learn and teach others what they need to know to be successful…" (GDEB, 2023). In order to fully capture this core value GDEB had to first understand the underlying needs of GDEB and its suppliers. GDEB had to first look within to see where they would fall short when it came to onboarding thousands of new employees annually. This new growth was a mixture of GDEB and their supplier's new demand, along with the population exiting the businesses which caused the new demand to multiply. GDEB recognized two main shortfalls within their current onboarding model: 1) facility capacity and 2) retention of new employees within the first year of employment. For GDEB to train new hires they knew they needed more conducive training spaces and they needed to transfer knowledge in a more comprehensive thoughtful hands-on manner. Once the problem was identified in 2016, Rhode Island's public and private stakeholders convened.

The initial initiatives included pre-employment training at six career and technical centers, post-employment training, and increased capacity at New England Institute of Technology (NEIT) in the Ship Building and Advance Manufacturing Institute (SAMI) as well as a partnership with the RI Office of the Postsecondary Commissioner and the Community College of Rhode Island (CCRI) at the new Westerly Education Center for training in maritime pipefitting, sheet metal, and electrical (Office of the Governor, 2016). To advance some of this work, the State of Rhode Island invested in a unique public-private partnership through the build-out of the Westerly Education Center (WEC). The vision to create a community college in the downtown of Westerly, Rhode Island, morphed into a higher education workforce development hub for southern Rhode Island and eastern Connecticut. GDEB became the anchor tenant, working with the Community College of Rhode Island to educate and train new hires in maritime pipefitting, sheet metal, and electrical tradespeople. The programs were designed to operate in a simulated environment and on a shift schedule, increasing retention for the first year of employment. Since its initial opening in 2017, GDEB has continued to increase the programs at WEC to augment their pipeline at the other higher education institutions in Rhode Island and Connecticut. Since 2016, the programs in both states have educated over 1,000 youth in grades K-12 in maritime manufacturing outreach programs and 5,543 adults through the pipeline. As GDEB shifts to building the Columbia-class submarine, they are working with their training partners, such as the New England Institute of Technology to adjust the curriculum to meet their needs (Quigley, 2021).

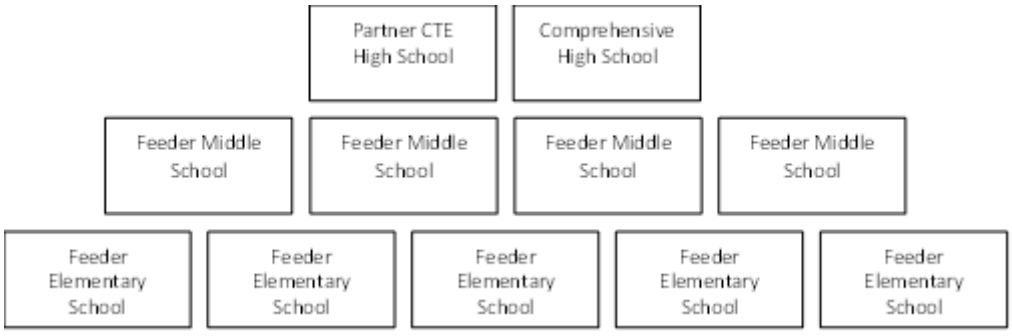
Leaning Into K-12

Once GDEB's initial problem was resolved, the next hurdle for them and their suppliers was the lack of people interested in making manufacturing a career. GDEB set out with the State of Rhode Island, and eventually the State of Connecticut, to grow the next generation of shipbuilders through leveraging their career and technical education (CTE) system. However, before GDEB asked the state for support they first had to do some due diligence. GDEB reached out to local and national organizations and discovered through benchmarking that the national maritime manufacturing education landscape had some very helpful ongoing efforts. GDEB first collaborated with the National Maritime Education Council and the Gulf States Shipbuilders Consortium (GSSC) to support the development of maritime manufacturing CTE curriculums which were then published through the NCCER organization (formerly known as the National Center for Construction Education and Research) for schools to implement. In partnership with the Rhode Island Department of Education (RIDE) and the Rhode Island Department of Labor and Training (RIDLT), all ten CTE schools were independently assessed based on infrastructure, schedule, feasibility, and interest. Over the past seven years over 10 programs were funded, built, and implemented, and this number is still growing today. GDEB then moved this initiative into Connecticut and over the next several years into other parts of the region and nation to help support their supply chain. However, GDEB realized they could not stop there as they needed to ensure these programs were filled.

Through the support and encouragement of several local Rhode Island officials, GDEB developed middle school "feeder" programs and even continued into developing programs for elementary schools. Now that GDEB had CTE programs within certain districts they needed programs that would educate middle school youth about these career opportunities. This is when GDEB strategically designed its school-based pathway for each CTE district which is outlined in Figure 1.

Figure 1

Partner School Districts



This strategy identifies not only CTE partner programs/schools that possess a maritime manufacturing program but now form partner districts. Each educational level introduces maritime manufacturing occupations through a hands-on educational STEM-based curriculum.

After the creation of the Partner School Districts, the Boat for Explorers, the middle school program was developed. This program morphed over the first few years from a weekend program to a school-based program. GDEB realized two years into the program that the program as initially designed was limiting its potential scalability. GDEB redesigned the program so that it could be predominantly implemented within the school districts as a teacher-led program. The reason was two-fold: 1) the program was scalable and 2) allowed for more community engagement and investment into the strategy. The Department of Defense's Sea Perch program, in collaboration with RoboNation, was identified as the base of the program. The program has several partners involved to enhance the experience for the youth involved. First, GDEB identifies the partner schools in collaboration with the CTE partner school, which allows for district alignment. Second, GDEB provides training for all the teachers in collaboration with RoboNation. This training walks teachers through the entire build of the submersible vehicle but most importantly educates those teachers on how each part of the build correlates to GDEB's six core trade occupations. Thirdly, GDEB provides guest speakers throughout the duration of the program through collaboration with the Navy to help tie what they are learning to the bigger picture of national security. Finally, GDEB helps support tours of the CTE partner school at the conclusion of the program, which hopefully helps the programs stay full and thriving for years to come.

After implementing the program in the middle schools, GDEB developed The Boat for Kids program which is delivered in the 5th grade is implemented in those elementary schools which feed the Boat for Explorer schools and can be delivered by a variety of individuals, based on school preference. GDEB has designed and created kits for the program to make it simple for the teachers to do in their classrooms. An activity book was developed around the six core trades: Welding, Shipfitting, Machining, Pipefitting, Electrical, and Sheetmetal. This activity book provides those teaching the program activity for each trade, word search, math worksheets, color pages, and other related exercises. The activity books are housed within the kits along with everything needed to perform each activity as well as a backpack for each student.

Reaching into the Community

GDEB determined that developing the future shipbuilders and training new hires was not the only initiative that would grow the population migrating into manufacturing. Due to the volume of people needed GDEB had to: 1) Educate the community on the occupations they needed to hire and 2) Grow the company to be more reflective of the communities' populations. For example, The State of Rhode Island has a population of 51% women and 16.9% non-white residents (U.S. Census. 2023.). GDEB strives to grow its diversity in every possible way but learned it

needed to expand its reach even more. To complement this concept GDEB learned that not only did everyone not know what the company builds but the lack of knowledge for each occupation and skills required. Therefore, GDEB developed and deployed three focused programs within the community to educate people about the company and its occupations. Three adult Boat Programs were designed to center on different populations of individuals. The first program designed was the Boat for Women and this program focused on the education and encouragement of women into the trades. Like most manufacturers throughout the nation, the population of female shipbuilders was lower than their counterparts. "Women account for almost exactly half of the U.S. labor force yet makeup only 29% percent of the manufacturing industry" (Forbes, 2021). So, by building a program run by women, for women, GDEB has been able to support and encourage females into the trades. This program is an exposure program where women come together a few nights a week at one of GDEB's pipeline sites and learn about GDEB's six core trades.

Similar to the previously created programs for youth, the women learn about Welding, Shipfitting, Machining, Maritime Pipefitting, Maritime Electrical, and Maritime Sheetmetal through hands-on exploratory projects within each trade, as well as how to apply to the company. Next was the Boat for Vets program. This program focused on encouraging more veterans to join GDEB as well as helping veterans to understand how their skills are transferable to GDEB occupations. The program details are identical to Boat for Women but the occupations they explore are more focused on their military experience. Participants in this program learn about becoming an Operations Supervisor, Shipyard Test Organization – Maritime Electrical (two sessions) Shipyard Test Organization – Maritime Mechanical (two sessions) and Radiography. The final program designed was the Boat for Everyone, which is intended to really connect with the community and have a program that was able to be offered to different community groups to help GDEB diversify their population and support and encourage those outside of GDEB's typical population to become interested in manufacturing. This program is run in the same manner as the Boat for Women program focusing on GDEB's six core trades. At the end of each program, the participants are offered an opportunity to tour GDEB's facility to see where they would be working if they decided to apply for a career with GDEB. All of these programs are fully funded by the Department of Defense through Southeastern New England Defense Industry Alliance (SENEDIA).

GDEB illustrates a successful public-private partnership to address significant workforce needs in New England. This is an example of how multiple states, government agencies, higher education, K-12 education, and industry partners came together to design a workforce solution that would create sustainability of a workforce for the next decade. The current landscape of working-age adults requires all of us to be creative in how we train, recruit, and retain talent in our workforce today and in the future.

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Strategies and Best Practices to Support e-Learning for Faculty within Higher Education

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Abstract

Globally, the COVID pandemic prompted a greater demand for and highlighted the benefits of e-Learning within higher education. Among its many advantages, e-Learning provides greater accessibility for diverse student populations, increased learner flexibility, instructional innovation in teaching, and improved learning outcomes. However, there are challenges when adapting to e-learning. As a tool to examine best practices that address these obstacles, the authors conducted an integrative literature review regarding strategies and best practices for faculty related to e-Learning.

Keywords: e-Learning, faculty, higher education, strategies

Introduction

The history of e-learning has its origin in higher education which has also served as a significant benefactor. Given the ongoing innovation and evolution within the field of e-Learning, there remains no singular definition of what e-Learning should entail. However, debates and research into a standard definition have been extensive in the literature on e-Learning (Moore, 2010). One of the challenges of defining e-Learning is that it could be reviewed from multiple perspectives, including distributed learning, online-distance learning, and hybrid learning (Maltz et al., 2005). Wentling et al.(2000) described e-Learning as the attainment and use of knowledge predominantly facilitated by electronic means. Other researchers (Keller & Cernerud, 2002; LaRose et al.,1998) defined e-Learning as any learning enabled by the Internet or World Wide Web. The diverse terminology surrounding e-Learning may contribute to the challenge of a precise definition. Within the context of this paper, the term e-Learning will be utilized interchangeably with online learning, web-based learning, and virtual learning. These definitions would provide the conceptual meaning of understanding for this literature review.

Despite the lack of consensus regarding an operationalized definition, the benefits of e-Learning are endless. As research and innovation further expand the application and development of e-learning, the advantages of e-learning will continue to increase. Research and trends have revealed that e-Learning provides flexibility, expedience to learners, differentiated instruction, and teaching innovation (Bubou & Job, 2021; Alsobhi & Alyoubi; 2020). Moreover, the global pandemic demonstrated the importance and advantages of e-Learning within education. It has proven to be instrumental in providing students with access to education and assisting educators in the learning process. For many higher education institutions, e-Learning became a new trend that provided new educational insights, student

access, and innovation. In the same light, there have also been challenges encountered by faculty with higher education. If e-Learning is to be effective, it is crucial to equip faculty with the appropriate knowledge, strategies, and pedagogy to integrate it (Ristić et al., 2023; Kamardeen, 2014).

The purpose of this paper is threefold:

1. Within a higher education context, discuss the challenges experienced by faculty as it relates to e-Learning.
2. Explore strategies and best practices for addressing the challenges faculty may encounter regarding e-Learning.
3. Analyze the implications for faculty and students utilizing strategies and best practices for e-Learning within higher education.

Method

The methodology for this study adhered to the principles outlined by Torraco (2005) for integrative literature reviews. According to Torraco (2005), an integrative literature review is a sophisticated form of research that seeks to review, critique, and synthesize literature on a focused topic and is a beneficial technique for examining emerging topics. Given that Stepanyan et al.(2013) emphasized the importance of researching evolving topics within e-Learning, the integrative literature review approach provides a platform for analyzing current issues within the field and providing synthesized best practices.The strategy for this literature review involved utilizing the EBSCO host database and Google Scholar. The keywords identified included "e-Learning benefits," "e-Learning strategies for faculty," and "e-Learning best practices." The results from the search yielded a large number of initial articles. The results were filtered to include English-language, peer-reviewed articles, higher education context and available to the authors in full-text form. Selected articles were published between 2013 and 2023. Additional educational and business-related sources were included for context and depth.

Challenges of e-Learning Within Higher Education

Although e-Learning can potentially provide numerous benefits within higher education, potential challenges exist that should not be overlooked (Manca, 2020; Zhang et al., 2019). One significant issue highlighted within the literature pertains to the adaptation of in-person pedagogical practices. Furthermore, learning methods encompass many different domains, such as individual learning styles, group interaction, and varying assessment approaches. Accordingly, the techniques used within in-person versus online classrooms often vary widely. For this reason, several authors argue that traditional face-to-face learning requires a different pedagogy from traditional classroom approaches (Magruder & Kumar, 2018; Islam, 2015). Online learning differs from lecturing to a class of in-person college students. As such,

the online learning environment requires different methodologies compared to the traditional face-to-face learning environment. This is attributed to the usage of computer technology, applications, and systems required for academic activities within an online learning environment (Olowonisi, 2016).

Another challenge of e-Learning identified was the lack of technical training for faculty within higher education institutions (Magruder & Kumar, 2018; Islam et al., 2015; Jackson & Fearon, 2013; Khetan & Gupta, 2013; Lumpkin, 2021). Technical difficulties will inevitably be encountered by students utilizing e-Learning. However, it is essential that faculty are trained to facilitate some of the technical challenges students may experience. There have been criticisms of poor training provided by institutions to academics. Researchers (Magruder & Kumar, 2018; Islam et al., 2015; Jackson & Fearon, 2013; Allan Lawless, 2012; Khetan & Gupta, 2013; Lumpkin, 2021) mentioned examples of inadequate training, training styles that do not align academics' personal preferences and a lack of hands-on experiences. Further findings (Vershitskaya et al.; 2020 Babinčáková & Bernard, 2020) also revealed that faculty were reluctant to accept and adopt new technology. However, faculty can have a better experience if they have the knowledge, skills, and capacity to facilitate e-Learning.

Strategies to Enhance e-Learning Within Higher Education.

A common theme derived from the literature was linked to strategies for e-Learning. Strategies for adopting e-Learning should address the gaps that e-learning poses within higher education. Faculty should consider that many students may not be familiar with e-Learning technology, even though they may be digital natives. Studies (Kitching et al., 2015; Regmi & Jones, 2020) have shown that some learners are unfamiliar with e-Learning and may sometimes lack basic IT knowledge and skills Therefore, faculty may seek to impliment visuals, flow charts, and video explanations to address student e-learning needs (Khazanchi et al., 2022). Using images, animations, music, voice, video and educational materials appropriately can motivate students. For example, for a synchronous live session instrumental or jazz music can be utilize as a welcoming interlude to provide an inviting environment. Alternatively, a graphic or quote can be displayed to provoke thought and discussion for a module topic. Such techniques also enhance students' ability to participate in discussions – this may be especially pertinent for students who do not typically participate in traditional classroom discussions. Several studies (Lumpkin, 2021; Al-kreimeen & Murad, 2022) support the view that diversity of content with e-Learning can motivate student learning. Content diversity can support various learning styles for students within higher education. According to Ristić et al. (2023) e-learning provides a platform for learning to be customized to the individual needs of learners through learning enabled by artificial intelligence and learning analytics..

Another strategy suggests creating e-Learning activities that encourage the learner to effectively engage in learning (Khetan &Gupta, 2013, Kibuku et al., 2020). It is vital

that faculty working within the e-Learning environment consider differences in written texts in the absence of in-person social cues. An awareness of group dynamics and individual needs is also required to support and engage students. Likewise, Pammer et al. (2021) and Scager et al. (2016) encourage self-directed and collaborative learning using e-Learning tools for synchronous online discussions, group work, and reflective practices. Video conferencing tools, real-time cloud applications, and multimedia capabilities within e-Learning, for example, can facilitate self-directed and collaborative learning. Similar to when faculty prepare for traditional classroom environments, e-Learning environments require significant preparation. Magruder & Kumar (2018) acknowledge the importance of aligning learning objectives with specific e-Learning tools and technology. For example, an instructor may want students to discuss a topic, which can be aligned using technology such as Padlet or Flipgrid.

Limiting distractions in the e-Learning environment is a rare yet important topic. Considerations may include setting deadlines, assignment checklists, and rewards for task completion. Studies (Gay & Betts, 2020, Broadbent & Poon, 2015; Wang et al., 2013; Lumpkin, 2021; Khazanchi et al., 2022) show that applying self-regulated learning through the ability to plan, control, manage, and evaluate the learning process can assist with limiting student distraction. These strategies will allow higher education instructors to align e-Learning mechanisms with diverse student needs and enhance engagement and learning outcomes.

Best Practices

This literature review revealed a reasonably significant gap related to studies focusing on proven best practices for e-Learning, specifically within higher education. While there were substantial studies (Magruder & Kumar, 2018; Gay & Betts, 2020, Broadbent & Poon, 2015; Wang et al., 2013; Lumpkin, 2021; Khazanchi et al., 2022; Pammer et al., 2021; Scager et al., 2016) to support strategies that can effectively bridge those gaps in e-Learning within higher education. This was not the case for best practices for e-Learning within higher education. Current research cited the practice of ensuring directions and expectations for e-learning are clearly communicated to students (Koehler & Farmer, 2020; Lumpkin, 2021; Khazanchi et al., 2022). Similar findings encouraged timely feedback to learners as a means of best practices for e-Learning (Fisher, 2020; Kaden, 2020; Scull et al., 2020, Gaskell and Mills, 2014). Feedback, when provided within a reasonable timeframe, supplies a sense of contact and communication, similar to the traditional classroom where learners do not sense the absence of a faculty facilitator.

On the contrary, before higher education faculty can adopt best practices, higher education institutions should seek to align their instructional goals and objectives with e-learning capabilities. This will ensure that institutions of higher education can deliver and support e-Learning. Kibuku (2020) argues that universities should seek to conduct feasibility studies prior to implementing e-Learning technologies. With the

implementation of a feasibility study, institutions of higher education could better assess their needs and capabilities necessary to provide e-Learning and equip faculty with training. Researchers (Allan et al., 2012; Jackson and Fearon, 2013) agreed that providing adequate training ensures faculty utilize e-Learning effectively within higher education.

Implications for Practice

Much like any technology platform, challenges of e-Learning within higher education are inevitable. However, withstanding this, it is paramount for faculty within higher education to explore strategies and best practices to ensure e-Learning success. Implications for practice include (a) faculty adaptation of the strategies and best practices, (b) adequate training for faculty within higher education, and (c) ensuring e-Learning aligns with standards. Faculty within higher education can seek to adapt various strategies discussed in this study. The findings provided commonly applied e-Learning strategies and best practices for faculty to explore to mitigate potential challenges and ensure student success. These strategies can also allow faculty to utilize e-Learning and other associated technology for the first time. Furthermore, these strategies and best practices can guide faculty in using e-Learning and its associated technology. Inadequate training on the technology associated with e-Learning was a common theme in the examined literature. This study provides the impetus for a greater emphasis on training and development of e-learning. Investment in training can potentially reap sustainable rewards and benefits for higher education institutions and educational stakeholders. Therefore, ensuring appropriate systems, training, and support is given priority with e-Learning within higher education.

The gap in the literature addressing best practices for e-Learning provides a good indicator that e-Learning needs to be aligned with standards (Sułkowski et al., 2022). Organizations like the United States Distance Learning Association (USDLA), Online Learning Consortium (OLC), Western Cooperative for Education Telecommunications (WCET), and the European Distance and e-Learning Network are resourceful means for providing standards for e-Learning. Institutions of higher education and faculty can utilize these organizations to align e-learning practices and use as opportunities for development. These organizations can also be viewed to advance research on best practices for e-Learning within higher education. The findings of this study will prove beneficial if these implications for future practice are recognized among faculty with higher education.

Conclusion

With e-Learning being a significant element in the future of education, it is relevant to address the challenges and the need of e-Learning users. Therefore, there must be continued research, innovation, and strategic approaches that meet the future demands of e-Learning. This integrated literature review provided a synthesis of the

literature on the challenges, strategies, and best practices of e-Learning. The findings from this study have the potential to foster significant contributions to faculty development in higher education in the area of e-Learning. This study also provides the premise for further research on best practices of e-learning. Future research would foster a greater degree of support, success, and the enriched experiences of e-Learning success.

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Supporting Learner Skill Development: Examining the Roles of Competency, Entrustability and Environmental Complexity

Richard Silvia and Kathy Peno

Abstract

Skill development within professional education has been performed for decades. Ensuring that learners, new practitioners, and even experienced professionals are all competent at their requisite skills, is required for any profession. More recent developments in skill assessment have incorporated entrustability, where a practitioner is afforded varying degrees of supervision based upon ability. This leads to questions of how skill development and entrustability correlate to each other, but also how changes in workplace complexity might affect entrustability for a practitioner. Moving from one work environment to another of lower or higher complexity should affect the entrustability given to the individual, but how this is determined is less clear. This paper attempts to examine how these three concepts intersect with each other.

Keywords: Skill development, competency, entrustability

Background

While the notion of skill development in pharmacy, medical, and other professional education is not new, the concept of entrustability is much newer to these fields. Entrustability encompasses overall skill development but adds the element of how much a supervisor/instructor/mentor (hereinafter referred to as supervisor) trusts a learner to perform that skill in the workplace. Presumably, increased skill attainment would allow the learner to have greater entrustability from their supervisor. However, how is the connection between skill development and entrustability affected by changes in environmental complexity? For example, if a learner with a set skill level is moved from a moderate to high complexity environment, how does this affect the entrustability afforded to them by their supervisor? Similarly, when a learner graduates from their program and moves from a learning environment to a working environment, what entrustment should their new supervisor afford them?
The proposed model described below attempts to connect three concepts: competency, entrustability, and environmental complexity in skill development. While the connection might seem intuitive, the concept of entrustability is inherently subjective, introducing some unknown into the intersection of these concepts. This too should be explored as entrustability is introduced to more professional education programs.

Entrustability in Pharmacy Education

Entrustability has typically been described within professional education as entrustable professional activities (EPAs). Each profession has developed a list of core EPAs that describe basic units of work for that profession (Haines, et al., 2017, and ten Cate, 2005). In pharmacy education, each EPA is rated over time along a 5-point scale of entrustability (see Figure 1) describing decreased need for observation by the supervisor over the learner (Haines 2016). The expectation is that learners will achieve level 3 on all EPAs by the time of graduation, licensure, and entry into the workforce (see Figure 2).

Figure 1: Entrustability Scale Utilized within Pharmacy Education

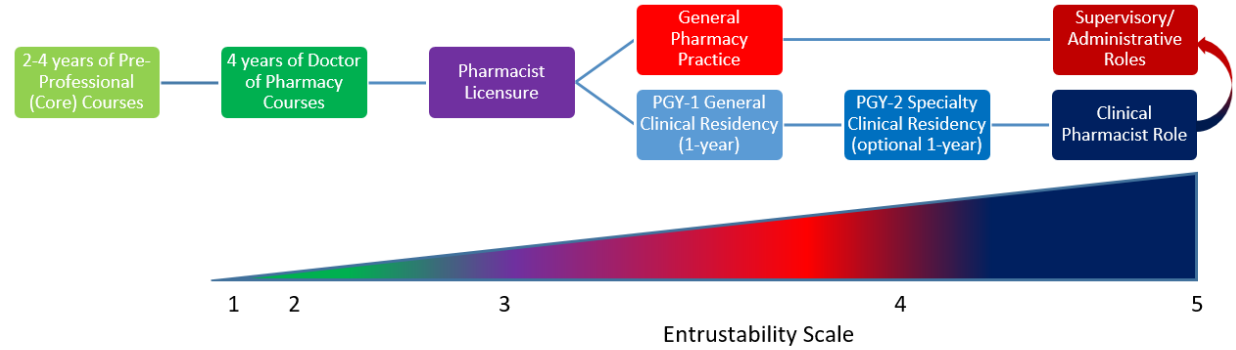
Level	Description
I. Observe Only	Learner is permitted to observe only. Even with direct supervision, learner is not entrusted to perform the activity or task.
II. Direct Supervision	Learner is entrusted to perform the activity or task with direct and proactive supervision. Learner must be observed performing task in order to provide immediate feedback.
III. Reactive Supervision	Learner is entrusted to perform the activity or task with indirect and reactive supervision. Learner can perform task without direct supervision but may request assistance. Supervising pharmacist is quickly available on site. Feedback is provided immediately after completion of activity or task.
IV. Intermittent Supervision	Learner is entrusted to perform the activity or task with supervision at a distance. Learner can independently perform task. Learner meets with supervising pharmacist at periodic intervals. Feedback is provided regarding overall performance based on sample of work.
V. General Direction	Learner is entrusted to independently decide what activities and tasks need to be performed. Learner entrusted to direct and supervise the activities of others. Learner meets with supervising pharmacist at periodic intervals. Feedback is provided regarding overall performance based on broad professional expectations and organizational goals.

From Haines et al., 2016

While the application of EPAs has generally occurred within educational settings, there has been discussion of how they apply post graduation as a component of continuous professional development of working professionals. For example, educators are examining them as a component of post-graduate residencies within pharmacy training (see Figure 2). Pharmacy learners begin with 2-4 years of pre-professional general education coursework, where EPAs might be introduced but minimally developed. Upon entry into the 4-year Doctor of Pharmacy professional curriculum, educators provide instruction on EPAs and then assess student progression over time. Upon graduation from the program and licensure, learners generally fall into one of two career pathways: entry into the pharmacy workforce or post-graduate training programs such as residencies. Residency programs are similar to those seen in physician training, with a first "general" year followed by a second "specialty" year (if desired). Residency training prepares the learner to enter into more clinical, direct patient care roles as a pharmacist, with the potential to move into administrative roles over time. As these residencies are a training extension of the Doctor of Pharmacy degree, it would seem appropriate to continue EPA development and assessment in these training programs. However, once fully

entered into the workplace, how will EPAs be applied, particularly alongside other concepts within skill development?

Figure 2: Typical Education, Training, and Career Paths for Pharmacists with Corresponding Entrustability



Key: PGY = Post-Graduate Year

Dreyfus Model of Adult Skill Acquisition

At the foundation of our thinking about supporting students to achieve higher levels of skill is Dreyfus' Model of Adult Skill Acquisition (Dreyfus & Dreyfus, 1980, 1986). The model delineates characteristics of skill at each of five levels of practice: novice, advanced beginner, competent, proficient, and expert. While the model is general in nature, it provides an important structure that can be useful in any field of practice.

A *novice practitioner* is rules-oriented in their practice as they lack knowledge and experience in the context of their role, while *advanced beginners* begin to see contextual elements they need to consider and can begin to develop their own maxims to guide their practice in these new situations. With continued practice in a given field, a *competent practitioner* still deliberates when faced with a problem or new situation, but generally understands which situational aspects of their role need attention and which can be ignored. Some practitioners can get "stuck" at this level if they develop a sense of complacency. A *proficient practitioner* exhibits more emotional involvement in their practice with a greater deal of experience and performs with situational intuition. They are able to "reflect on" their practice and make adjustments going forward (Schon, 1983). An *expert practitioner,* with thousands of hours of experience, practices intuitively and can "reflect in" practice (Schon, 1983) and make adjustments in real time. We can assume the trajectory described in Figure 2 allows the skill acquisition described in the Dreyfus model to occur. However, the skill model lacks strategies to assist practitioners to move to higher levels of practice, therefore, the Purposeful Ongoing Mentoring Model (POMM) was developed (Peno & Silva Mangiante, 2012) and later revised (POMM-R) (Peno & Silva Mangiante, 2021).

The Purposeful Ongoing Mentoring Model-Revised (POMM-R)

The POMM-R provides a vehicle for instructors/coaches/mentors to use when assisting practitioners to move to higher levels of practice in a given field. It details goals and actions that instructors/mentors/coaches can utilize in their work with mentees/learners. The model is grounded in the Dreyfus Model of Adult Skill Acquisition (Dreyfus & Dreyfus, 1980, 1986), Vygotsky's theory of the Zone of Proximal Development (ZPD) (Vygotsky, 1978), and Schon's (Schon, 1983, 1987) notion of the pivotal role of reflection on experience in the meaning-making process.

The Goals section of the POMM-R (Peno & Silva Mangiante, 2021) (not pictured) provides practitioners and their mentors a snapshot of what learners can attain as they move toward higher levels of skill on the Dreyfus' model (Dreyfus & Dreyfus, 1980). In essence, it makes visible what practice looks like at the next level and provides a visual of what students' performance can/should look like at that level. The Action(s) section (Figure 3) can be used to guide learners through a process of practice, reflection, and practice adjustment. The POMM-R (Peno & Silva Mangiante, 2021) is a valuable professional development tool that can be utilized in any field of practice.

Figure 3 - POMM-R (Peno & Silva Mangiante, 2021). Mentor Actions Using ZPD to Scaffold Followed by Reflection on Action.

	Novice	Advanced Beginner	Competent	Proficient	Expert
Mentor Actions with Learner	*Assist the learner in reflecting on current practice. *Model an effective strategy for using a rule in a given context. *Provide feedback on the learner's construction of a new approach.	*Assist learner to reflect on practice as applied in different situations. *Model alternative approaches. *Provide feedback on the learner's construction of practice in a variety of situations.	*Model strategies for continuous reflection-on-practice in typical and challenging situations. *Model self-regulation in challenging situations. *Help learner develop options with the purpose of expanding possible responses.	*Model strategies for continuous reflection-in-practice. *Assist learner to become self-directed in their reflection in situations. *Provide regular feedback to support reflective thinking.	*Assist learner to consider how they can transfer their experience to new domains. *Provide ongoing opportunities for discourse regarding practice.

Toward a Model of Competency and Entrustability in Variable Complexity Environments

As mentioned above, this work examines the interplay between three components related to performing a skill in learning and work environments: skill development (competency), entrustability, and environmental complexity (complexity). Each of these is described in more detail below.

Competency

Competency is incorporated using the Dreyfus' Model (Dreyfus & Dreyfus 1980, 1986), where skill development is described along a continuum from Novice to Expert. Most learners enrolled in an educational program are at the Novice level (at most), move to Advanced Beginner soon after entering the workforce, and then progress linearly over time towards Competent. As discussed previously, many practitioners will stagnate at this level, but some will continue to develop towards Proficient and eventually Expert. As learners move through these stages their intuition and ability to adapt to new situations based upon past experience increases, which can be useful when considering changes in environmental complexity.

Entrustrability

Entrustability, while related to competency, is a separate concept. While it is tied into competency, it also includes more affective components such as the learner's self-efficacy and the supervisor's potential biases (positive and negative) regarding trust towards learners. While this can introduce potential subjectivity in determining entrustability, the goal is to align the learner's competency with the level of supervision they require. As shown in Figure 1 above, entrustability is measured using a 5-point scale starting with Observe Only, appropriate during initial skill instruction, and moving into varying levels of learner supervision. The first, Direct Supervision, utilizes the supervisor in a close-support role monitoring the learner at all times. Indirect Supervision allows the learner more autonomy as the supervisor is close by when needed, and able to check on the learner periodically to ensure the skill is being utilized appropriately.

Intermittent Supervision affords the learner even more independence to perform the skill, as the supervisor recognizes the skill ability of the learner and does not need to be present to observe. The final level, General Direction, affords the learner relative independence to act as they deem appropriate for the situation. They may also be allowed to supervise others in light of their skill ability. Another inherent component of the scale is the application of feedback from the supervisor to the learner. As entrustability increases, feedback moves from being instantaneous and continuous in Direct Supervision to periodic feedback when needed by the learner or supervisor

in Intermittent and General Direction Supervision. This also aligns with the notion of "coach and fade", as described in Vygotsky's theory of the Zone of Proximal Development (Vygotsky 1978), as someone achieving greater entrustment requires less direct and frequent coaching.

Complexity

The concept of complexity is less directly relatable to the other two, and to date has not been considered as a significant factor affecting them. As such, no published scale for complexity is available in the education literature. For the model, a 5-point scale was developed beginning with Pre-Practice, indicating an educational setting outside of the true workspace that is utilized for initial skill instruction. Actual workplace environments include Low, Standard, High, and Highest complexity. Each increase in complexity on this scale relates to increases in overall challenge, difficulty, and relative level of skill needed to perform successfully with the given environment. In pharmacy settings, this could range from Low complexity in a community pharmacy, Standard in an ambulatory care clinic, High in a typical inpatient hospital setting, and Highest in an intensive care unit of a hospital. While this doesn't preclude that individual situations arising within each of these settings might rise to a higher, or lower, complexity, the average overall complexity falls within these parameters. It also has implications on the expectation that learners will be at the "Reactive Supervision" entrustability level upon graduation: within what level of complexity environment is this intended? Of note, as complexity is considered across a variety of professions, definitions for each of the complexity levels would need to be determined within each profession to ensure universal application of these definitions.

Combining the Three Concepts into a Model

Considering all three of these concepts together, the initial version of a model was created, as seen on the left side of Figure 4 below. Initially, the model made two assumptions; first, that competency develops linearly over time based upon continuing skill development and experience. Second, that entrustability development is not linear, but rather develops more slowly at first as competency is increased and then increases more quickly over time as higher levels of competency are attained. The concept of complexity was then added to form a 3-sided matrix, where competency and complexity could be utilized to determine the entrustability appropriate to the given situation.

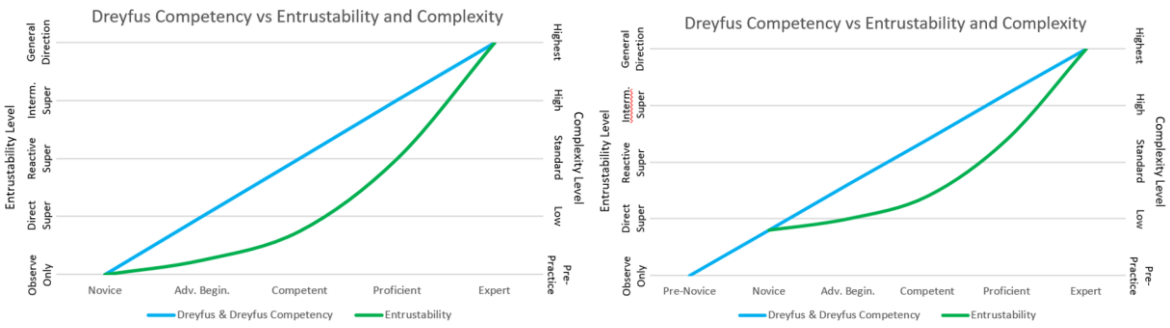
Conversely, what level of complexity would not be appropriate to entrust to a learner of a given competency. A third assumption was that while competency increases over time, within a short timeframe it was essentially static. Essentially, if someone were taken from one complexity environment and placed into a higher complexity environment, their competency would not change immediately, so the

entrustability afforded them would likely need to be adjusted to a lower level, at least in the short term. This also supports the non-linear development of entrustability, as one attribute of the Proficient and Expert stages of competency is the ability to apply past experience and knowledge to new situations and settings. At higher levels of competency, the learner can adapt more quickly to the higher complexity environment compared to someone with lower competency.

Feedback from peers on this model suggested that a Novice would likely be afforded more than "Observe Only" entrustability, and might be placed in a Low complexity working environment, not a Pre-Practice, educational environment. One peer commented how this would not apply to nursing education, as recent graduates would be considered Novice level at a minimum and afforded greater entrustability in a Low complexity work setting. As a result, an additional competency level was added to the Dreyfus' Model, a "Pre-Novice" level, indicating a learner is still in the core educational program for the profession. This aligns better with the concepts of "Observe Only" entrustability in a "Pre-Practice" complexity environment. This revised model can be seen on the right side of Figure 4. As the Pre-Novice learns how to utilize the skill effectively, they can attempt to employ it themselves within the Pre-Practice environment under Direct Supervision, receiving immediate feedback from the supervisor. The POMM-R can be particularly useful here, as the supervisor allows for reflection on prior practice and offers suggestions to improve practice. Over time, the student moves towards the Novice level, with potential application in higher complexity environments with supervision as appropriate to the environment.

Figure 4: Proposed Model of Competency, Entrustability, and Environmental Complexity

Initial **Revised**



First (Initial) version of model (left) compared to updated (Revised) model (right) incorporating the concept of Pre-Novice.

Implications for Learner Skill Development

If this model holds true, it has application across the spectrum of learner skill development, particularly among early learners. As more professional education programs incorporate entrustability, as EPAs or in other ways, this model could be useful as a framework for skill development. One area could include experiential education, where skill assessment is a core component. A learner working with one supervisor in a particular complex environment would likely have a different level of entrustability than with a different supervisor in a higher complexity setting. For example, a pharmacy student in a community pharmacy for one experiential program would likely have higher entrustability compared to the following experiential program in an inpatient hospital, where the complexity is much higher due to the acuity of the patients. The student's competency has not changed, but the entrustability, and therefore, the overall expectations of the supervisors would likely be different. This difference should be considered by the supervisors, as it could affect their assessment of the learner, and should be explained to the learner, in order to prevent any frustration or skill regression due to any perceived slight of their abilities.

As mentioned above, entrustability also introduces potential subjectivity compared to traditional skill assessment methods. A supervisor's past experiences, positive or negative, with learners could affect their ability to objectively assess the learner as an individual and afford them the appropriate level of entrustability. Considering the effect of complexity on entrustability just mentioned, this bias could further affect entrustability further, and in an inappropriate manner. Being aware of these biases and their impact on entrustability would assist supervisors in being more objective in determining learner entrustability. This bias could occur in working environments as well, where supervisors could make judgements regarding employees based upon their own past experiences. By considering support models such as the POMM-R, instructors/supervisors/mentors/coaches can help students see their role in moving to higher levels of practice in an increasingly complex environment. Making their role visible can encourage more buy-in on the students' part, thus making the relationship less "us vs. them" and more "we" in the process of professional learning.

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