Phoenix Scholar™

College of Doctoral Studies
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SPECIAL EDITION

Reshaping Education Through Innovation
The Pandemic Response

PHOENIX SCHOLAR

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The recent global events of the COVID-19 pandemic and the further rise of digital technology have disrupted educational systems from K-12 to higher education. Historically, the field of education has inertia for change. Higher education institutions in particular have historically been very slow in adopting new approaches. The pandemic has shaken educational systems by forcing them to accelerate the adoption of online teaching and learning, optimize administrative processes, and revise curricula to better serve learners. Many institutions have struggled with altering their systems and managing online teaching and learning. As the implications of the pandemic endure, the need for change and adoption of innovative strategies have become more essential than ever.

In response to the current conditions, the Phoenix Scholar Special Edition in Education focuses on topics related to reshaping education through innovation. The aim of this edition revolves around innovative approaches to address the disruption, to reshape educational systems, and to support teaching and learning in K-12 and higher education. This Special Edition is hosted by the UOPX College of Doctoral Studies' Center for Educational and Instructional Technology (CEITR).

In this edition, we share a collection of reflections from University of Phoenix leaders related to the challenges of the pandemic, responsive strategies, and long-term impacts on our institution. These invaluable reflections provide insights from various leadership perspectives. From the macro-organizational view of President Cohen and the Chief Operating Officer to the managerial analysis of the financial, enrollment, and instructional leaders, to the more specific detailed analyses of college deans related to their particular college's issues, these reflections contribute to a better understanding of how University of Phoenix as a large practitioner-oriented institution has managed the disruption of the pandemic. Many of these lessons can be applied to similar organizations when encountering future disruptions.

We also present several institutional studies conducted at University of Phoenix and managed by CEITR researchers. The studies focused on essential topics suggested by University leaders for improving teaching and learning at UOPX. The variety of topics include remote work skills, alternative credentials such as digital badging and mini certifications, promoting learners' grittiness and retention, and aligning curricula with employer needs. Additional articles focus on other educational implications of the pandemic, such as equity in education and public special education.

Overall, we conclude that all was not lost as is shared in the last article. The pandemic had some benefits for educational systems, driving them to accelerate their adoption of technology to improve teaching and learning and become more aligned with learners' needs. Furthermore, the pandemic underscores that adaptability is essential to survive and thrive in difficult times, and constant reform – based on learners' and society's needs – are key for the success of educational systems. Hopefully, the strategies and perspectives shared in this edition shed some light on how educational organizations may be equipped to enhance their systems to successfully manage the enduring implications of the pandemic and encounter future disruptions.

Sincerely,

Mansureh Kebritchi

University Research Chair

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Technology Research
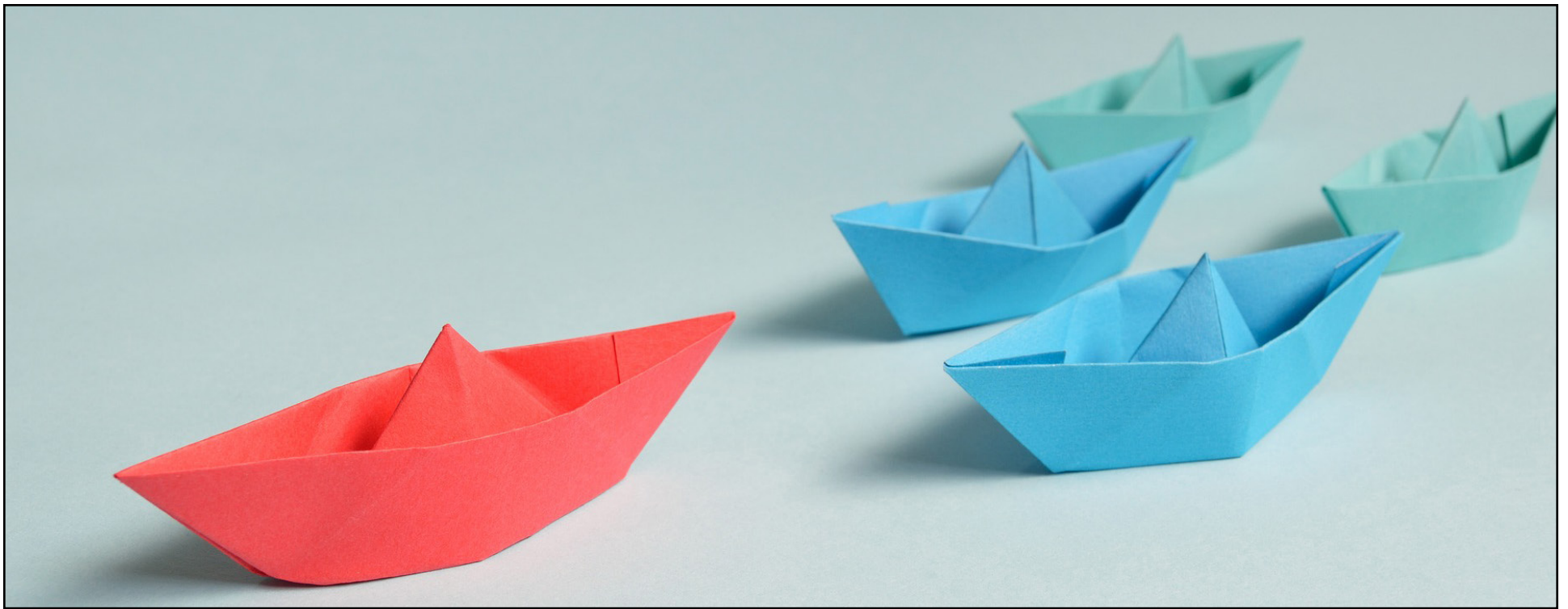
Strategies Used to Manage the COVID-19 Pandemic Challenges at University of Phoenix: Leaders' Reflections

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The COVID-19 pandemic disrupted higher education institutions in many ways, but University of Phoenix seamlessly managed the pandemic challenges. It is very valuable to learn how our institution managed the pandemic. However, the complexity of the situation and variety of approaches used during the pandemic make it difficult to comprehend all the challenges and ways to resolve them. To better understand and capture the challenges and corresponding strategies, we invited the university leaders to reflect on their experiences during the pandemic. Their reflections provided a window behind the scenes of the pandemic management at our institution. The highlights of their reflections related to the pandemic challenges, strategies, and long-term impacts are shown in Table 1. The reflections are provided after the table. The reflections provide invaluable insights and take away messages that can be applied to other similar situations.

Table 1

The Highlighted Reflections of UOPX Leaders

Challenges	Strategies	Long Term Impacts
The fluidity of environment, rapid changes, and the lack of being able to understand students and staff needs	To be there for people whenever they might need it. Organizational culture and core values define how you react, ours went directly to support and service. Use long run strategy for short run operations	The pandemic underscores the importance of organizational culture and core values
Realization that education and career outcomes are much more aligned than they might anticipated before	Made major pivot to make sure we help people in both education and career aspects	The pandemic accelerated what we were already thinking about the importance of alignment between education and career
Students who participate in face-to-face instruction continue learning safely	The university shifted all face-to-face instruction into a synchronous online environment using Blackboard Collaborate	A more universal acceptance that online learning is as relevant and rigorous as site-based teaching and learning
Students had limited technological resources	1,113 free laptops shipped to students	Realization that it is essential to be a modern, mobile, and accessible institution
Students' financial needs	Received more than $10 million in pandemic funds of which 100% were distributed to our students. Scholarships awarded on a broader scale. Each month, approximately 400 scholarships, totaling $1M, are granted to students	Students' financial supports continue
Faculty and staff who perform in face-to-face setting continue their work safely	3,400 staff members switched to working from home. Within a 72-hour period, most of our Enrollment Representatives were working from home	Work from home strategy has now become permanent for over 2,000 employees
Faculty skills for online teaching	Live and recorded training sessions about Blackboard Collaborate offered for faculty	Faculty training and support continue
Students and faculty stress and mental health	Ramped up our ADA accommodations and trained our staff and faculty to realize the stresses. Offered webinars for topics such as "Stress Management", "How to Talk to Your Kids About the Virus", and "Homeschooling"	Mental health accommodations continue
Community responsibility	Trained more than 5,000 K-12 teachers on how to teach online	Offering the training continue
College of Doctoral Studies: The continuation of Doctoral residencies offered face-to-face	Switched residencies to online synchronous platforms	Online residencies continue
College of Nursing: Students' continuation of the required clinical activities to progress in their programs	Modified policies to make clinical practice hours flexible and create alternative clinical activities. Simulation laboratory for bachelor students. Telehealth patient services for master students	Telehealth becomes part of the program. A full program revisioning of the MSN-FNP will occur, in part based on the insights gained from the pandemic
The College of Social and Behavioral Sciences: Continuing counseling services to clients so students could gain clinical hours for program completion	Implemented the use of a modality communication tool for telehealth to continue counseling services.	Telehealth continues
The College of General Studies: Newest students struggling with school and other issues	Adopted more flexible policies that would help students complete course requirements	Student accommodations continue

President Peter Cohen

Our university rose to the challenges created by the worldwide pandemic and its impact on students and teaching across the country. I am proud of the way our staff supported students whose lives were impacted by the virtual lockdown of society during the first year. We shipped laptops to students in need who had to move from a campus to an online delivery program. We ramped up our ADA accommodations and trained our staff and faculty to realize the stress parenting and work life put on their studies, and provided thousands of students with course work accommodations. We trained more than 5,000 K-12 teachers on how to teach online, for those who were thrust into that role with no notice and using a myriad of cobbled together systems. We applied for and

received more than $10 million in pandemic funds, of which 100% was distributed to our students to help them in this transition. And we seamlessly moved 3,400 staff members from working in the office supporting our students to working from home with no reduction in student satisfaction, and an increase in staff satisfaction. This work from home strategy has now become permanent for over 2,000 of our employees. Additionally, during this period we continued to innovate within the university, building out new product development teams to assure we stay even closer to our student's needs. All in all, this crisis has proven the commitment of our staff to do whatever it takes to support our students regardless of their personal challenges, and that is what makes all of them Phoenixes. One of the enduring impacts of the pandemic is a more universal acceptance that online learning is as relevant and rigorous as site-based teaching and learning.

Raghu Krishnaiah, Chief Operating Officer

The pandemic created a fluid environment. As changes were happening so quickly, it was difficult to understand what our students and families were going through. People's attention was changing day by day. The fluidity and not being able to really understand the environment made it difficult to get a read on what was going on. Normally, things are static over at least two or three months, and so you can get an understanding of what's happening. In this case, you really couldn't, so that was one of the major challenges we faced.

Our approach was to find ways to be there for people. We didn't know exactly what that meant. How do we make it so that when people need us, we are there for them? We used long run operational strategy for short run operation. In many ways, we went back to our core beliefs, making sure people succeed. This core value really came to the forefront, and we went back to who we are. During times of stress, organizations can either rip apart or come together and ours came together. Our organizational culture helped us, and we grew stronger.

We realized that education, career, and career outcomes are much more aligned than were anticipated. We made a major pivot to make sure we help people with learning and career. Consumer behavior during the pandemic shifted as people were looking for different ways of getting to their outcome. The pandemic accelerated some changes that we had already planned to adopt. For example, being available 24/7 for student support by chat was started pre pandemic, but it accelerated during the pandemic and that will be continued. The importance of career was always there, but it became more urgent to help students with a work from home approach.

Historically, higher education has not changed quickly, but now more organizations are online, embracing the use of technology, specialized tools, and the support practices that online students have had for years. Higher ed institutions are thinking about what they can do to improve. We know that access is much more easily accomplished, quality can be more easily measured, and outcomes are what people care about. If institutions focus on those three things, they will be in good shape for the next decade.

Brett Romney, Vice President of Enrollment Services

March of 2020 is a time that we will all remember at the University of Phoenix. We were growing, working hard, and developing new and creative ways to support our students. However, all those ideas would be put on pause as a worldwide pandemic closed our schools, caused widespread fear, and reduced job opportunities for our students.

As infection numbers grew across the country, we moved our enrollment operations to a work from home environment and closed our campus locations. Within a 72-hour period, most of our Enrollment Representatives were working from home and were able to continue to support students with their questions, concerns, and new worries. Due to the strong leadership within our academic and campus operations teams, our university was able to organize additional attendance options that allowed our ground students to attend virtually while still maintaining their synchronous classroom environment.

Although these operational adjustments were introduced more than 18 months ago, we are still offering this virtual attendance option and our Enrollment Representatives continue to service their students in a work from home environment. These changes and so many others have had a positive impact on our institution and have allowed us to maintain our commitments to our students while maintaining strong levels of support even when it seemed impossible to do so. Our students continue to be our passion and their efforts continue to be our inspiration. We are so thankful for their efforts and commitment to excellence.

Bronson Ledbetter, Vice President of Financial Operations and Student Services

The last year and a half of uncertainty required the university to shift our approaches and use innovative techniques to provide the additional support our students needed. We accomplished this through various methods, including shifts in our student discussions to ensure they felt supported in both their education and mental health with various life events. In a situation amplified by the COVID-19 pandemic, students encountered barriers to accessing technology and the ability to attend courses without access to a computer. In May 2020, the University began issuing free laptops to students who indicated they were unable to purchase one. To date, the university has provided 1,113 free laptops to students in need, so they may continue their education.

The economic conditions added additional financial challenges, which is why we developed initiatives to create increased flexibility for upcoming and past due payments to keep students' educational goals on track. To remain empathetic to individual circumstances and prevent an additional financial burden, the university also chose to hold student balances. The university committed to using 100% of its Higher Education Emergency Relief Fund allocation to support our students through direct grants of emergency financial aid. Another exciting step we took to help students with the cost of their education was to offer scholarships on a broader scale. Each month, approximately 400 scholarships, totaling $1M, are granted to students to apply towards the cost of their education. We continue to look for ways to support our students through innovation and will continue to do so in hopes of providing them with the best possible educational journey.

Hinrich Eylers, Vice Provost of Doctoral Studies and Academic Operations

In the College of Doctoral Studies, we were holding monthly doctoral residencies at our Phoenix campus in 2020. When we made the decision to go to a fully online format for the entire university in March, we had a residency coming up in a few weeks. Thus, we needed to quickly decide how we could serve these students best and how to execute as quickly as possible so that students would not experience any delay. Although we already had asynchronous online residencies available for our most recent program versions (and we offered those to students as an option), we decided to also move the residencies that were to be held on the Phoenix campus to a fully synchronous Blackboard

classroom, keeping the schedule and content the same. Although that meant that students would have to spend between three and eight full days in the virtual classroom, it was a big success. We received great feedback from students who appreciated that they could continue in their program, still network with their peers, and that they didn't have to make any changes to their schedules. Many students missed the opportunity to network in-person while at the campus, but they appreciated not having to spend money on travel to Phoenix.

Marc Booker, Vice Provost Strategy

One thing that the COVID-19 pandemic highlighted is that many institutions had begun taking for granted the availability of wi-fi networks and the digital access students had to connect to online resources provided by colleges and universities. Although, students were able to get online, the source of their access may not have been their own individual or personal network, but rather a shared access spot at a library, restaurant, store, or coffee shop. With physical mobility reduced, and public spaces constrained, the digital divide reared its head and created issues for students coming from underprivileged areas or with limited resources. This required institutions to look at other options to help students access class, including providing technology resources – such as laptops; or teaching students how to turn mobile devices into wi-fi hot spots and enhance data plans. With our institutional priority of ensuring students have access to continue their studies in a world where they have numerous competing priorities, we found that it is not just important to be a modern, mobile, and accessible institution – but that it is essential. This principle will continue to guide us in the years to come as we attempt to ensure our institution has the stability to weather any storm that has the potential to disrupt our student's studies.

Emily Breuker, Associate Provost, Faculty Engagement

About 97 percent of the university's students learn in an asynchronous online environment. So, when the COVID-19 pandemic came to the United States in March 2020, the university's local campuses faced a unique challenge: how could students who normally participate in face-to-face instruction continue learning safely? To combat this challenge, over a single weekend the university shifted all face-to-face instruction into a synchronous online environment using Blackboard Collaborate. The university knew faculty would be essential to this transition. To prepare faculty, the Faculty Training & Development team at the university offered a plethora of live and recorded training sessions about Blackboard Collaborate. It also offered live Q&A sessions and prepared a variety of reference materials for faculty to use as they set up and taught their online classes. Additionally, campus staff reached out to faculty individually to ensure they were prepared, and both the training team and campus staff were on hand for urgent and last-minute faculty questions. The experience was a prime example of departments across the university coming together to support our students.

Kathleen Winston, Dean of College of Nursing

It has been said that we don't learn by doing but, rather, we learn by reflecting on what we have done. What we have done here at the University of Phoenix, in the College of Nursing in response to the "severe acute respiratory syndrome coronavirus 2" (SARS-CoV-2) is nothing short of remarkable.

The College of Nursing exists to encourage registered nurses in pursuing their post licensure and advanced nursing education goals. From early 2020 to present this support has expanded and was redesigned to also boost the morale and quiet the anxiety that accompanied caring for infected patients in the early days of the virus when little scientific information was available.

Despite the stress of their work, our working nurse students remained resolute in their desire to persist and progress in their academic programs. College of Nursing students are located across the country representing no fewer than forty-five (45) states and they witnessed the coronavirus pandemic through the lens of urban, suburban, and rural communities. They cared for patients in settings with shortages of PPE (personal protective equipment) and in hospitals with many available inpatient beds. As nurse always do, they experienced the best and the worst of humanity. The experience of COVID-19 highlighted nurses' willingness to work, the need for support mechanisms, and the role of modern technology. It heightened an awareness for the educational needs of nurses and strengthened the College of Nursing's commitment to meeting that need.

The challenges related to our students' education during the pandemic were many, but none greater for nursing students than balancing the practice of the profession while persisting with their education. The College of Nursing's faculty and staff were tested as we faced the question of how students would complete the required clinical activities needed to persist and progress in their programs. This paramount concern led to an innovative team's construction of plans that modified policies to make clinical practice hours flexible and create alternative clinical activities that achieved the learning outcomes with empathy and rigor. Licensed Vocational Nurse and Licensed Practical Nurse for BSN (Bachelor of Science in Nursing) students were able to complete their final clinical courses using the state-of-the-art simulation laboratory while Master of Science in Nursing; a Family Nurse Practitioner (MSN-FNP) students provided tele-health patient services and conducted virtual physical assessments with real time faculty evaluation. The College of Nursing at UOPX may have been the only Advanced Practice Registered Nurse (APRN) program that continued to offer it's in person five-day intensive Clinical Residency to MSN-FNP students to prepare them for their clinical preceptor practice. The collaborative efforts of local campus operations, policies working groups, student facing teams and College of Nursing faculty and staff resulted in preparing about 350 students without a COVID-19 related incident and who became part of the frontline workers making a difference in the lives of many.

Looking back at the recent global events including the COVID-19 pandemic makes the view looking forward even more clear. Continuing to support nurses to advance their education and therefore their practice impacts the lives of individuals, families, and communities in profound and permanent ways.

Christina Neider, Dean of College of Social and Behavioral Sciences

One major challenge related to students' education during the COVID-19 pandemic in 2020, was continuing providing counseling services to clients so students could gain clinical hours for program completion. The College of Social and Behavioral Sciences implemented the use of a modality communication tool for telehealth to continue counseling services. This ensured our students continued to progress in the program and graduate, while continuing to support our communities with mental health services. We quickly implemented this change as clinical sites either closed or could no longer support students in a face-to-face modality. The importance of the change helped students to continue gaining clinical experience, but it also showed a change in how services will continue to be offered across the country and world. The telehealth option for clinical mental health services expands the reach and access for many clients who would normally not be able to obtain them, usually due to transportation challenges or other access issues. Now, clients can be anywhere in a private location to receive these free services and it helps our students gain experiences to hone skills that are vital to their counseling

career.

Briana Houlihan, Dean of College of General Studies

In the College of General Studies, we serve incoming new students in nearly all programs offered by the university so when COVID-19 struck, we saw significant impacts across our student body. Students further along in their programs were somewhat better equipped to overcome the challenges COVID-19 presented because attending school had become more ingrained in their daily lives. In contrast, our newest students, faced with job losses or other disruptions at work, home schooling, and caring for themselves or loved ones through illness, really struggled to figure out how they could continue their education.

One way we tried to support students during the challenges of COVID-19 was to adopt more flexible policies that would help students complete course requirements, while also allowing them time to tackle any issues they might be experiencing. Our Faculty Supervisors guided faculty in understanding the new policies and how they could apply them to help students balance schoolwork with the added pressures brought on by COVID-19. The university also allowed faculty to submit students for ADA accommodations if they or a family member was dealing with a COVID-19 illness or related complications. This reassured students that we recognized the challenges they were facing and were willing to work with them, so their educational goals were not derailed. As of May 2020, we had accommodated 449 students with COVID-19 related challenges.

Another support measure that the university undertook was to create webinars covering much-needed topics like "Stress Management," "How to Talk to Your Kids About the Virus," and "Homeschooling." We offered these on YouTube to our students and the larger community at no cost and the response was incredible! The College of General Studies Associate Dean, Dr. Jacquelyn Kelly, who is also a mom to two young children, created a webinar sharing tips for homeschooling K-5 children. The webinars were launched in March of 2020 and by May they had nearly 12,000 views.

These are just a few of the ways we strived to support students and our communities during a very difficult time in our history. University administrators and faculty played a tremendously important role partnering with students to help them stay on track despite the barriers they faced. We learned a great deal from COVID-19 impacts about the different support measures we can provide to better support students through natural disasters and other widespread events outside of our control. Ultimately, these lessons help us become more agile and better equipped to support students through possible crises in the future.

Remote Work Skills and Teaching Strategies for Effective Online Collaboration

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The unexpected COVID-19 pandemic forced transition for workers and learners to function in remote settings with online tools. Change to an online environment left many struggling to find effective remote work and learning strategies. Working virtually and collaboratively became a job requirement in many professional work environments due to the COVID-19 pandemic (Stepanova et al., 2020). The skills needed for working collaboratively in virtual environments develop through practice and experience (Paterson & Prideaux, 2020). Therefore, new understandings could support effective online collaboration for work and learning. As both companies and schools required collaboration and effective teamwork, new remote work skills have become vital.

The COVID-19 pandemic also changed the way educational organizations approached teaching and learning. This created an immediate need to reevaluate content delivery and curriculum to ensure learner needs were being met (Ransdell & Rieck, 2020; Stewart, 2020). The COVID-19 pandemic and social distancing continued to influence the job market, work style, and higher education in the United States and resulted in a need to develop new skill sets to effectively, work, collaborate, teach, and learn in an online environment (Paterson & Prideaux, 2020; Torun, 2020; Wieland & Kollias, 2020).

Framework & Methodology

The Community of Inquiry (COI) (Garrison et al., 2010) fostered critical thinking, inquiry, and communication among students and instructors. The basis of COI was Dewey's (1933) constructivist learning approach inclusive of three foundational constructs (Anderson, 2017; Garrison et al., 1999):

- Social presence: The ability to communicate purposefully in a trusting environment and develop interpersonal relationships by projecting personality.

- Cognitive presence: The extent that learners and workers constructed meaning through reflection and discourse.

- Teaching presence: The facilitation and design of social and cognitive presences for personally meaningful and educationally worthwhile learning outcomes.

Using the COI framework, optimal learning occurs at the intersection of social, cognitive, and teaching presences. The challenge for remote work and learning is to inject the COI framework into the online setting.

Social Presence Theory supported COI (Garrison et al., 2010) by showing the need for workers and learners to experience social engagement during online interactions (Lowenthal & Dunlap, 2018). The foundation of social presence was immediacy and communication intimacy to

improve team communication and interactions (Sung & Mayer, 2012). The social nature of cognitive presence, proposed by Vygotsky (1978) in social constructivist learning theory, showed that communications supported the interactions, modeling, and mentorship needed within a learning environment. A revised version of COI found that social presence overlapped with teaching presence and cognitive presence. Social presence established that interactions for the socialization of content, community development, course design, self-study, and learning experience were needed elements of COI to build engagement, understanding, and peer support within online interactions (Armellini & De Stefani, 2016).

The purpose of this mixed-methods study was to explore (a) skills for effective remote work, and (b) strategies to cultivate the skills and build remote workers trained in higher education institutions. University of Phoenix faculty and students participated in this study by completing a quantitative survey and engaging in qualitative interviews. Descriptive statistics were used to analyze the quantitative data. Open coding and thematic analysis were used to analyze the qualitative data. Additionally, a review of the literature was conducted using Cooper's (1988) framework to identify the remote work skills in the literature. The framework offered a systematic literature review to (a) formulate the problem, (b) collect data, (c) evaluate the appropriateness of the data, (d) analyze and interpret relevant data, and (e) organize and present the results.

Findings: Remote Work Skills

While the study is ongoing, the researchers have uncovered several strategies based on the analyzed data and literature review that supported effective online work. The strategies for effective remote work fell into four major categories: personal skills, people skills, organizational skills, and strategic skills.

Personal skills to support remote working include discipline, enthusiasm, self-motivation or self-efficacy, and trustworthiness (Dean & East, 2019; Farrer, 2020). Self-discipline is inclusive of controlling personal energy, time, and tasks to prioritize work needs. Enthusiasm helps build excitement for project goals and keeps the team focused on task completion (Ransdell & Rieck, 2020). Self-motivated workers in remote teams pace themselves not just on deadlines but on team needs in order to foresee, predict, and be ready for follow-up work. Personal motivation and discipline support making personal connections with teammates. Trustworthiness is vital in a team environment where trust among team members creates openness and a safe environment for questions. Forming team trust is a vital step as an online team becomes a cohesive unit. However, team size is an important issue and increased team size can lead to less team trust and decreased cooperation within the team (Paterson & Prideaux, 2020).

People skills drive interpersonal relationships in face-to-face as well as remote interactions. Remote workers in teams need to be adept at communications, leadership, and empathy skills to support and maintain productive working relationships (Schaberg, 2019). Teamwork skills are critical to team success as they affect productivity, engagement, and worker behavior. Many job descriptions ask for candidates who can foster teamwork and work effectively in a group (Dean & East, 2019). Team building is the process of establishing and maintaining contacts, managing group conflict, and developing effective team interaction (Stepanova et al., 2020). Effective communication is vital to remote work environments to clearly convey the thoughts and ideas of team members.

Online communications such as email, texts, and shared documents need to be clear, comprehensive, transparent, and concise through deliberate and focused writing (Flores, 2019). Leaders guide remote workers with supportive influence and leadership training to develop the skills needed for resilience during change and adaptation (Stewart, 2020). Empathy supports effective online teamwork as remote team members use their empathetic and sympathetic interpersonal skills to communicate. Team members need additional support for online asynchronous work to enable an empathetic, positive work environment (Farrer, 2020).

Organizational skills such as time management, accountability, and adaptability provide remote workers with the skills to organize priority tasks and accomplish team goals. Time management skills enable remote workers to organize the timing of tasks to divide time between needed activities and resources (Flores, 2019; Rasul et al., 2013). Remote worker timeliness to meetings and completing tasks towards team efforts generate trust between teammates (Schaberg, 2019). Personal accountability demonstrates dependability of the team where responsible remote workers explain and take responsibility for their choices and actions. Adaptability is a key attribute for remote workers to enable effective teamwork and flexibility for the evolving need in an online environment (Farrer, 2020).

Strategic skills like critical thinking and problem-solving are ways to plan for future events and possibilities. Challenges occur in every environment and workers with strategic skills are best prepared to handle those challenges effectively. Critical thinking helps remote workers systematically gather and evaluate data and use it to make complex decisions (Lyons & Bandura, 2020). Problem-solving skills support the troubleshooting and negotiation to advance creative solutions (Flores, 2019).

Findings: Teaching Remote Work Skills

A strong instructor presence in all elements of online classes is critical. The instructor adapts to learn the remote work skills needed to support an online environment. Instructors need to be empowered to teach in an authentic way using digital tools to create online content with learner choice, live discussion, and video elements (Wieland & Kollias, 2020). Providing clear communication, building a respectful learning community, and ensuring that course design is effective and exciting shows that remote instructors understand adult learner needs (Bourdeaux & Schoenack, 2016). Further, remote workers need soft skill training using multiple formats that include active learning such as guest speakers, role-playing, training in real-life situations, or practice in high-pressure simulations (Anthony & Garner, 2016). Teaching remote work skills required respect for adult learner needs in the form of patience, encouragement, timeliness, availability, and understanding (Bourdeaux & Schoenack, 2016). This study findings support the adoption of COI for enhancing remote work skills.

The COVID-19 pandemic changed the way workers and learners collaborated and communicated. Workers had to quickly adapt to new work patterns and information technology systems while moving their work processes to an online environment (Carroll & Conboy, 2020). Needed skills for remote work consist of four categories: personal, people, organizational, and strategic skills. Instructors and trainers

need the skills to assist remote workers and learners to utilize technological tools to enhance learning and to enable and engage learners for an active, collaborative, and challenging environment.

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Research Trio Strives to Publish Public Special Ed Response to COVID-19

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The pandemic has affected and changed the face of public education across the U.S. in so many ways. One area that was hit particularly hard was K-12 special education, as was noted by Andrea Wilson, Ph.D., Walden University, and University of Phoenix's Cheryl Burleigh, Ed.D. and Erik Bean, Ed.D. The trio began a content analysis study in winter 2020 to investigate how the pandemic has affected school systems from the Atlantic to Pacific. While their results are not yet complete, their analyses includes a mix of peer reviewed studies, mass media articles, and state educational websites. These data points reveal struggles, hardships, and frustrations of school systems, students, and parents, who must spend an inordinate amount of time staying engaged on and offline. This is in addition to the traditional learning challenges associated with Independent Educational Plans dubbed IEPs.

Wilson first noticed a regional effect with many similarities in how school systems delt with special education students while under lock down, and how they delt with the goal of returning to school. Wilson stated:

I noticed patterns based on a number of reports and soon discovered that many educational systems produced similarities in how they responded to providing IEP services and these patterns could be divided into regions. Moreover, regions responses could be divided into stages.

With that preliminary finding, the trio submitted a proposal that was accepted for presentation at the 13th annual Qualitative Report conference to be held at Nova Southeastern University in January 2022.

All school systems were forced to take drastic measures to continue serving special education students with the number one priority of keeping them safe and out of the pandemic. With the onset of COVID-19, increased infection rates, and deaths among US citizens, drastic measures were taken by individual states to protect the health and welfare of the populace. The burden of how and when to close K-12 public schools fell onto state governors and state led education agencies such as school boards of education, school superintendents, and departments of education. Burleigh continued,

But within the chaos that ensued, a specific population of K-12 public school students were not thoughtfully considered as to the impact virtual learning would have on their learning, those in special education who had active and ongoing IEPs…. Students who have IEPs require various services and learning accommodations that are best provided in a structured classroom environment. When the physical learning environment and support providers are no longer available due to distance learning, the question becomes how is the student's IEP accommodations being met, if at all.

Bean added, "the special education departments within each school district will then rely on the guidance of their respective state and the federal government to be sure that IEP services can be provided in fear of falling out of compliance." The research team knew that even before the implications of the COVID-19 global pandemic on special education students can be understood, the nature of the synergistic relationship between general education law and special education law must be brought into focus.

Background

Wilson, Burleigh, and Bean revealed the current K-12 public education system in the United States is governed by numerous federal statutes which began to emerge in the post-World War II era. The Elementary and Secondary Education Act of 1965 (ESEA) and its subsequent reauthorizations play a major role in the operation of every K-12 school district in the country. The ESEA established a commitment of federal resources toward ensuring that all students be afforded equal opportunity to experience and benefit from public education. In essence, ESEA and its successor reauthorizations along with associated laws govern the operation of K-12 public schools throughout the nation for all students.

All K-12 public schools in the United States must operate in a manner that is consistent with the requirements of these laws. The vast majority of federal education laws were written with all students in mind. In essence, education of the entire K-12 student body of the United States, inclusive of all its special populations, is at the heart of these laws. However, for some student populations, there are additional laws in effect. One such group is special education students or students with disabilities. Special education students are a special class of students who were first singled out for special protection with the Education for All Handicapped Children Act of 1975, known more commonly as Public Law 94-142 (PL 94-142).

PL 94-142 required all states that accepted federal money to provide equal access to education for all children with disabilities. This law – and its subsequent iterations via the Individuals with Disabilities Act 1975 (IDEA) – makes it mandatory for all schools to provide equal access to education, regardless of a student's status as a student with a disability. In other words, students with disabilities cannot be denied access to the specialized educational services to which they are entitled under the law.

Special education laws take provision of specialized instruction to students with disabilities one step further. Students with disabilities are provided an individualized education plan (IEP) that is customized to suit the specific needs of the student. The IEP is a legally binding, written contract between the school and the student which must be followed. Further, the IEP can only be changed through a detailed procedure that is designed to protect the rights of the student.

In times of normal school operation, these federal laws work together in an ongoing synergistic relationship to ensure that K-12 public education access is freely and equitably available to all students, regardless of needs. However, at no time prior to the COVID-19 global pandemic had the applicability of these laws been so tested. COVID-19 sparked a unique crisis in K-12 public education, nationwide.

In the early days of the 2020 global pandemic, K-12 public schools went into a state of full closure. All schools were shut down for all students. General education students and special education students alike were equally affected by schools being closed. Under the federal laws, when schools are closed for all students, all requirements under said laws are also suspended for all students. However, as soon as schools reopen for all students, all the federal laws must be followed.

Perspective

During the COVID-19 crisis, the reopening of schools was geared toward the provision of services to general education students via virtual, hybrid, and other modified instructional formats said the research team. These formats might be appropriate for provision of basic educational services to the average student, but these formats presented significant and unique challenges for the education of special education students whose educations are governed by IEPs. As soon as schools reopened for all students, the existing (pre-school closure) IEPs of special education students were required to be followed as written. Students with specialized services including one-on-one work with paraprofessionals or other service providers, nursing care, physical and occupational therapy services, and many other specialized methods of support and instruction were required to restart in a compromised environment. These highly specialized and labor-intensive educational services are structured for provision within a typical school environment, not within the individual homes of students or across an internet connection.

Content Analysis

To evaluate the COVID-19's effect on the K-12 education sector, Wilson, Burleigh, and Bean's study relied upon federal, state, and professional organization websites as a lens through which the process of responding could be viewed. A preliminary search for federal and national professional organizations guidance and recommendations to state and local school systems was conducted. In addition, other reputable sources for education related information and specialized resources addressing the needs of students with disabilities were included. With regard to their research Burleigh provided some detailed insights,

> Federal agencies' guidance was released early in the pandemic crisis with several updates over time; however, as the length of the pandemic drew on, the guidance from the federal government seemed to decline. As a result, responsibility for handling the crisis in education shifted to the state departments of education followed by the local school systems.

With this shift in mind, Wilson saw their findings culminated in an intentionally balanced perspective in investigating the states' issued guidance on providing educational services during the pandemic. States were divided into regions based on the current configuration of U.S. time zones (N = 22). States were intentionally selected for inclusion in the analysis by first selecting highly populated states in each region as well as states with smaller population size within the same region. This ensured inclusion of urban, suburban, and rural school districts within each regional sample and in the total sample. Due to large differences in the geographic size of states in each region, the number of states selected from each region varied (Eastern n = 9; Central n = 5; Mountain n = 4; Pacific n = 4).

This study revealed that the pool of existing literature on the direct impact of COVID-19 on IEP services for students with special needs was limited. However, there were some surprising facts that the team cannot reveal since they are currently preparing their findings for peer reviewed journal submission. That said, the study raises implications for public K-12 schools and the contexts in which students with special needs are obtaining services as mandated within IEPs during a time of crisis. In other events, such as natural disasters, contingency plans are in place within the school district to support students with special needs to mitigate the length of time in which the disruption occurs. No such plans are in existence based on the findings of this study. Wilson, Burleigh, and Bean are hoping to provide a follow-up with the results of their efforts to have their work accepted for peer reviewed journal publication in spring 2022.
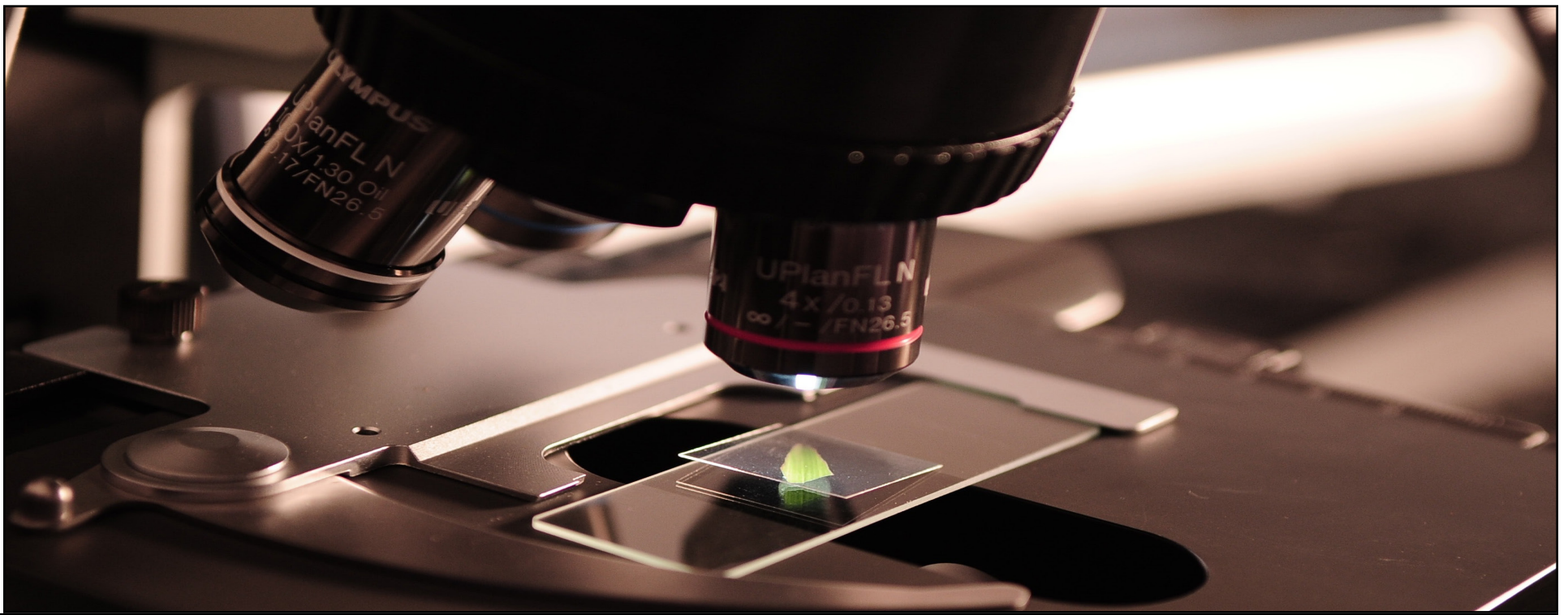
CEITR Research Lab: Exploring the Impact of the COVID-19 Pandemic on Nursing Students and Nursing Faculty at the University of Phoenix

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The Center for Educational and Instructional Technology Research launched nine studies focused on institutional research in 2021. The present study focused on identifying, exploring, and expanding institutional knowledge regarding the impact of COVID-19, specifically on the College of Nursing faculty and student population. This population was deemed especially vulnerable to the impacts of COVID-19 due to their direct interactions as front-line workers: with the virus, those affected, and their families. Additionally, as front-line workers these faculty and students had the potential of struggling – possibly at increased rates – with COVID-19 contraction within themselves and their loved ones. This study hope to find out how best to support those within the College of Nursing.

Faculty

The onset of COVID-19 highlighted the shortage of nursing faculty throughout the educational domain, which exacerbated the pandemic crisis and (in most cases) increased nurses' workload (AHC MEDIA, 2021). The shortage of nursing faculty resulted in a reduced number of students who could attend classes (Stukalo & Simakhova, 2020). To overcome the shortfall, nursing faculty would need to take on additional classes which would create additional personal stress for them (Stukalo & Simakhova, 2020). Handling the unknown changed the way nurses prepared to work (Thobaity & Alshammari, 2020). Maintaining clinical competency proved difficult with hospital and university policies and protocols changing daily (Locasa et al., 2020). Lebo (2021) outlined the changing needs of nursing faculty and how they adapted by meeting students virtually in Facebook communities and pages where academic information was disseminated throughout the pandemic. Faculty reported an increased focus on time management and how to best meet their nursing students' needs throughout the global pandemic (Morin, 2020; Grech, 2021). Taylor et al. explained that the nursing students struggled over their own "professional and ethical duty" (2020, p. 2) and the risk they faced caring for these patients.

Nursing faculty faced with transitioning to online teaching encountered novel challenges in the classroom during the COVID-19 pandemic. There was restructuring of nursing curriculum and teaching pedagogy and reflection on how to effectively use these new constructs to impart knowledge to students. Faculty members reported increased attention to student learning styles, student professional goals, and reassessment of their personal contribution to the field of nursing education. Reflection also included consideration for the tools faculty members had on hand for course instruction. Faculty reported an increased focus on time management and how to best meet their nursing students' needs throughout the global pandemic. Tools were diverse and aimed at meeting the need for students to engage with faculty in real-time, an aspect of education which was readily available in face-to-face instruction prior to the 2020 pandemic (Romero-

Ivanova et al., 2021).

Students

COVID -19 has had a significant impact on nursing students worldwide. The effects ranged from fear of contracting the virus, to uncertainty for their prospective career. Between the two opposing concerns came additional, unexpected anxieties which included mental strain and the unclear means of how to navigate their way through nursing school. The mental health burden was expressed with anxiety, depression, and insomnia. Professional issues arose such as an ethical dilemma as to whether to worry about their own safety over a patient's safety. The student nurses felt a huge responsibility as they held the hands of dying patients. The nurses had been taught throughout their nursing academic career that they are there for the patients, but the feeling of being afraid and helpless haunted them.

As the pandemic became more serious, clinical placement became another undefined stressor. Nursing students typically felt insecure and anxious when they began their clinical rotations. They struggled with the feeling of new environments and new situations, which can often result in psychological, physiological, and behavioral responses that can affect their clinical performance outcomes.

Study

The present mixed-method study addressed two main questions through collection of quantitative and qualitative data:

1. How has the Covid-19 pandemic impacted UOPX students?

   • What personal and educational impacts has the COVID-19 pandemic had on UOPX students?

   • What personal and educational adjustments did UOPX students have to make to succeed with their schooling?

   • What new personal and educational resources did UOPX students need to cope with the COVID-19 pandemic?

2. How has the Covid-19 pandemic impacted UOPX faculty?

   • What personal and educational impacts has COVID-19 pandemic had on UOPX faculty?

   • What personal and educational adjustments did UOPX faculty have to make to succeed in their teaching?

   • What new personal and educational resources did UOPX faculty need to cope with the COVID-19 pandemic?

Preliminary Results

A total of 88 faculty and 126 students completed a survey distributed through Survey Monkey between June 1, 2021 and August 31, 2021. Additional participant demographics may be seen in Table 1 and 2.

Table 1
Student Demographics

Baseline characteristic	Students n = 126	
	n	%
Gender		
Female	111	88.1
Male	13	10.3
Gender Non-Binary	1	0.8
Prefer not to disclose	1	0.8
Age		
18-24	1	0.8
25-34	22	17.5
35-44	38	30.2
45-54	40	31.7
55-64	22	17.5
65+	3	2.4
Race/Ethnicity		
White	69	54.8
Black or African American	17	13.5
Hispanic	17	13.5
Asian	14	11.1
Native Hawaiian or Native Pacific Islander	3	2.4
Native American or Alaska Native	3	2.4
Multiracial or Multiethnic	3	2.4
Program of Study		
MSN/FNP	42	33.3
RN to BSN	50	39.7
MSN/Education	14	11.1
MSN/Admin	15	11.9
DNP	2	1.6
Post-Masters Cert/Admin	2	1.6
MSN/Informatics	1	0.8

Table 2

Faculty Demographics

Baseline characteristic	Faculty n = 92	
	n	%
Gender		
Female	81	92
Male	7	8
Age		
35-44	9	10.3
45-54	12	13.8
55-64	31	35.6
65-74	32	36.8
75+	3	3.4
Race/Ethnicity		
White	69	75.0
Black or African American	8	8.7
Hispanic	2	2.2
Asian	4	4.5
Native Hawaiian or Native Pacific Islander	1	1.1
Native American or Alaska Native	1	1.1
Multiracial or Multiethnic	3	3.3
How long teaching at UOPX		
0-1 year	3	3.4
2-4 years	18	20.7
5-10 years	12	13.8
10+ years	54	62.1
Faculty Type pre-Pandemic		
On-line/Asynch	59	68.6
Local Campus	18	20.9
Combination	9	10.5
UOPX Faculty Status		
Full time	12	13.6
Assoc/Part time	76	86.4

Due to space limitations, ongoing analysis of qualitative data, and the complexity of collecting both qualitative and quantitative for two separate groups, only select results will be presented.

Quantitative

Of those faculty who answered the questions, 51% reported that were not clinical supervisors, 80% were part-time adjunct faculty, and 52% were employed in a hospital or other clinical setting. Faculty indicated that they primarily used online discussions (80%), asynchronous teaching methods (74%), submitting papers online (69%), and videoconference systems such as Collaborate or Zoom (65%). Sixty-three percent of faculty felt that COVID-19 impacted them professionally as a faculty either "A Little" or "Not at all" and 66.7% felt that it was Not at All challenging to transition to online teaching. Overall, 69% felt that COVID-19 impacted their teaching style "A Little" or "Not at all."

Student responses were similar. When asked about their education, 27.5% indicated COVID-19 had impacted their education "A Great Deal" and 22.5% "A Little" demonstrating a bimodal response. When asked how challenging it was to transition to online learning, 56.6% indicated "Not at all," but that could be because most students were online students pre-pandemic (74%), jumping to 91% currently considering themselves online students. In other words, most were already online so the impact was minimal for most students. Only 18% of students noted that the pandemic caused them to reach out to their academic counselor more often, with 66% noting faculty were available "A Great Deal" or "A Lot." Contrary to the qualitative findings from faculty data, 57% of students indicated they "Never" needed to use an assignment extension. Finally, and possibly of most import from a matriculation standpoint, due to the pandemic 28% of students considered leaving nursing, 22.5% considered leaving health care, 31.7% considered changing health departments/units/specialty, 28.3% considered a temporary leave of absence, and 7.5% considered a permanent leave from the program.

Qualitative

While faculty were asked 13 open-ended questions providing 839 excerpts of qualitative data, only one question will be reported here. 76 faculty answered the question "How did your professional faculty work environment change due to the pandemic?" The most prominent response categories were that there was a change in pedagogy (adding asynchronous training, providing extensions or accommodations for students, integrating synchronous teaching platforms, and increased difficulties managing discussions online or assessing course outcomes), a need for increased support for students (for example, meeting via phone after hours, helping students with burnout/anxiety/stress, and noticing students dealing with trauma due to deaths of Covid patients), and a change in clinical opportunities for both faculty (participating on COVID-19 incident command, increased telemedicine, or increase in demanding clinical work) and students (fewer clinical sites taking on students).

Students were asked 6 open-ended questions resulting in 390 excerpts of qualitative data (and currently 319 codes applied to the data). When students were asked "Regarding the time since the start of the pandemic, how would you as a nursing student say you have changed or grown?" a large variety of answers emerged. For example, students noted better time management, increased appreciation for learning online in order to finish the degree, changes in career path, and learning "that I can survive anything." Unfortunately, students also encountered numerous deaths of patients and within their own families, struggled with technology, contracted COVID-19 themselves leading to mental fog, exhaustion, and difficulties completing assignments on time. Those who thrived noted they felt increased emotional strength, resilience, they became a stronger nurse, and felt supported by professors and the school.

Summary

Undoubtedly as we continue to analyze the data more findings will emerge, and those above will continue to be clarified and honed. However, it is clear even at this point that the COVID-19 pandemic has been a challenging time for faculty and students alike. In alignment with the Phoenix motto "Together We Rise," when students and faculty felt supported they were able to overcome the personal and professional challenges, making adjustments as needed in order to meet an extra-ordinarily demanding time in our history.

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Building Grittiness in Undergraduate Students

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The topic of grit arose during discussions focused on research for the Adult Learners in Higher Education (ALHED) Research Lab in the Center for Educational and Instructional Technology Research (CEITR) at the College of Doctoral Studies. Grit was discussed in relation to recurring concerns with student retention since an ongoing concern in higher educational is that of student attrition. As educators, we found ourselves wondering, Why don't students finish what they start? Is it possible to teach students to complete their goals? Can students be taught to persevere?

Grit is defined as, "perseverance and passion for long-term goals . . . over and beyond measures of talent" (Duckworth & Quinn, 2009, p.166). Grit had been suggested as a trait that can reduce attrition and perhaps improve achievement of students in higher education. Therefore, a comprehensive quasi-experimental study was conducted in collaboration with the College of General Studies.

In the first phase a literature review yielded what was already known about the topic of grittiness since it was popularized by Angela Duckworth in 2007. While most of the literature review only hinted at classroom strategies, and some pointed to recommendations, there was little empirical research to be found on tried-and-true strategies. The purpose of this study became: a) to identify classroom strategies for cultivating grit, b) to develop a grit building module based on the identified recommendations, and c) to explore the impact of a grit-building intervention on course retention rate, task completion, and grittiness with first year undergraduate students at University of Phoenix.

After researching and crafting recommendations and a module for coursework, we asked ourselves: to what extent are there differences (if any) between the end course retention of UOPX first year undergraduate students who are taught using the grit promotion intervention and students who are not? And, to what extent are there any differences between the task completion rate of UOPX first year undergraduate students who are taught by the grit promotion intervention and students who are not taught by the model? Finally, can building grittiness be realized by the students themselves?

UOPX participants included 210 students identified as new or transferred undergraduates. Half were deemed control group while the other half were allocated as the experimental group (or the grit-building group). An impressive effort was made by the College of General Studies to separate similar attributes (degree, program, gender, etc.) among the two groups. With only recommendations and a few experiments found in the literature, classroom strategies were developed that included the creation of short burst learning videos and activities about grit, including how to incorporate goal setting frameworks, setting up short term goals, overcoming obstacles, using a growth mindset, and time management. As opposed to the control group, the experimental or grit-building group received a newly designed intervention or prototype of grit-building strategies. These activities were above and beyond those already required in regularly assigned coursework. A Grit scale (an 8-item scale) was completed before and after each of the two courses for the control and experimental groups.

Working collaboratively with staff and faculty prior to course integration of the grit-building module into GEN201 and follow-up PSY110 coursework allowed further enhancements of the intervention to be made. However, not all students would remain in their enrolled courses. During the first course, there were seventy non-starters (did not post any assignments or did not post assignments past the end of week two). Students with only some work in week one or two were removed from the original data set because we were unable to assume that the intervention could have had much impact within such a limited time frame. Therefore, the remaining data set was 140

students: 61 in the experimental or grit-building group and 79 in the control group.

Table 1

	GroupID	N	Mean	Std. Deviation	Std. Error Mean
TaskCompA	Control	79	.9072	.15103	.01699
	Grit	61	.9095	.14796	.01894
TaskCompB	Control	56	.8891	.19991	.02671
	Grit	48	.8240	.27461	.03964
GPA	Control	74	2.5572	1.37887	.16029
	Grit	55	2.6191	1.25924	.16980

Results

Retention was defined as "posted Y[es]" for students enrolled in a next course. Following the first course, we found 71% of the control group members and 79% of the experimental (Grit) group members were retained, an 8% increase in retention by students who had 30% more tasks to complete. However, a Mann-Whitney test did not reveal a statistical significance.

With 56 students of the control group retained and 47 in the experimental grit group from the first course, the continuity in a second course was not always as expected. Instead of the expected follow-up course (PSY110) some students entered HUM 115, ENG 100 and FP 100, and in a few cases GEN 201, meaning multiple students in the grit-building cohort did not receive the second part of the intervention.

In addition, there was qualitative feedback that suggested aspects of the grit-building intervention were redundant and overlapped during the second leg, or course. Fortunately, however, the first course was both more consistent in expectations for control and grit group, but also in feedback received from faculty and student participants and could be used to observe task completion rates.
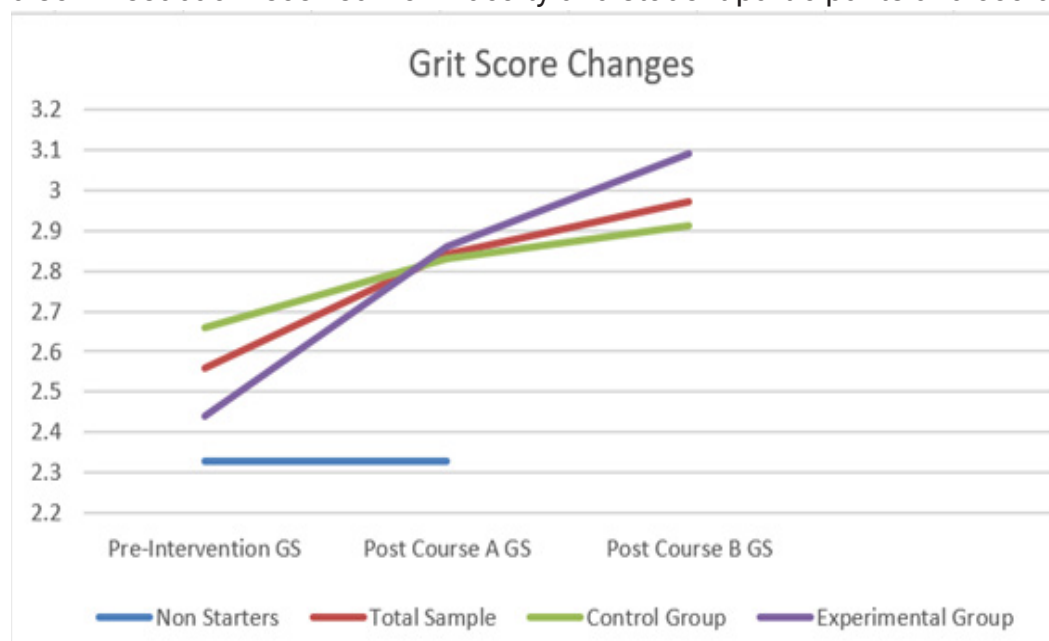
Task completion was measured as the number of assignments completed, regardless of actual points, and were based on course tasks (exclusive of the additional grit assignments). While the experimental group had more assignments and received less points for their regular assignments, the task completion rate was calculated as the number of tasks completed from total tasks expected.

Table 2

Mean task completion rates were nearly identical for both groups in the first course (GEN201) with growing differences resulting from the second course (PSY110, among others). With an original intent to measure differences using MANCOVA and covarying GPA, a Quade's Analysis (basically an ANCOVA with ranks instead of means) was conducted with no statistically significant results to measure effects.

Surprisingly, there were a number of students in both groups who were successful in task completion and earned points, but did not chose to progress to the next course (further impacting retention rates). This experiment did not pursue follow-up questions of those qualifying students but could be an area for further research in addressing student retention.

Grittiness can be measured with a Grit scale constructed by Duckworth and Quinn (2009). The Short Grit Scale, an eight-item survey, has been validated for internal consistency, test–retest stability, consensual validity with informant-report versions, and predictive validity (Duckworth & Quinn, 2009). GPA and retention are found in the literature as indicators of educational attainment; there are no differences found in validity for age, gender, nor educational level. University studies in England (Kannangara et. al, 2018) show that higher grit scorers meant higher levels of mental well-being, self-control, resilience, and endurance. We used it to measure student grittiness before and after the first and second course.

As depicted on the graph, non-starters had the lowest starting levels of grittiness, reinforcing findings from the literature that those with less grit are less likely to attain educational goals. Those in the grit group happen to start with a lower grit scale score than counterparts in the control group and it seems they gained the greatest increase in grittiness after the first course, and even more so after the second course. However, those in the control group – who were equally successful in task completion and retention – made a smaller gain in perceived grittiness. We ponder if awareness (through the grit-building intervention) leads to a growing self-awareness that one is capable of and can build grit with every task attempted and accomplished. Perhaps, providing a feedback loop about task completion regardless of points leads to encouragement, increasing self-efficacy, self-control, and self-regulation.

Table 3

UoP College * Experiment Grouping Crosstabulation

Count

		Experiment Grouping		Total
		Control	Grit Grp	
UoP College	College of Business and Information Technology	53	40	93
	College of Health Professions	6	6	12
	College of Social and Behavioral Sciences	18	13	31
	College of General Studies	2	2	4
Total		79	61	140

UoP Program Degree * Experiment Grouping Crosstabulation

Count

		Experiment Grouping		Total
		Control	Grit Grp	
UoP Program Degree	AA	29	19	48
	BS	47	39	86
	BA	1	1	2
	AS	2	2	4
Total		79	61	140

Recommendations from this study include refining the grit-building intervention for the second course, further integrating the grit assignments into coursework, and expanding the intervention to a larger starting sample size. Other questions could include: Can we learn more about why capable students do not continue? Can we build grit before first-time students take their first class?

By translating the literature into recommendations for classroom strategies, building and implementing a grit-promoting module as an intervention, and allowing students to realize they are becoming grittier, we have succeeded where others have not even tried. We remain hopeful that with continued work in this area we can demonstrate that by providing students with the tools to support their intentions to persevere, we can build momentum for a drive that takes students all the way to degree completion one course at a time.

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Equity in Education: Maximizing Learning for At-Risk Minorities Prior to and in the Face of COVID-19

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Introduction

The COVID-19 pandemic has set back learning for all students, but especially for at-risk students and students of color (Dorn et al., 2020; Lieberman, 2020; Pokhrel & Chhetri, 2021). Learning disabilities, low literacy rates, language difficulties, family instabilities, and low socioeconomic conditions contribute to ongoing challenges (Lesaux & Rangel, 2013; Li & Edmonds, 2005). Positive classroom behaviors and a culture of respect and community can be fostered in the context of a prescribed academic program, such as an alternative disciplinary setting (Nasir et al., 2013). However, despite differentiated instructional strategies within alternative disciplinary settings, upon return to their home school, at-risk African American and Hispanic students often continue to display the negative behaviors, fail courses, and perform poorly on reading and math standardized assessments; resulting in high levels of recidivism, school dropout, or incarceration, a problem likely exacerbated with the onset of the COVID-19 pandemic. Likewise, the COVID-19 pandemic has taken a heavy toll on Black, Hispanic, and Indigenous communities with prolonged periods of remote learning, resulting in increased rates of depression and anxiety to the loss of student learning (Dorn et al., 2020).

Advanced educational reforms implemented prior to the COVID-19 pandemic, such as research-based differentiated instructional strategies, language immersion programs, and Individual Education Plans (IEPs), have required increased accountability toward decreasing the achievement gap, with alternative disciplinary education programs providing services for at-risk youth who experience learning and social challenges in the traditional classroom settings (Becker & Luthar, 2002; Hadderman, 2002; Moses, 2011). However, COVID-19 has posed challenges with remote learning such as accessibility, flexibility, learning pedagogy requiring families to rely on technology and digital solutions to keep children engaged in learning (Lieberman, 2020; Pokhrel & Chhetri, 2021).

Despite numerous educational reform practices, at-risk African American and Hispanic students consistently academically performed poorly in comparison to their peers and often received harsher discipline (Bell, 2014; Fitzgerald, 2006; Lesaux & Rangel, 2013). While all students have suffered due to COVID-19 and closing and later reopening of schools, students of color could be six to twelve months behind academically in comparison to four to eight months for white students (Dorn et al., 2020). The problem is continuing to address the needs of at-risk students through differentiated instructional strategies while mitigating COVID-19 barriers has often proved challenging.

Methods

The purpose of this qualitative exploratory single case study was to explore teacher and administrator experiences with differentiated instructional strategies, and at-risk learning experiences in an alternative disciplinary middle school in southern Texas before and during the COVID-19 pandemic. The alternative disciplinary middle school under study (identified as a behavior middle school) included 70 students: 94% of whom were a minority and 82% receive free or reduced lunch, identifying students as at-risk.

Data collection included semi-structured interviews from with 20 participants, comprised of middle school teachers and administrators, as well as classroom observation data, and archival school records. Initial data collection occurred pre-pandemic (2018) with follow-up one year into the COVID-19 pandemic (2021). Study participants detailed teacher and student interactions, supporting alternative disciplinary education programs for closing the achievement gap between at-risk minority and non-minority students and how these shifted during the COVID-19 pandemic.

Results and Discussion

Thematic analysis revealed key findings which included differentiated instructional strategies, adapted school climate and culture,

routines and behavior, and student engagement considerations. Pre-pandemic observations of teaching experiences and achievement data revealed teaching difficulty for struggling and reluctant learners with minimal administrative support. Overall results indicated the need for professional development and training, culturally responsive curricula, research-based programs, and differentiated instructional strategies possibly to improve the achievement gap between at-risk African American and Hispanic students in this alternative disciplinary middle school. Study results revealed at-risk African American and Hispanic students within this school district failed to receive appropriate research-based education programs for academic and social supports pre-pandemic. The COVID-19 pandemic has widened the equity gaps along racial lines by disrupting educational systems across the country resulting in greater academic loss for at-risk minority and economically disadvantaged learners.

Findings in this qualitative exploratory single case study supported previous research regarding educational equity with at-risk and minority students (Dorn et al, 2020; Lieberman, 2020; Pokhrel & Chhetri, 2021). Previous studies highlighted shared characteristics of alternative schools including small class size for increased opportunities for individualized instruction, accommodating diverse learners. This study school framed strict organizational structures and routines to minimize misbehaviors, but knowledge learning acquisition failed observations in some classrooms. Several classroom observations demonstrated student failure to connect with instructional materials, experience engagement, and self-regulated behavior.

Based on educational trends toward accountability, this alternative school study site incorporated restorative practices, creating individualized solutions to mediate unwarranted behaviors and building tiered systems for learners to experience academic and social success. The study site had strict guidelines for student movement, providing an educational structural design. For safety, students entered the building and walked through metal detectors, experienced being searched, and surrendered all electronic devices prior to entrance into a classroom. This practice represented conducive precautions, creating a safe environment for students and staff; however, it mirrored the jail system, creating feelings of anxiety. Moreover, class rosters continuously changed throughout the school year challenging staff to establish meaningful relationships with students.

Research suggested students responded academically better when they experienced positive relationships among alternative disciplinary school peers and teachers (Baron & Darling-Hammond, 2008; Castagno, et al., 2008; Dresser & Asato, 2014). When the learning community shared nurturing commitment and relationship building, academic and social success promoted achievement (Powell & Kalina, 2009; Smith & Palmer, 2015; Zimmerman et al., 1992). Vertigo and Glenn (2006) stated alternative schools established non-traditional environments, handling specific needs and issues of low achieving student academic and social success. However, once students returned to their home school or another traditional school, misbehaviors resurfaced. Socially distancing and restrictive movement policies have significantly disturbed traditional educational practices mixing in-person and on-line instruction (Lieberman, 2020; Pokhrel & Chhetri, 2021).

Prior to the Covid-19 pandemic the recidivism cycle often repeated with ISS only to end back at the alternative school, depending on the infraction. The various learning theories supported the value of developing the student and teacher relationships, emphasizing cognitive and social development. For example, Long's (2012) psychosocial theories included self-reflection and interpersonal skills, shaping student thinking as they made meaning of their experiences within the school setting. If students failed, regardless of prescribed interventions in a belonging to a nurturing environment, they negatively responded. For example, in the study observations, when students placed their heads down and remained quiet during instruction, an atmosphere of complacency and unintentional learning contributed to fixed unengaged mindsets to learning. Online instruction due to COVID-19 has increased the deficits in learning gaps with excessive screen time spent on instruction and lack of parental guidance (Pokhrel & Chhetri, 2021).

Significance to Educational Leadership

Findings from this study suggested discrepant and contradictory education practices in the study alternative disciplinary middle school. Research-based instructional practices failed required implementation, although evidenced-based efforts presented behavioral interventionists, teachers, and counselors, working together, tracking progress of students, and creating and monitoring individualized education plans. While experiencing high rates of student recidivism, the study alternative disciplinary middle school included instructional intervention planning, yet students failed to receive proper counseling or intervention services for academic and social success. The COVID-19 pandemic has posed challenges with online learning highlighting learners reluctance to keep cameras on during instruction suggesting off task behaviors and disengagement (Lieberman, 2020). Educational leaders failed responsible development for creating systems conducive to teaching and learning and accommodating all learners in their pursuit of attaining an education.

Additionally, behavioral In School Suspension (ISS) without relevant and meaningful instruction placed students further behind, academically, a finding supported in previous literature (Morton, 2015). Placed in ISS, students often failed without required access to activities aligned with the core subject curriculum. Without certified staff members, failing students lacked experiencing a deliberate, intentional, and purposeful viable curriculum. Without student support for advancing efficacy, intellectual and social development, and success, at-risk students lacked assistance and perpetuated achievement gaps. Emphasis on social emotional learning coupled with authentic assessments and online educational tools to provide optimal learning opportunities would help support at-risk learners (Lieberman, 2020; Pokhrel & Chhetri, 2021).

Findings in this study showed significance of proactive education leadership perspectives focused on the need for instruction and discussion on reflective understanding of the human change cycle, offering transparency, altering mindsets, and closing the academic achievement gap for at-risk learners. Education leadership requires ongoing conversations and meaningful professional development, focusing at-risk alternative middle school student academic and social accommodations. The COVID-19 pandemic has disrupted and forced educational systems to refocus and devise infrastructures to accommodate all students and particularly decrease expanding learning gaps for at-risk minorities. As such, ongoing studies on the impact of COVID-19 pandemic on teaching and learning equity for primary and secondary education at-risk students should persist.

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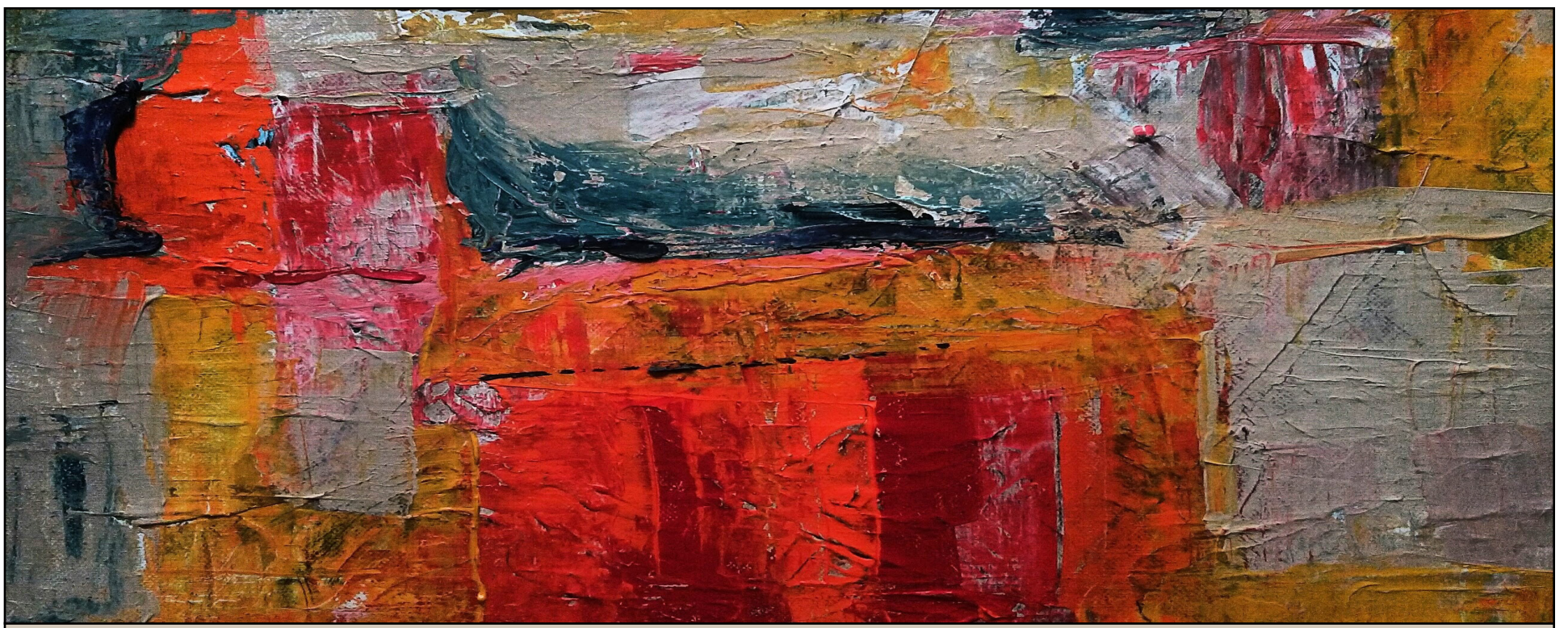
Metacognitive Pedagogy

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Metacognitive Pedagogy

This article addresses the stories and experiences of elementary educators concerning the understanding of metacognitive pedagogy and its educational implications. A recent qualitative narrative inquiry led to the conclusions that while educators want students to be able to think critically and problem solve, elementary educators lack training and experience on how to explicitly teach metacognitive strategies in the classroom. The lack of understanding concerning the importance of the explicit teaching of metacognitive strategies in the classroom has led to metacognitive pedagogy deficiency. A brief background of the research problem, five identified themes, and recommendations will be included within this article.

Background

One of the most overlooked facets of education is the understanding of learning as a skill that needs to be taught (Wilson & Bai, 2010). Learning to learn is a skill that is understood, but not presented in curriculum. Learning is an active process and there are specific ways to improve performance if the cognitive processes are recognized, taught, and understood by learners (Wilson & Bai, 2010). The awareness and ability to regulate thinking requires practice and understanding of metacognitive processes. It is important to explore teachers' awareness of their ability to think about, talk about, and write about their thinking and pedagogical understanding of metacognition so that we can bridge the gap between what is known to benefit students in the learning process and what is happening in the classroom (Braund, 2019; Ozturk, 2017; Wilson & Bai, 2010; Zepeda et al., 2019).

On the cusp of educational reform, the explicit integration of metacognitive strategies emerges as the most cost-effective, easy to implement, and engaging form of boosting student achievement, increasing attendance rates, improving student behavior, and increasing teacher satisfaction (Semple et al., 2017). Educators consistently want students to perform complex problems by thinking, collaborating, and applying the skills learned in class, but students often do not know how to access metacognitive strategies that would allow advanced performance on complex tasks (Zepeda et al., 2019). Educators often underestimate the ability of elementary students to participate in advanced cognitive training; thus, do not explicitly teach metacognitive skills as part of their curriculum (Spruce & Bol, 2015).

Research

A qualitative narrative inquiry study was conducted to explore the experiences of elementary educator's experience concerning the explicit teaching of metacognitive strategies in the classroom and subsequent educational implications. During thematic data analysis, educators' experiences helped to identify five themes consistent among the research participants: (1) students struggle with thinking processes, (2) metacognition is modeled in elementary classrooms, (3) educator training lacks focus on metacognitive practices, (4) explicit teaching of metacognitive strategies is minimal in elementary, and (5) students benefit from metacognitive training.

Recommendation One

Based on the results of the thematic data analysis process and review of existing literature, it is recommended that teachers receive metacognitive awareness training to address the deficit identified in the first theme. Some educators struggle with thinking processes, which has been found to be a fundamental problem within understanding metacognitive pedagogy development (Wilson & Bai, 2010). Educators have consistently demonstrated a lack of personal understanding of thinking processes related to their own understanding, and thus are ill prepared to teach students about metacognitive strategies (Zepeda et al., 2019). Teachers, administrators, and support staff should receive training about the different thinking processes involved in information acquisition. Time should be allotted for educators to think, process, and determine the types of thinking required by the learner prior to planning lessons to teach content areas. It is essential

that teachers are well versed in metacognitive processes to effectively teach students to use metacognitive strategies to solve complex problems.

Recommendation Two

Multi-modality training should be incorporated for the explicit teaching of metacognitive strategies in the classroom. Teachers report being limited in their approach to teaching thinking through metatalk and modeling. While this is an effective strategy to increase metacognition, it is only one tool that is available for use in the classroom (Zepeda et al., 2019). To assist teachers with the explicit teaching of metacognitive strategies, these strategies should be presented in a multi-modality way. Teachers should be equipped with the structure and lessons that facilitate critical thinking skills that compliment curriculum. This could potentially increase the depth and complexity of thought regarding connections between the curriculum and beyond.

Recommendation Three

Perhaps, the greatest recommendation is to improve educator training that focuses on metacognitive practices in the classroom. From teacher preparation courses to certification courses, to professional development courses, a focus for a metacognitive framework should be established (Spruce & Bol, 2015). As discussed in recommendation two, educator training should first develop the educator's own metacognitive awareness and positionality. In recommendation two, the recommendation was for tools and strategies that can be used to develop pedagogical practices that focus on a metacognitive framework should be taught. Recommendation three is for professional competencies to be developed as a requirement for educator certification. Unless the professional competencies are tied to certification, educators may not fully engage in the process (Spruce & Bol, 2015). Prospective educators who seek a career in teaching should be trained, demonstrate proficiency in metacognitive awareness, and possess the skills necessary to be able to explicitly teach metacognitive strategies in the classroom. The professional competencies should be required for educator certification.

Recommendation Four

Requiring educators to demonstrate competencies regarding the explicit teaching of metacognitive strategies should be an essential aspect of observation and evaluation criterion for teacher performance. Recommendation three suggests that educator certification be contingent upon demonstrating professional competencies in metacognitive awareness and the ability to teach students metacognitive strategies to be successful in the classroom. This recommendation is for educators that are already certified to be held accountable for gaining the skills necessary to be metacognitively competent.

Recommendation Five

Theme 5 suggests that students benefit from metacognitive instruction and authentic assessment practices. Student assessment opportunities should reflect metacognitive expectations (Spruce & Bol, 2015). Students benefit from metacognitive training; thus, assessments should include opportunities for authentic performance tasks (Teng & Zhang, 2017).

Conclusion

The purpose of this qualitative narrative inquiry was to examine the understanding of teachers' metacognitive pedagogies and its educational implications. Educators shared their unique perspectives and experiences during the data collection process. The stories of the educators add to the body of knowledge concerning teachers' metacognitive pedagogies and subsequent educational implications. The identified themes within the research suggest that educators lack understanding and training concerning the explicit teaching of metacognitive strategies in the classroom. Evidence for teacher training and development of metacognitive pedagogy emerges as a critical need in elementary education.

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Preparing for the Mentorship Process: How to Give Yourself the Best Experience

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This article is a combination of personal reflections and synthesized recommendations for optimizing the mentorship experiences of new faculty in the College of Doctoral Studies. The authors completed separate mentorship experiences at approximately the same time as they entered the ranks of staff faculty in the College of Doctoral Studies, Ed.D. program. While both are experienced teachers and administrators in other higher education institutions, neither had teaching experience at the University of Phoenix at the time of their onboarding, and hope that this article can inform future participants in the program.

Johnnie Driessner, Ed.D., Mentee

Upon first learning of the expectation for an eight-plus week mentorship for teaching a course, I was skeptical. After 42 years of higher education teaching and administrative experience I was unconvinced of the potential benefits of the experience, and the return on the investment of time and energy. My skepticism quickly dissipated. With the ongoing support of my mentor, I was able to make adjustments in some areas to improve the student experience and make the instruction more authentic. The relationship that I developed with my mentor began several weeks prior to the beginning of the course, and she provided me with general advice, specific resources, and feedback on my design of certain course materials. Drawing on recommendations of successful strategies detailed by my mentor (shared in instructional materials) and based on my past experience with the creation of video learning objects (and with the added experience provided by the Integrating Multimedia workshop provided by the University of Phoenix Faculty Services) I created and posted three videos highlighting essential University of Phoenix resources and doctoral strategies to enhance my students' experiences.

At the beginning of week two, I sent a message to each student summarizing their engagement and performance in week one and sharing my perspectives on how they might better engage the course (where appropriate). Beginning week four, I designed and implemented a rubric for assessing the discussion posts which I used for the remainder of the course. I also actively utilized the course announcement feature, including 41 announcements outlining course adjustments, sharing links to additional learning resources, and seeking to clarify assignments and expectations.

My mentor encouraged me to engage more authentically and deeply in the discussion threads. She shared examples of effective posts aimed at expanding the discussion and enhancing application and synthesis. My engagement in the discussion threads was enhanced significantly, but my mentor continued to push me to improve. One enhancement I will use in the future is the implementation of detailed discussion rubrics throughout the course, beginning in week one.

Josh Valk, Ph.D., Mentee

Entering the mentorship, I was a bit apprehensive. I had the expectation that this would be a "check the box" experience. However, I was a bit overwhelmed at the beginning. My initial interaction with my mentor was extremely positive, and he was very clear about the expectations. I began to feel at ease knowing that I had an ally invested in my success rather than someone just providing harsh feedback. Although I had the benefit of understanding the system from years of experience as a student and three-time alumni, I quickly became aware of the behind-the-scenes processes. My mentor challenged me in a way that drastically improved my instructional approach. He showed me examples of his classes and how he strategically places announcements. His approach resulted in consistent communication with the class in which critical information was delivered at an appropriate pace. The mentorship at University of Phoenix was one of the most impactful times in my career as an instructor.

I always considered myself an active participant in class discussion boards. My mentor challenged me to be more in-depth and post more frequently. Following his lead, I began to offer an optional weekly live session for my class. At the end of the course, I had several

student comments about how beneficial these sessions were, and how refreshing it was to have visual and verbal interaction with their classmates. As an incentive for attending and participating in the live session, students were exempted from replying to a classmate on the first discussion board each week (although their initial post was still required). I found this led to two things; attendance was generally around 75%, and students became so engaged with classmates that they did not use the incentive, instead they became more active.

I was detailed and precise in my week one grading and challenged students to think like doctoral students. I had several upset students after the week one grades. However, because of my frequent interaction within the class, almost every student received a 15-minute one-on-one meeting with me for a thorough explanation. I saw a drastic increase in the quality of writing by the end of the course, and most students thanked me for challenging them as doctoral students and helping them considerably improve their writing and APA literacy.

Jane Schumacher, Ed.D., Lead Faculty Area Chair and Mentor for Johnnie Driessner

In the first year of my role as Full Time Lead Faculty Area Chair, I was asked if I would I like to serve as a mentor for potential faculty in the Ed.D. division of the College of Doctoral Studies. I can state unequivocally that I responded with an enthusiastic "yes, please!" When I serve as a mentor, I am charged with sharing my own best practices with my mentees. I personally believe that one cannot teach content until and unless relationship building comes first. I do this in a mentor/mentee role by sharing that I am a wife, a mom, and a grandmother. This is the first line in my meet and greet that I share with my mentees, and I ask that they share with me who they are personally first, and then professionally second. This is the same strategy that I use with my students to build strong relationships within the very first day of each course I teach. It models the importance of knowing one another as human beings first and professional human beings second for the mentee.

As a seasoned mentor, I can now say that the mentorship program at UOPX allows me to meet new faculty members where they are and help them to become high quality, caring, and supportive instructors for our college. The more engaged I become with my mentees the greater the chance for their success, and, ultimately, for my own success as a Lead Faculty Area Chair. Another critical piece of the mentorship process is to help the mentee proactively address areas of concern.

Personally, the relationships I built with my mentees leads to excellence in their roles after the formal UOPX Mentorship. I know about each mentee's family, personal interests, professional interests, challenges, and successes. This leads me to not only view our staff and associate faculty as colleagues but as friends at work. In this virtual environment, we are all charged with finding new and innovative ways to connect with one another and the Mentorship process does exactly that!

Jon Lewis, Ed.D. (Candidate), Assistant Dean of Operations and Faculty Engagement and Mentor for Josh Valk

Mentoring is an essential element of effective teacher preparation. Therefore, the question raised is "what is the best approach for equipping new adjunct faculty candidates for online, asynchronous teaching?" The answer lies in inspiring the candidates to meld their practitioner skills and talents to leverage the Learning Management System's (LMS) capacities, in a way that exceeds the institution's recognized best practices, and more importantly, the students' expectations. Inspiration is key. It is one thing to clearly lay out minimal expectations and coach to conformity. It is something altogether different, and all-the-more desirable, to create a context wherein the candidates understand how they can uniquely contribute to student learning, while using the available systems.

One element of inspiration acknowledges the strengths that the candidate brings to the classroom. This includes years of successful professional experience. However, that does not necessarily translate to instructional acumen. In fact, the two are often unrelated. It is the mentor's responsibility to tease out the candidates' strengths and make strategic recommendations for improvement in a timely fashion. One way to work around timeliness in an asynchronous context is to offer frequent class walk-abouts, that can refresh the candidates' memory of issues, doubts, and difficulties with various aspects of facilitation.

Another element of inspiration allows the candidates to experiment with ideas and concepts, and to make them individually relevant; it may be helpful to describe typical student needs, expectations, and pain-points along the way, so that the candidates consider how they may be most impactful. Finally, the candidates draw the greatest inspiration from positive feedback from their learners. If a learning environment has been established that provides frequent, relevant, and even personal interaction, the students will organically respond with their own forms of "Like" feedback that work to draw further experimentation and personal gratification for the new faculty member.

Mini-Certification Programs to Enhance Faculty Engagement and Professional Development: A Mixed-Method Study

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The focus of this research study is on the applicability of mini-certification programs to enhance faculty engagement and professional development. A mini-certificate program, also known as a digital badge program, is a way to both document and encourage professional learning and to formally recognize skills developed by faculty (McCullough & Buch, 2020). The success of mini-certificate programs relies upon the intrinsic motivation that "allows individuals to aspire to achieve their fullest potential" (Ippoliti, 2018, p. 5).

Adjunct faculty work on a part-time or fee-for-class basis. They have no tenure and typically have no benefits (Murray, 2019). Despite these issues, many well-trained professionals still seek these positions as either supplemental income or post-retirement work. Colleges and universities seek ways to enhance the engagement of their adjunct faculty while encouraging them to increase their professional development. The use of mini-certifications is one suggested method of accomplishing that goal. The goal of this study is to inquire of contingent faculty and to quantify their past experiences with and their perceptions about the effectiveness and utilization of mini-certifications.

Problem Statement

The general problem is that universities depend heavily upon the use of adjunct faculty. Problems may exist related to these adjunct faculty (AAUP, 2020; Buch, et al., 2017). If adjunct faculty feel unengaged or isolated from the institution, their effectiveness as instructors might not be at the highest levels (Kimmel & Fairchild, 2017). Without some method of enhancing adjunct faculty engagement, universities might underutilize resources that could enhance the teacher-student experience (McNaughtan et al., 2017).

Purpose of the Study

The purpose of this mixed-method study is to inquire as to the potential effectiveness of a mini-certification program at a large national university where the majority of staff teach primarily online. The population of interest is contingent faculty. Contingent faculty, for the purpose of this study, are individuals, sometimes referred to as "associate" or "adjunct" faculty, who are non-tenured, and part-time.

Population

The population for this study included any faculty teaching in higher education. According to the NCES (2020), that number is estimated at 1.5 million, about half full-time and half part-time faculty. The sample was online faculty at one university headquartered in the Southwestern United States. The survey was sent by the university administration to a random selection of faculty. The following chart broke down the demographics of the sample of 66 faculty who replied by 23 July 2021.

Table 1
Demographics

Age		Ethnic Background		Gender		Years Teaching at Target Population Institution		Total Years Teaching in Higher Education	
25-34	10.6%	African American	33.3%	Female	66.6%	1-5	30.7%	1-5	26.2%
35-44	24.2%	Asian	3.0%	Male	33.4%	6-10	14.5%	6-10	16.9%
45-54	31.9%	Caucasian	56.1%			11-15	33.9%	11-15	24.6%
55-64	7.6%	Native American	1.5%			16-20	16.1%	16-20	9.2%
65-75	22.7%	Other	6.1%			21-25	4.8%	21-25	6.2%
76+	3.0%							26-30	7.7%
								30+	9.2%

A survey was conducted using Survey Monkey. If faculty members decided to participate, they accepted the informed consent before being able to proceed to the survey itself. All participation was voluntary.

Each qualitative question was input by faculty in their own words and subjected to the process of coding, categorization, and subcategorization as described by Saldaña (2016). Themes were extracted from the data for each of the four qualitative questions. As the actual volume of surveys that will be sent out and returned was unknown, software tools could be used to process data.

Research Questions

Quantitative Research Questions

RQ1: Are there statistically significant differences between the expected and actual experiences of faculty in terms of engagement who have participated in mini-certification programs as compared to their expectations, value, and satisfaction?

   H10: There are no significant differences between the expected and actual experiences of faculty in terms of engagement who have participated in mini-certification programs compared to their expectations, value, and satisfaction?

   H1A: There are significant differences between the expected and actual experiences of faculty in terms of engagement who have participated in mini-certification programs compared to their expectations, value, and satisfaction?

RQ2: Are there statistically significant differences between the expected and actual experiences of faculty in terms of professional development who have participated in mini-certification programs compared to their expectations, value, and satisfaction?

   H20: There are no significant differences between the expected and actual experiences of faculty in terms of professional development who have participated in mini-certification programs compared to their expectations, value, and satisfaction?

   H2A: There are significant differences between the expected and actual experiences of faculty in terms of professional development who have participated in mini-certification programs compared to their expectations, value, and satisfaction?

Qualitative Research Question

What are the perceptions of faculty regarding the implementation of mini-certificate programs designed to enhance faculty engagement and professional development?

Quantitative Data Analysis

The Likert-type scales for questions 1-6 provide ordinal rankings. Multiple sources support the use of Likert-type scores with five or more values as continuous variables for statistical analysis (Johnson & Creech, 1983; Norman, 2010; Zumbo & Zimmerman, 1993). The quantitative analysis was a correlational study including the variables professional development and professional engagement against the variables: expectations, value, and satisfaction. The quantitative analysis was conducted using Excel.

Qualitative Data Analysis

The qualitative questions were uploaded into QDA Miner. QDA Miner was used to help with the identification of codes (words and phrases commonly used by the participants), as well as categorization and the eventual extraction of themes. The process of coding, categorization, and subcategorization as described by Saldaña (2016) was followed. Once the coding and categorization process was completed, themes were extracted from the data for each of the four qualitative questions.

Quantitative Results

There were six quantitative questions. Each had five Likert-type possible ordinal responses. Correlational analysis was used to determine if there were any significant relationships between the six questions. Descriptive statistics showed similar values for all six questions.

Table 2
Correlational Analysis Results Between Questions 1-6

Question	1	2	3	4	5	6
1	1					
2	0.528175	1				
3	0.598416	0.635906	1			
4	0.611142	0.694747	0.752458	1		
5	0.628886	0.590176	0.804003	0.729798	1	
6	0.630223	0.596485	0.81913	0.759728	0.85848	1

Correlations range from +1 to -1. A value of zero indicates no relationship. A positive value of 0.3 to 0.69 indicates a moderately strong relationship. Values of 0.7 and above indicate a strong relationship. In this study, the data reflects moderate to strong relationships between all six questions with the strongest association between questions 4-6.

As all of the responses were from faculty who had participated in a mini-certification problem, the moderate to strong association between the six questions is not surprising. Overall satisfaction with the mini-certification program (#6) and professional expectations in terms of engagement and professional development (#5) provided the strongest association (r = 0.86).

Qualitative Results

There were four qualitative research questions (see the Appendix). The textual material from each question was coded following the process outlined by Saldaña (2016). Codes were separated into categories and subcategories, and themes extracted for each question. Following coding for the individual questions, the responses were treated as a whole, and themes extracted. Following is a list of themes extracted from the various qualitative questions:

- Additional training on research, teaching research, and research best practices.

- Best practices in classroom instruction.

- Alternative technologies to assist in research, communication, and teaching.

- Additional training sessions.

- Professional development in specific areas of teaching.

- Focus on understanding of adult learners.

- Faculty understanding of culturally diverse students.

- Development of communities (communities of inquiry).

- Certificates that would fulfill yearly professional development.

- Recognition of faculty research and publications.

- Reinstitution of some grants.

- Ways to reach our students using technology.

- Technologies that could improve faculty scholarship and professional development.

- Student cultural diversity and online learning.

- Topics in business management and leadership.

Themes Developed across all Four Qualitative Questions

1. Desire to have mini-certifications that enhance professional development.

2. Alternate or new technology that could improve professional development and enhance faculty scholarship.

3. Tools for better understanding and working with student cultural diversity.

4. A need to effectively recognize faculty scholarship and research.

Discussion

Faculty who participated in mini-certification programs appear to believe that the programs enhanced their professional development and overall engagement. By using the mixed methods approach to analysis, both quantitative and qualitative views were analyzed (Terrell, 2012). By integrating both quantitative and qualitative approaches, results may be more meaningful and robust (Ivankova & Plano, 2018). Faculty who completed mini-certificates were satisfied with the programs (quantitative) but there were still ways to improve the content (qualitative). Future research using a mixed-method with an experimental quantitative design could provide more detailed and specific data.

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Appendix

Mini-certification Survey Questions

The focus of this survey is faculty mini-certifications. The purpose of mini-certifications is to recognize faculty who showcase achievement/proficiency on various topics that promote faculty engagement and personal development and enhance the teacher-student experience.

Have you ever participated in a mini-certification program at an educational institution? (Yes/No)

If yes, please continue. If no, thank you for your time.

1. To what extent did your level of classroom engagement increase as a result of participating in the mini-certification program?

2. To what extent did your employability increase as a result of participating in the mini-certification program?

3. How well did the mini-certification program meet your expectations?

4. To what degree did the mini-certification program add value to your professional development?

5. To what extent did the mini-certification program meet your professional expectations in terms of engagement and professional development?

6. How would you rate your overall satisfaction with the mini-certification program?

7. What kind of mini-certificate, if any, have you received? What type of mini-certificate program would encourage you to be more engaged in your work as a faculty member? Please explain and offer suggestions.

8. What kind of mini-certificate, if any, would encourage you to enhance your professional development in your work as a faculty member? Please explain and offer suggestions.

9. Other than monetary recognition, what types of recognition/rewards would increase your level of engagement? Why? Please share below.

10. What topics would you include in a mini-certification program that would contribute to your engagement and professional development? Why? Please share below.

Higher Ed Perspectives of Short Burst Learning and Digital Badging: An Initial Study

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As part of the University of Phoenix Center for Educational and Instructional Technology Research (CEITR) 2021 Research Interests, a mixed method study was conducted exploring how alternative credentials – such as short burst learning and digital badging – provide value to University of Phoenix faculty and students.

Short burst learning are activities that offer content in small doses about topics that a student might want or need at the time. The goal is to help students supplement their interest in a topic as well as to build knowledge necessary to bridge objectives of the course. However, little is known about the value of short burst learning to students, particularly as this relates to the delivery mechanism – either augmenting or replacing course content – and about the benefits and/or effectiveness of short burst learning.

Digital badges are visual representations that symbolize achievements, accomplishments, and/or affiliations (Rosenberger, 2018). Digital badging is a common practice for displaying reputation and professional status on social media, such as Twitter and LinkedIn, and badges can be catalogued in digital backpacks, like a dashboard that allows badge owners to customize privacy settings and where badges may be published (West-Puckett, 2016; Carey & Stefanik, 2018; Rosenberger, 2018). As digital badges are a way of displaying personal and professional achievements and experiences, badges could also be used to capture and display academic achievements.

In a study for the Career Institute of the University of Phoenix, the Edelman research group analyzed results from 10,000 participants about current training and planned interests to pursue educational programs. Approximately 4.5% of those already enrolled in training were involved with micro-credentialing and/or badging programs (Edelman, 2020). Of those who responded, approximately 13% stated they planned to enroll in micro-credential and/or badging programs in the future to build their skill sets (Edelman, 2020).

Measuring the efficacy of short burst learning tends to focus on measuring student satisfaction with learning deliverables. Satisfaction metrics have included: 1. Employees' career progression pathway rate, 2. Engagement rate, 3. Like and dislike rates, and 4. Learning sentiment. The approach for short burst learning aligns well with a progression pathway rate metric that can be used to determine the impact of a specific education experience on employee professional mobility (Janoska, 2019).

The use of digital badging in business is said to have emerged in 2010 and in academia in 2011, but the practice of creating, awarding, and displaying visual representations of acquired skill or accomplishment in a virtual setting stems from online gaming and in the awarding of medals and trophies (Hodges & Harris, 2017; West-Puckett, 2016). Digital badges are more than an acknowledgement of credentialing as open badges contain metadata: hyperlinks that describe the context, meaning, process and even artifacts or evidence used to earn the badge (Carey & Stefanik, 2018; Hodges & Harris, 2017).

Some companies that create and manage digital badges include Badge Cert, Badgr, Credly and Open Badges. These companies support multiple fields including energy, environment, higher education, technology, and government agencies. They administer aspects of digital badge integration; including alignment of data, setting up of badge criteria and descriptions, managing of digital signatures, provisions of evidence, issuance and expiration of badging, and tracking and verifications of recipients.

Recommendations for designers from the literature of digital badges include making learners aware of badge value and how to use the digital badge. One can build currency or value by educating participants about why badges are useful and how to display them for internal and external validation, displaying badges in a social space, on a social media platform or with a manager, colleague, or peer. Researchers warned that a space isolated from external validation may have a negative impact on participation and motivation (Rosenberger, 2018). This aligns with other recommendations that learners need to be able to compare abilities with their peers, which

involves social persuasion and the perception that earning badges are valuable, that badges should be considered a rewarded effort, as it has been used in goal attainment and increased student motivation to learn. Without descriptive steps towards goal attainment, empty badges can foster disinterest and dislike of badges among learners. Either way, more needs to be explored about the value of digital badging (Hodges & Harris, 2017).

For the research question "what is the perception of impact or educational value of alternative credentials?" a mixed method study with a quantitative descriptive survey component and a qualitative component with follow-on questions was conducted. In the first, completed phase, survey data on short burst learning and digital badging was collected from faculty and students, including Likert items and ranking questions. Survey data was collected over the summer of 2021, from 720 faculty and 1,021 student participants at the University of Phoenix. Demographic statistics revealed diverse representation of faculty and student survey participants by age, gender, and ethnicity. The highest percentages of student participants were 35–44-year-olds, female, and those seeking a bachelor's degree. The highest percentages of faculty participants were very similar; 35-44 years of age, female, and have been teaching at the university and any other universities between 1-5 years. Multiple colleges were represented including the College of General Studies, Education, Business and Information Technology, Social & Behavioral Sciences, Healthcare and Doctoral Studies. The highest percentage of both faculty (12%) and student (40%) respondents were from the College of Business and Information Technology. When asked about employment, 70% of faculty respondents and 76% of students reported being employed elsewhere while 24% of faculty and 17% of students reported being employers.

Short Burst Learning: When asked about familiarity with short burst learning, 34% of faculty participants and 47% of student participants either taught or learned with short burst learning (SBL). When provided with seven types of SBL, faculty and students were asked to rank in order from most to least effective, 1 to 6 respectively. Student respondents ranked the most effective types as short instructional videos, followed by content delivered via mobile devices, flashcards, simulations, online quizzes, customized guides, and least effective was vocabulary memorization. Conducting a non-parametric Friedman one-way ANOVA by ranks test using SPSS, a statistically significant difference between the rankings, (6) 204.245, p = 0.000, was found. See figure displaying SPSS rankings.
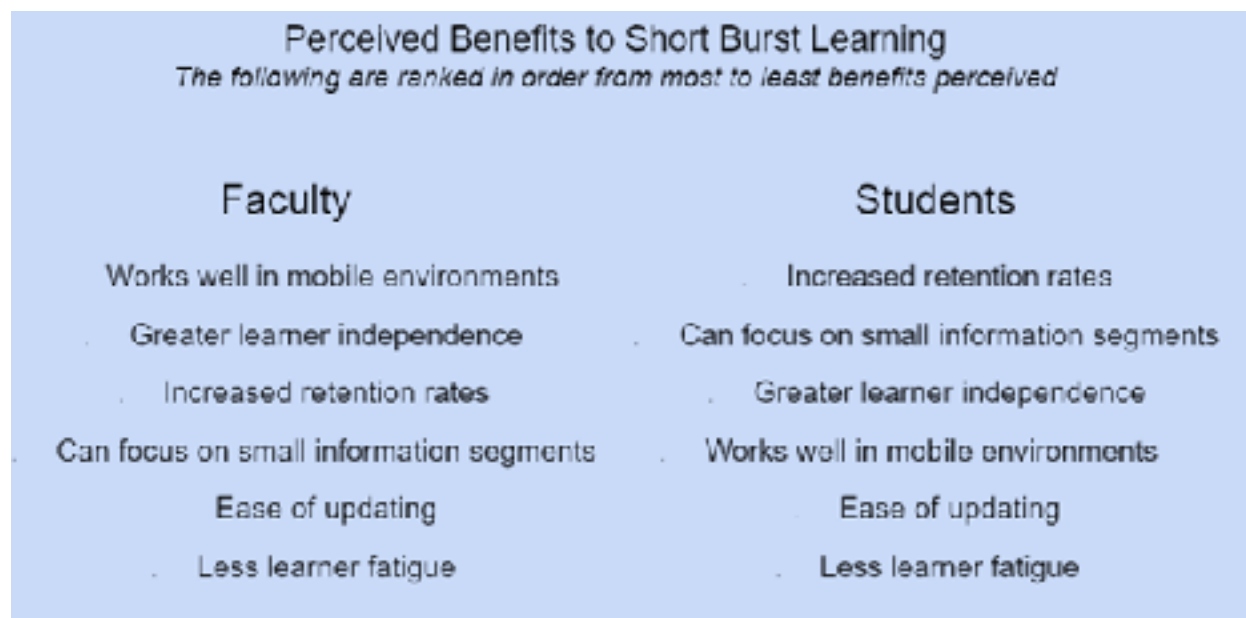
Table 1

Ranks

	Mean Rank
Short instructional videos	2.67
Content delivered via mobile tools (instant message, email, etc.)	2.73
Simulations	3.80
Flashcards	4.31
Online quizzes	4.61
Customized guides	4.67
Vocabulary memorization	5.19

Results of the Faculty survey showed a nearly identical ranking of short burst learning types and their effectiveness. Conducting a Friedman Test using SPSS, a statistically significant difference between the rankings, (6) 622.244, p = 0.000, was found, indicating a very small likelihood the rankings were by chance.

In contrast, for perceptions about the benefits of short burst learning, faculty and student respondents differed. The ranked order for faculty, from most beneficial reason to least for use of SBL, was works well in mobile environments while students ranked increased retention rates as the greatest benefit. Both groups ranked ease of updating and less learner fatigue as among the least beneficial reasons to use short burst learning. Differences can be seen in the accompanying figure.

Table 2

Perceived Benefits to Short Burst Learning
The following are ranked in order from most to least benefits perceived

Faculty	Students
Works well in mobile environments	Increased retention rates
Greater learner independence	Can focus on small information segments
Increased retention rates	Greater learner independence
Can focus on small information segments	Works well in mobile environments
Ease of updating	Ease of updating
Less learner fatigue	Less learner fatigue

Digital Badging: When asked about familiarity with badging, 27% of faculty and 34% of students reported experience teaching with, learning from, or receiving digital badges. Both faculty and student groups were mainly neutral on whether digital badging is used by employers for hiring, compensating and/or promoting individuals. Both groups positively supported and claimed short burst learning and digital badging would be impactful to the University of Phoenix experience.

Among recommendations from this study, thus far, are: 1. build value into short burst learning and digital badging programs by announcing initiatives and disseminating information throughout UOPX faculty and student communities; 2. design short burst learning and digital badging programs with both faculty and student input and with the knowledge now known as to how these groups perceive SBL types, benefits and the effectiveness of specific types; and 3. evaluate the perceived values and program gains associated with these initiatives to continually inform further development.

As alternative credentials, short burst learning and digital badging are opportunities to innovate educational practices. Short burst learning provides timely access to knowledge that directly impacts student program and career progression. In contrast, digital badging can encourage goal attainment and provide a means to illustrate competency, particularly on social media platforms that might not accommodate traditional recognition methods. Survey responses indicated students tend to be more familiar with both approaches, but students and faculty alike believe short burst learning and digital badging would positively impact the UOPX educational experience.

In a follow-up qualitative phase, being completed Winter 2021, survey respondents who offered to participate in follow-up data collection are invited to focus group discussions. The analysis of the focus group discussions will further the understanding of the survey responses while we continue to explore emergent and innovative implications. The information will be available to higher education administrators to inform creators and designers of digital badges and short burst learning programs.

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Reshaping Practitioner Higher Education Institutions to Serve Adult Learners: The COVID-19 Pandemic Implications

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Abstract

Involving over 200 countries, the COVID-19 global pandemic impacts adult learners' retention, increasing the need to reshape practitioner-oriented higher education institutions to better serve students. The purpose of this study was to explore how practitioner higher education institutions adopted innovative approaches and reshaped policies, practices, and perspectives to accommodate changes brought about by the COVID-19 pandemic and successfully maintained or increased enrollment. This article reports the results, which may enhance practitioner higher education programs.

Introduction

The established ecosystem of universities/colleges and students was severely affected by the COVID-19 pandemic. The COVID-19 pandemic shook the world to its core, delivering political, social, and economic ramifications that exist today.

Universities faced challenges as COVID-19 pandemic radically changed educational practices at every level beginning in early 2020. Many universities rose to the challenge and adapted policies and practices to the new conditions. The problem is that a general understanding of how policies and practices can support student retention and growing enrollment under COVID-19 conditions is not available. The purpose of this study was to explore how online universities successfully maintained or increased enrollment as they reshaped products, policies, practices, and perspectives to accommodate changes brought about by COVID-19 pandemic.

The study focused on exploring strategies used in the United States by seven practitioner higher educational institutions serving adult online students with steady or increasing enrollments. The intent is to provide a composite understanding of the characteristics that maintain stable retention and increasing enrollment even through the COVID-19 pandemic. Existing literature indicated that online education was effective in ensuring continuity in adult education experience (Adedoyin & Soykan, 2020).

Literature Review

Research conducted by the Center for Education Consumer Insights depicted over one-third of US adults either changed or canceled their education because of COVID-19 (Hanson, 2021). This statistical data is directly correlated to a recent study that presented a decision-making system for higher education university selection by assessing priorities, both pre- and post- COVID-19 through the lens of current higher education students. Using a creative approach, education data from LinkedIn Insight was examined using a multicriteria decision-making (MCDM) model that employed eight common factors of the university selection process. The pre-COVID results from the study depicted that the top two priorities were student life and top skills of students. The post-COVID results from the study depicted that the top two priorities were E-learning and cost (Nanath, Sajjad & Kaitheri, 2021). While the study did not address prospective students, there is enough empirical data to categorize prospective students with current students. The National Student Clearinghouse Research

Center (2021) report discussed undergraduate and graduate enrollment since the beginning of the pandemic. The report showed a 5.9% decrease in enrollment in undergraduate students and a 4.4% increase in graduate student enrollment from 2020 to March 2021. The report broke down undergraduate enrollment by public four-year universities which showed a decrease of 2.9%, private non-profit four-year universities 3% decrease, private for-profit four-year universities 0.1%, and public two-year universities 11.3% decrease. Graduate schools were broken down into public four-year universities which showed an increase of 6%, private non-profit four-year universities increased 2.5%; and private for-profit four-year universities increased by 3.8%.

To fulfil the purpose of the study the following questions were developed.

Research Question

Research Question: What products, practices, perspectives, and persons related to stakeholder wellbeing were maintained or reshaped by online universities that successfully adapted to COVID-19 challenges as evidenced by increased or stable enrollment in the era of COVID-19?

Method and Design

A content analysis design was employed for this study. The qualitative content analysis tracked the frequency of words, or concepts within text (Nagai, 2015) with the goal of identifying themes to answer the research questions. The analysis was based on text published by the universities and university stakeholders such as faculty, students, or other informed sources that is descriptive of products, practice, policy, and other indicators of the student experience at that university.

Data Analysis

The data focused on universities with extensive experience in adult focused, online learning. There were two primary sets of data, collected from publicly available sources:

1. Information about the products, practices, policies, and persons that universities promoted through their public websites, and

2. Data about enrollment, student demographics and tuition comparing 2019 to 2020 (pre-pandemic and mid-pandemic).

Additional data was taken from reports and articles that analyzed student enrollment in Spring of 2021.

Universities included in our study included:

1. University of Phoenix Online

2. Western Governors University

3. Southern New Hampshire University

4. University of Maryland Global Campus

5. Walden University

6. Capella University

7. Purdue University Global

The data regarding enrollment, student demographics and tuition did not demonstrate tremendous differences between 2019 and 2020. The source for the 2019 and 2020 data was the Integrated Postsecondary Education Data System (IPEDS) reports, a division of the National Center for Education (2021).

Most of the study universities saw a slight increase in undergraduate enrollment from 2019 to 2020. The National Education Clearinghouse Research Center published data in May of 2021 for Spring 2021 enrollment estimates by institution sector. These data showed only slight negative change from enrollment in Spring of 2020 for public, private nonprofit, and private for-profit four-year institutions. The only sector with continued negative enrollment trends were two-year community colleges.

Most of the universities kept tuition rates the same from 2019 to 2020, or even lowered them. Southern New Hampshire University made a dramatic reduction in tuition from 2019 to 2020.

However, Walden and Purdue University Global both raised tuitions slightly in 2020.

University Website Language Regarding Student Support

The researchers searched subject university websites with a strategy of using one or two clicks from the home page to search for language related to the university's portrayal of products, practices, perspectives, and persons who represented the university's brand, mission, and vision. The language was then analyzed using a text analysis technology, MonkeyLearn, to create simple word clouds.

Terms that emerged from the study university website to illustrate "products for student support" were mostly commonly "career services." Other common terms included "veteran's assistance fund," "online contact," and "individualized tuition plan." There are clear associations between the products universities are promoting and support students need in order to enter and remain in school.

Terms found that illustrated "perspectives for student support" focused on attributes and features that make online programs affordable, skill-based, and flexible are what students are drawn to. The cost of attendance is the highest relevant term in this category.

The terms with the highest relevance to the category of "practices for student support" are less relevant to the idea of practices, but the top two terms "COVID-19 dashboard" and "Support services" fit for obvious reasons.

Some of the terms used in study university websites that have the highest relevance to the category of "persons representing the university brand" do not seem consistent with student support. However, some themes do emerge in these examples: accreditation, diversity, value. These suggest that attempts to create community and connection by universities can have a positive impact on student perceptions of support.

Results and Discussion

The results of this study provide adult online learning institutions with information needed to more effectively identify organizational characteristics and system relationship development to attract a larger number of students, including people from an underrepresented population for stable retention. The goal of increasing enrollment and economic stability benefits both learners and institutions. Providing a framework for comparative analysis of practitioner-oriented adult online higher educational institutions after COVID-19 with stable retention and increasing enrollments could allow further analysis of organizational and cultural attributes that support student and organizational growth.

Online universities that provided flexible programs and support for students increased or maintained enrollment post pandemic as compared to community colleges. In some instances, evidence of care for non-traditional students seeking personal advancement through education was prominent. Adaptations to university forms included enhanced existing products such as expanded career placement services, flexible learning, scholarships, tuition plans, practices such as technology supported meetings for large and small groups, perspectives such as creating new learning opportunities and cultural heroes such as persons who mastered the changing conditions. The combined effect of the adapted forms and demonstrated concern for stakeholder well-being both now and in future community work roles could be considered transformative.

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Strategies to Support Persistence in Non-traditional Students in Practitioner-Based Programs

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Developing innovations to better serve adult learners in higher education institutions is becoming critically important given the increasing number of non-traditional students enrolling in college. According to the National Center for Education Statistics (2002), non-traditional students are classified as follows: delayed enrollment into postsecondary education, attends college part-time, works full time, is financially independent for financial aid purposes, has dependents other than a spouse, is a single parent, or does not have a high school diploma. These students comprise 74% of undergraduate enrollment (NCES, 2015). Fishman et al. (2017) estimated that students above the age of 25 represented 44% of total enrollment in American colleges and universities. Moreover, shifts in the workforce have resulted in 10% of college students being over 40 years old and 25% earning less than $20,000 annually (Bernhard, 2020; PNPI, 2020).

Many non-traditional students enroll in online degree programs for the scheduling flexibility they afford, given that these students are often balancing work, family, and other obligations (Osam et al., 2017; Shank, 2017). Nevertheless, obligations beyond the classroom are often prioritized when compared to traditional students. It has been suggested that traditional methods for advisement and success do not meet the needs of non-traditional students. Lack of resources and a general inability to navigate the complex university administrative structure can lead to attrition despite the ability to succeed academically. Additional considerations for non-traditional learners include enrollment status, limited support, lack of preparation or academic skills, first-generation student, and socioeconomic backgrounds (Kasworm, 2014).

Due to the myriad financial, occupational, familial challenges non-traditional students face, academic success rates are suboptimal. The American Council on Education found that the degree completion rate among non-first-time students was only 33.7%, compared with 54.1% of first-time students (Insidetrack, 2015). Given the growing number of non-traditional students set to outpace traditional students (McCall et al., 2020), it is critically vital that evidence-based strategies to improve overall academic success, including persistence and graduation rates, are implemented. Non-traditional students are an incredibly diverse group with unique backgrounds and needs. Their motivations to enroll, persist, and graduate varies depending on factors internal and external to the college, and are often dissimilar to their traditional-aged counterparts. The purpose of this study was to define and explore evidence-based strategies to enhance the persistence of non-traditional students enrolled in institutions with practitioner-based programs.

Research Questions

The research questions guiding this study included the following:

RQ 1: How is persistence defined at practitioner-based programs for non-traditional students?

RQ 2: What are the most effective evidence-based strategies to support persistence for non-traditional students at practitioner-based programs?

Conceptual Framework

Several conceptual models were used to guide this research. Tinto's Student Integration Model (1975, 1993) aims to understand and identify various factors influencing persistence in college students. Tinto defined retention as a longitudinal process which incorporates the academic potential of the student as well as the institutional social systems. The learning experience in the classroom with a focus on expectations, support, assessment, and involvement greatly influences student persistence (Tinto, 2012). Rovai's Composite Model

of Persistence (2003) builds upon the ideas of Tinto's Student Integration Model (1993) and Bean and Metzner's Attrition Model (1985) while also incorporating online education.

Method and Design

This literature review is organized using Cooper's (1998) research framework to a) formulate the problem; (b) collect content; (c) align data to the purpose of the study; (d) appraise, interpret, as well as determine relevance; and e) present the synthesis. Applying a standardized criterion for evaluation ensures the findings are meaningful, relevant, and valuable to inform administrative decision-making. Literature from the last 5 years (2017-2021) was evaluated in EBSCOhost and ProQuest databases to identify strategies to support persistence for non-traditional students in practitioner-based programs.

Persistence and Retention Definitions

The preliminary findings of the literature review synthesis contributed to defining persistence and retention while identifying common support strategy themes. Persistence is defined as continued enrollment (or degree completion) at any higher education institution – including one different from the institution of initial enrollment – in the fall semesters of a student's first or second years (National Center for Education Statistics, 2021) or the enrollment headcount of any cohort compared to its headcount on its initial official census date (Noel-Levitz, 2007). Retention consists of the percentage of first-time students who return to the same institution the following fall (National Center for Education Statistics, 2021).

Evidence-based Support Strategies

Undergraduate retention strategies include providing effective academic advising, environment for social connectedness, approachable faculty and staff, a satisfying learning experience, and student support services. Similar strategies were identified at the graduate level including providing socialization with other students and faculty from the university and academic program, targeting known barriers to persistence (e.g., isolation, financial, time management), offering ongoing individual and group academic coaching, and creating personalized early alert/early intervention systems (Aversa & MacCall, 2013; Lehan et al., 2020; Lehan & Babcock, 2020). At the doctoral level, retention strategies consisted of encouraging students to embrace support from family, friends, fellow doctoral peers, and faculty; providing individual coaching; collaboration opportunities; and resources while creating consistent support to clarify program requirements and create connections (Boone, et al., 2020; Studebaker & Curtis, 2021).

Recommended Strategies

Based on the literature review and experiences at this university, the research team proposes several specific strategies to support student persistence and retention. Technology is a critical consideration for nontraditional students. Since students often use smartphones, the resources for learning must be mobile-friendly (Dahlstrom et al., 2014; Wankel & Blessinger, 2013).

Student-faculty interactions that are advantageous to students' learning can also support non-traditional student persistence. Faculty play a significant role in counterbalancing structural inequities and contextual challenges by building relationships with students, engaging them in learning, and serving as an outlet to helpful campus resources. Faculty can use texting and other free messaging services, which are faster and effective modes of communication in reaching students (Dahlstrom et al., 2014). The goal should be to offer students as many ways to connect with faculty as possible to make it easier for them to reach out and ask for help when needed. Similarly, it is important to proactively engage students who may not be performing at a high level as showing individualized concern makes students feel valued and fosters trust.

Establishing community both in and out of the classroom is an effective way to build a network for students, which reduces feelings of isolation (Boone, et al., 2020; Studebaker & Curtis, 2021). A sense of community can also support healthy habits for studying and high academic performance. Faculty can create connections during synchronous sessions with students that offer opportunities to connect with peers and faculty. Another support strategy includes open office hours during evening hours and weekends when non-traditional students have questions about assignments. Encouraging student study groups and activities is also helpful to establish a connected college experience.

Conclusion

In exploring these factors, institutions can reap many benefits in increasing the persistence rates of non-traditional students. In addition, the recommended strategies may allow institutions to make better decisions on techniques to work with non-traditional students. Gaining additional insight from this research is increasingly important in supporting non-traditional students who are becoming the majority in higher education (McCall et al., 2020). This information also adds value, as attaining an education can enrich student confidence, career prospects, and preparation to address unique experiences emerging in society (McCall et al., 2020).

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Reshaping Education Through Innovation: Aligning Curricula with Employer Needs

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Introduction

Career success depends upon integration of discipline-specific and social skills, such as team collaboration, communication, listening, analytical thinking, and ethics (Aasheim et al., 2019; Monteiro et al., 2020; Sahin & Celikkan, 2020). Research validates synthesis of academic content with experiential learning prepares graduates for successful university-to-work transition (Sahin & Celikkan, 2020; Wolff & Booth, 2017). Harvard University President Drew Gilpin Faust underscored the importance of "soft skills" as intrinsic to success in an unpredictable world:

> Technology is disrupting so many traditional assumptions, employment options, economic foundations that we don't know what kind of jobs students are going to have a decade from now. People need to have the skills and adaptability that will make them flexible enough to be successful in a work that we can't predict. (Nagy, 2014, p. 40)

So, what are those kinds of skills? Imagination. Insight. Perspective.

Lack of alignment between academic curricula and employer needs is a recurrent theme:

> • An international survey sponsored by McKinsey found that less than half of employers described recent graduates as "adequately prepared for entry-level positions' while 72% of educators depicted graduates as "work-ready," leading the survey authors to suggest the two sectors increasingly "live in parallel universes" (Moore & Morton, 2017, p. 593; Mourshed et al., 2012, p. 18).

> • A Gallup study indicated only 11% of industry leaders rated graduates as having competencies required for workplace success although 98% of university leaders rated their institutions as "effective" in delivering career-relevant education (Wolff & Booth, 2017, p. 52).

Contributing factors may include failure of curriculum development specialists to keep pace with technology and data management innovation, paucity of pedagogical approaches promoting active learning and engagement in workplace activities (Monteiro et al., 2020, p. 2), and suboptimal integration of career services with academic programs to direct application opportunities.

Background

Since employability is predicated on demonstrating skillsets aligned with industry specific needs (Aliu & Aigbavboa, 2020) disconnects between formal education and professional competency expectations are problematic (Calonge & Shah, 2016). Employers seek candidates with the "personal management and teamwork skills" (Abas & Imam, 2016, p. 120) which may not be adequately developed

in discipline-specific curricula. Improving the quality of graduates' employability skills may better prepare them to fulfill industry expectations (Aliu & Aigbayboa, 2019). To enhance employability, some researchers (Bierma, 2019) advocate designing T-shaped curricula that incorporates situated, experiential, and active learning pedagogy. Transitioning to a T-shaped curriculum is intended to replace the fragmented, discipline-centric, reductionist nature of current learning systems with cross-disciplinary approaches predicated on systems thinking. Other researchers recommend a stronger focus on developing practical experience during graduate study as a means of increasing awareness of career pathways and strengthening self-efficacy (Monteiro, 2020, p. 14). Additional research is required to contribute to existing knowledge on university-to-work transition (Abas & Imam, 2016).

While the literature reflects a quest for "best practices," empirical discussions of recurrent themes in the experiences of doctoral alumni seeking doctoral level employment are rare (Monteiro, 2020, p. 4). Data suggest employability may be predicated upon the following competencies:

- People skills: Collaboration, teamwork, and cross-cultural competency;

- Problem-solving abilities: Critical thinking, creativity, and adaptability;

- Professional strengths: Communication, work ethic, and the habits of lifelong learning (Wolff & Booth, 2017, p. 51).

Successful transition from academia to professional workplace roles requires effective communication skills, defined as capacity to convey information with clarity and confidence, read proficiently, engage in active listening, and practice critical thinking (Aliu & Aigbayboa, 2019).

Problem

The general problem is graduates are insufficiently prepared to fulfill professional practice

expectations (Abelha et al., 2020; Bear & Skorton, 2019; Herbert et al., 2020; Vitale et al., 2020), possibly due to failure of higher education institutions to align curricula with employer needs. The specific problem is that Doctor of Education (Ed.D.) programs may fail to provide the discipline depth, system depth, and collaboration breadth requisite to succeed in roles such as School Administrator, Academic Affairs Representative, Dean, or Provost (Bierema, 2019; Harvard, 2021).

Research questions:

- Are Ed.D. curricula aligned with employers' industry skills requirements?

- What are employers' industry skills requirements for EdD graduates?

Framework

Systems theory focuses on structural components of a system (Bertalanffy, 1950; Bertalanffy, 1972), while cybernetics clarifies function, process, and how systems operate to achieve goals (Heylighen et al., 1999). Systems theory enables researchers to focus on the structure of systems or organizations and cybernetics targets how the system under study functions.

Within the framework of systems theory and cybernetics, the Social Cognitive Career Theory (SCCT) links transition from work processes to self-efficacy, outcome expectations, and goals (Lent et al., 2000). Individuals with higher perceived capacity to fulfill educational requirements and occupational roles are better able to utilize academic skills in the professional workplace (Bandura et al., 2001). SCCT encompasses career-relevant attitudes including job search intentions, career choice, task performance, persistence, interview readiness, performance, and employment outcomes and facilitates interpretation of student perceptions of career competencies (Monteiro et al., 2020).

Methodology

The purpose of this mixed method study was to identify career relevant competencies a Doctorate of Education (Ed.D.) program may provide through the lens of current doctoral students. The mixed method approach was appropriate to capture relevant quantitative and qualitative data. The quantitative data provided a correlation between program curriculum and upper-level job requirements in higher education. The qualitative data provided pertinent narratives from participants.

The survey instrument was based on the National Science Foundation's Early Career Doctorates Survey Questionnaire for a web-based survey (NSF, 2017), complemented by field tested qualitative components. After earning IRB approval, the survey questionnaire was distributed by email to a convenience sample at a university in southwestern United States. Inclusion criteria included currently active (defined as posted to the classroom within the last 365 days) students in the Ed.D. program who completed their first 8 courses in the program with a B- or better. Exclusion criteria included students who did not meet these criteria. Data collection is underway at this time; results will be published in the final quarter of 2021.

Future Research

This study focused on perceptions of employability and industry expectations from the perspective of current doctoral students in the Ed.D. program. Many of these students are working professional educators, academic advisors, and college administrators seeking to advance their careers within higher education settings, private industry, nonprofits and government agencies. Their voices and viewpoints on aligning Ed.D. curricula with industry needs are invaluable. Researchers could explore a broader section of this population to glean additional insights to strengthen curriculum development initiatives.

Due to feasibility constraints, this study focused on current doctoral students' assessment of whether or not Ed.D. curricula align with industry expectations. Future studies should explore other dimensions of this challenge, including employers and alumni. Insights provided by these stakeholders could clarify nuances of "job-readiness" and "soft skills."

Conclusion

This study contributes actionable data to strengthen career relevance of academic programs, align curriculum content with industry requirements, prepare students for the workforce, and improve job placement rates (defined as degree-related employment). Fostering development of adult learner competence to adapt to an ever-changing world is a strategic concern for colleges, universities, curriculum developers, managers, and other policy makers concerned with human resource development (Morris, 2019). Results may enable

institutional leaders, program directors, and curriculum developers to align Ed.D. curricular programs with industry needs.

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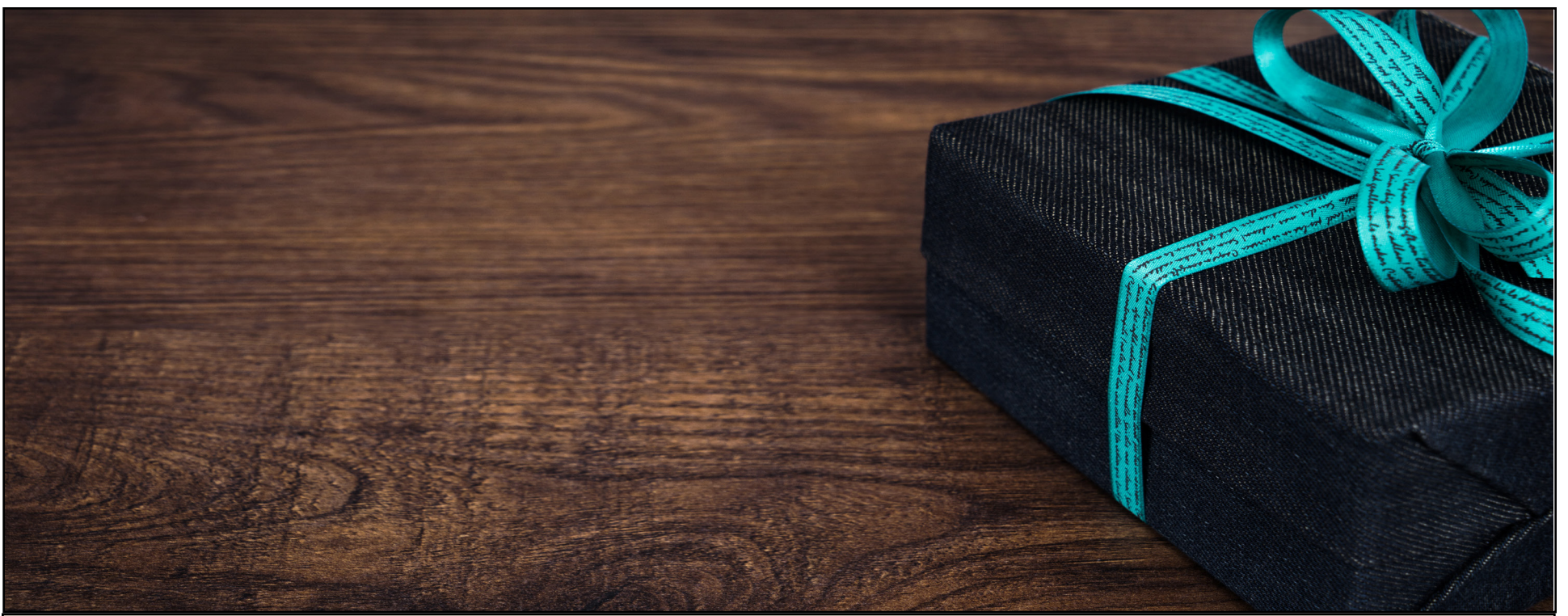
Not All Was Lost: Hidden Benefits of the COVID-19 Pandemic on Education

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There is no question that the COVID-19 pandemic impacted life around the world, but education was particularly hard hit. From the uncovering of racial and socioeconomic disparities to the rapid pivot to integrate appropriate technology, education has been changed forever. Despite the toll taken on teachers, students, and families, there were several positive impacts of the pandemic on education.

One impact was that the pandemic forced teachers into the digital age, whether they wanted to join it or not. Dornisch (2013) noted that college students had more negative feeling towards teachers and classes that didn't incorporate technology. The shift to online learning didn't leave teachers a choice – they had to adapt to and adopt technology. As students returned to school this fall, many teachers have seen value in continuing with technology integration. Continued technology use allows teachers to digitally deliver curriculum, which has several benefits to students. One benefit is the ability for students to revisit the learning materials, whether it is via teacher created videos or simply online materials. This is especially beneficial to struggling learners and special education students. Another benefit is that it is easier to check for student understanding. By using technology to check for understanding, teachers can monitor student learning more and classroom behaviors less (Wexler, 2020). Instead of redirecting negative student behaviors, teachers can focus on assessing student learning through technology tools such as student polls and simple, easy to administer formative assessments. Benefits for teachers were not the only positive in this environment.

The move to digital learning impacted students in a myriad of ways, but not all were negative. For instance, the use of digital software such as Microsoft Teams and Pear Deck gave students who may not speak up in class a simple and low stakes way to interact in class. Instead of being intimidated by the possibility of a wrong answer, students could answer and ask questions in a way that didn't bring additional attention to themselves, which is what many teens do not want in class. As students return to school, many districts have remained 1:1, allowing teachers to continue to assess student learning in low stress ways. Another benefit was the increase in group work. Because teachers could easily assign students to groups via their digital platform, teachers were better able to use collaborative work to facilitate learning (Wexler, 2020). Though teachers may not be utilizing digital tools to facilitate collaboration, many gained a deeper appreciation for student collaboration to supplement learning within the classroom.

There were also curriculum benefits that stemmed from the shift to distance learning. One of the main benefits was the focus on essential standards. Prior to the pandemic, teachers had the ability to teach a variety of standards over the course of the school year. When teachers transitioned to distance learning and different class schedules followed, teachers realized the importance of focusing on what was essential for students to learn (Lockee, 2021). By distilling the curriculum to the essential and necessary standards within the curriculum, teachers are now focusing their instructional efforts on ensuring students have a deep understanding of curriculum prior to moving forward, as opposed to glancing over a myriad of less important topics in an effort to cover material.

A final benefit of the pandemic (though when taken for face value is negative) was the illumination of racial and socioeconomic disparities many students face. The shift to digital learning illustrated just how many students had extenuating circumstances that impacted their ability to be academically successful. One study noted that some student barriers to learning included the lack of space to work, the lack of internet access, then need to watch siblings and even the need to work (Sofianidis et al., 2021). School districts were forced to find ways to support student learning for all students, not just those with privilege. Districts also had to address the underlying issues that traditional school requirements for many underprivileged students, including such simple considerations as homework expectations.

While the world works to recalibrate to the "new normal," education works to continue to adjust to the needs of their students. The calibration process will take time and there were many benefits gained from the rapid shift during the COVID-19 shift to digital learning. An understanding of these benefits can serve as a reminder that the move to digital learning served as a way to education to shift, albeit rapidly, to include many needed changes.

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Upcoming RSE Workshops

The College of Doctoral Studies' Research and Scholarship Enterprise (RSE) offers a variety of workshops for students, faculty, and alumni. Below, you will find workshop calendar, including titles and dates of upcoming workshops. Generally, courses will be offered in the evening to accommodate participants in all time zones. All workshops are in the Arizona time zome, which does not observe daylight savings time. Feel free to reach out to us if you have an idea for a future workshop. For attending the workshops, please click on the corresponding links. For the workshops recordings and further details please visit the RSE workshops site.

Date	Topic
January 4, 2022	Title: ILA 2022 Proposal Assistance Meeting Description: This webinar helps the participants develop acceptable proposals for ILA 2022 conference. Presenter: Dr. Erik Bean 5-6 PM AZ Time, via Collaborate
January 15, 2022	Title: CDS Student Coffee Chat Description: The College of Doctoral Studies Student Coffee Chat (SCC) is a virtual, bi-monthly event, hosted by the Center for Workplace Diversity and Inclusion Research, aimed at fostering student success. 10 AM AZ Time, for more information or to register visit CDS Student Coffee Chat
January 27, 2022	Title: Selecting the appropriate designs for your research Description: This webinar provides an overview of research designs and how to select appropriate designs for your study. Presenter: Dr. Mansureh Kebritchi 5-6 PM AZ Time, via Collaborate
February 3, 2022	Title: Navigating CDS Central Description: This session is designed to assist CDS members in effectively utilizing CDS Central as a tool for teaching and learning successes. Presenter: Sandra Sessoms-Penny 5-6 PM AZ Time, via Collaborate
February 7, 2022	Title: Curtailing Bias in Research Studies Description: This webinar provides an overview of identifying and mitigating research biases. Presenter: Dr. Erik Bean 5-6 PM AZ Time, via Collaborate
February 8, 2022	Title: Belonging and Empathy in the Online Learning Environment (Faculty Development series) Description: This webinar will examine inclusive pedagogy through universal design principles and delve into the importance of empathy and resilience from both students and instructors. Presenter: Kimberly Underwood 4-5 PM AZ Time, via Collaborate

February 17, 2022	Title: UOPX doctoral graduate guest speaker: Dissertation of the Year Awardee (DHA program) recipient Dr. Deborah Green-Gonzalez
	Description: Join this webinar to learn about doctoral journey of the speaker and how the doctoral degree from UOPX impacted career development of the speaker.
	Presenter: Dr. Deborah Green-Gonzalez and Dr. Louise Underdahl
	5-6 PM AZ Time, via Collaborate
February 24, 2022	Title: Tips for conducting interviews
	Description: This workshop provides an overview of tips, issues, strategies, effective practices, and challenges for conducting interviews.
	Presenter: Dr. Jim Lane
	5-6 PM AZ Time, via Collaborate
March 10, 2022	Title: Multivariate statistics
	Description: This workshop provides an overview of conducting Manova and Mancova statistical analyses. Issues and assumptions related to these analyses will be discussed.
	Presenter: Dr. Frederick Lawrence
	5-6 PM AZ Time, via Collaborate
March 17, 2022	Title: Introduction to heuristic design
	Description: This workshop provides an overview of issues, strategies, effective practices, and challenges data collection heuristic design.
	Presenter: Dr. Mark McCaslin
	4-5 PM AZ Time, via Collaborate
March 19, 2022	Title: CDS Student Coffee Chat
	Description: The College of Doctoral Studies Student Coffee Chat (SCC) is a virtual, bi-monthly event, hosted by the Center for Workplace Diversity and Inclusion Research, aimed at fostering student success.
	10 AM AZ Time, for more information or to register visit CDS Student Coffee Chat
April 21, 2022	Title: Sample size for qualitative designs
	Description: Explanation of how to identify a proper sample size for various qualitative designs.
	Presenter: Dr. Ryan Rominger
	4-5 PM AZ Time, via Collaborate
April 28, 2022	Title: Quantitative Correlation Analysis
	Description: This workshop provides an overview of how to analyze a correlation research design.
	Presenter: Dr. Frederick Lawrence
	4-5 PM AZ Time, via Collaborate
May 19, 2022	Title: UOPX doctoral graduate guest speaker: Dissertation of the Year Awardee (EDD program) recipient Dr. Jenae Whitfield
	Description: Join this webinar to learn about doctoral journey of the speaker and how the doctoral degree from UOPX impacted career development of the speaker.
	Presenter: Dr. Jenae Whitfield and Dr. Louise Underdahl
	4-5 PM AZ Time, via Collaborate
May 27, 2022	Title: Academic Blogging Part 1
	Description: Blogging is an art form all it's own. But blogging for anyone and blogging with an evidence-based academic approach are two different things. Learn the basics from Dr. Luster who blogs for Psychology Today.
	Presenter: Dr. Rodney Luster
	4-5 PM AZ Time, via Collaborate
June 16, 2022	Title: Different type of Delphi
	Description: Real time Delphi, Quantitative Delphi
	Presenter: Dr. Phil Davidson
	4-5 PM AZ Time, via Collaborate

July 14, 2022	Title: Repeated measures as research design and Repeated measures (Bonferroni vs Tukey's)
	Description: This workshop provides an overview of how to analyze a repeated measure research design.
	Presenter: Dr. Frederick Lawrence
	4-5 PM AZ Time, via Collaborate
July 21, 2022	Title: Data saturation
	Description: This workshop provides an overview of issues, strategies, effective practices, for data saturation.
	Presenter: Dr. Karen Johnson
	4-5 PM AZ Time, via Collaborate
August 11, 2022	Title: Ordinal logistic regression (logistic regression)
	Description: This workshop provides an overview of how to analyze logistic regression.
	Presenter: Dr. Frederick Lawrence
	4-5 PM AZ Time, via Collaborate
August 18, 2022	Title: UOPX doctoral graduate guest speaker: Dissertation of the Year Awardee (DBA/DM program) recipient Dr. Wayne McCoy
	Description: Join this webinar to learn about doctoral journey of the speaker and how the doctoral degree from UOPX impacted career development of the speaker.
	Presenter: Dr. Wayne McCoy and Dr. Louise Underdahl
	4-5 PM AZ Time, via Collaborate
August 25, 2022	Title: Academic Blogging Part 2
	Description: Blogging is an art form all it's own. But blogging for anyone and blogging with an evidence-based academic approach are two different things. Learn more about academic blogging from Dr. Luster who blogs for Psychology Today in the concluding session of this two part series.
	Presenter: Dr. Rodney Luster
	4-5 PM AZ Time, via Collaborate
September 23, 2022	Title: Positive Delphi method
	Description: This workshop provides an overview of conducting Positive Delphi method. Effective practices, issues, and challenges related to this design will be discussed
	Presenter: Dr. Phil Davidson
	4-5 PM AZ Time, via Collaborate
October 28, 2022	Title: Case studies & Triangulation
	Description: Explanation of finishing step of bringing together all the types of data analysis for a conclusion in a case study.
	Presenter: Dr. Mansureh Kebritchi
	4-5 PM AZ Time, via Collaborate
November 10, 2022	Title: Humility receiving feedback, progressing through dissertation process
	Presenter: Dr. Karen Johnson
	Description: Explanation of how to accept and incorporate feedback for dissertation enhancement.
	5-6 PM AZ Time, via Collaborate
November 17, 2022	Title: Career support
	Description: Join this webinar to learn about doctoral journey of the speaker and how the doctoral degree from UOPX impacted career development of the speaker.
	Presenter: Chris Celauro (or Alumni Service representative) and Dr. Louise Underdahl
	5-6 PM AZ Time, via Collaborate

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