

The Role of High Impact Practices in an Online Graduate Program: Leveraging the Success

Hwangji Lu and Robert Smiles

ABSTRACT

A feeling of isolation has been cited in the literature as one of the main reasons students dropped off their online courses or programs. Innovations in instructional design and delivery can boost student engagement, advance student learning, and enhance student success. Based on the findings generated from countless evidence-based research, high-impact educational practices are effective teaching strategies and can substantially benefit students. This paper presents a case study in which a capstone course incorporated with ePortfolio in an online master's program in healthcare administration is examined. This study's primary goal is to assess students' perceptions of the usefulness of ePortfolio and their overall experience in the capstone course. The findings shed light on how a program implemented ePortfolio in the entire program could impact students' acceptance and view of ePortfolio. Limitations of this research study are also presented. The contribution of this case study to high-impact educational practice research and implications for institutional decision-makers and educators are also discussed.

Keywords: Course Redesign, High-Impact Practices, ePortfolio, Online Education.

Published Online: June 29, 2023

ISSN: 2736-4534

DOI: 10.24018/ejedu.2023.4.3.691

H. Lu*

Department of Health Sciences, The University of Arizona Global Campus, Chandler, AZ, USA

(e-mail: hwangji.lu@uagc.edu)

R. Smiles

Department of Health Sciences, The University of Arizona Global Campus, Chandler, AZ, USA

(e-mail: robert.smiles@uagc.edu)

**Corresponding Author*

I. INTRODUCTION

Advanced telecommunication technology has transformed the landscape of higher education in the United States for decades. As technology permeates, educational institutions can offer flexible online learning opportunities to students (Naciri *et al.*, 2021). Especially adult learners are able to take courses to meet their educational needs, along with fulfilling other commitments such as family, jobs, and financial constraints, which make equal demands on their time (Mishra *et al.*, 2021). Since March 2020, due to the impact of COVID-19, educational institutions around the world have adopted remote learning modality to continue to provide education and training opportunities to students during the pandemic (Naciri *et al.*, 2021; Mishra *et al.*, 2021; Theodosiou & Corbin, 2020). Although the pandemic is fading, no sign shows a decrease in student enrollment in online courses and programs (Theodosiou & Corbin, 2020). Many faculty have been unprepared and struggled to keep students engaged, while students have felt isolated and need more motivation (Mishra *et al.*, 2021). The pandemic has exacerbated the issues in online education and surfaced the importance of quality online learning (Theodosiou & Corbin, 2020).

This paper presents a case study regarding course redesign in a capstone course incorporated with ePortfolio in an online healthcare administration program. After the section of the introduction, there are five main sections. The first section is a literature review to cover the essence of course redesign, active learning, high-impact educational practices, and research questions.

The following section details research design and method, including the context of the study and data collection and analysis. The results and discussions will be presented in the fourth section, followed by a section examining the limitations of this research study and future research. The sixth and final section will discuss the best practices and solutions derived from the literature review and the authors' experiences implementing the capstone course integrated with ePortfolio.

II. LITERATURE REVIEW

A. Course Redesign

Higher educational institutions have committed to enhancing students' learning experience, raising persistence, and increasing degree completion rates (Campbell & Blankenship, 2020). They have modified the curricula to increase student satisfaction and success in achieving their commitment because the quality of educational instruction is vital in motivating and engaging students to complete their courses and programs (Naciri *et al.*, 2021). Online learning literature has documented that many students leave their online courses or programs because of isolation without social interactions with their peers and instructors, which is the leading cause of high attrition rates in online learning (Radovan, 2019). Thus, high-quality online learning requires unique tools and strategies that promote engagement, keep students motivated to learn, and create learning experiences

in which students feel connected to their peers (Theodosiou & Corbin, 2020).

The purpose of course redesign is to better student learning with cognitive, non-cognitive, and metacognitive growth and development (Das *et al.*, 2019). Course redesign involves choosing effective teaching and learning strategies to generate greater learning experiences and align assessment methods with measurable course learning outcomes (Krsmanovic, 2021). Course redesign allows higher education institutions and educators to rethink how to deliver instructions to maximize learning (Das *et al.*, 2019; Theodosiou & Corbin, 2020). Numerous research studies have revealed that innovations in course curricula, instructional delivery, and pedagogy can improve student engagement, support student learning, boost student satisfaction and self-efficacy, and increase course completion rates (Budihal *et al.*, 2020; Kropf *et al.*, 2019; Krsmanovic, 2021; Wilson *et al.*, 2018). A well-planned and executed course redesign takes a learner-centered approach that could help resolve many issues associated with the existing course (Das *et al.*, 2019). A well-redesigned course also provides evidence of enhancing a student's awareness of his or her learning (Das *et al.*, 2019; Theodosiou & Corbin, 2020). Therefore, evaluating the effectiveness of course redesign is a vital step to determine whether the courses lead to proper evidence of student learning.

B. Active Learning

Higher education institutions need to move away from traditional passive learning approaches to more active learning methodologies that motivate students to actively participate in learning and think about what they are learning (Benková *et al.*, 2022). Once students actively engage with content and assume more significant responsibility for their learning, which leads to knowledge retention. Active learning includes a wide range of teaching strategies that could be case-based, collaborative, problem-based, and team-based learning (Collins & McLain, 2021). Examples of active learning activities include case studies, debates to engage students with the course material through discussions with peers, games, group projects, journal writing, role-playing, simulation, and other application activities (Abernathy, 2019; Collins & McLain, 2021). Active learning presents new learning experiences that enable students to do meaningful learning activities and engages students better in the affective, cognitive, and practical domains (Claro & Esteves, 2021). Under the doctrine of active learning, students become the center of the learning processes and engage in their learning by thinking, investigating, discussing, and creating (Arnold, 2019; Budihal *et al.*, 2020). They practice critical thinking and problem-solving skills with complex questions or case scenarios. By reflecting on and experiencing real-world issues, they apply hands-on tasks, propose solutions, and develop analytical and decision-making competencies (Arnold, 2019; Collins & McLain, 2021).

Students who participate in active learning must engage in higher-order thinking tasks, such as investigation, appraisal, and synthesis, to solve issues (Benková *et al.*, 2022; Collins & McLain, 2021). Consequently, active learning can help students develop essential skills, for instance communication, collaboration, critical thinking, innovation, and knowledge-

gathering (Benková *et al.*, 2022). Notably, with the rapid development of technology coupled with the intensification of competition and the world's complexity in the past few years, employers are pleased with practice-oriented graduates who have acquired professional skills concerning analytics, communications, critical thinking, decision-making, leadership, and problem-solving (Shi & Dow, 2019). Accordingly, higher education institutions have embraced the marketplace's demand by offering courses that are less focused on theoretically driven lectures and more on practicing and acquiring professional skills (Casado-Aranda *et al.*, 2021). Thus, to offer quality course instructions, institutions and educators should consider the balance of active and passive learning in course design or redesign (Abernathy, 2019).

C. High Impact Practices

Hundreds of instructional activities, strategies, and tools have been developed and are available to educators. Some might benefit students at a particular level, while others might only be suitable for specific courses or disciplines. A substantial body of research has assessed the effectiveness of varied instructional strategies and affirmed that certain teaching practices tend to have higher impacts on student engagement, learning experiences, retention, and persistence to graduation (Campbell & Blankenship, 2020). In order to increase student engagement and success, many institutions of higher learning have incorporated high-impact educational practices endorsed by the Association of American Colleges and University. There are 11 high-impact educational practices (HIPs) backed by evidence-based research. Capstone courses and projects and e-portfolios are two examples of HIPs (Kuh, 2008).

A capstone course is typically taken toward the end of an academic program. A capstone course could include a portfolio, a research paper, a project, or an investigation, allowing students to demonstrate their learning and expertise in their field of study (Abad-Jorge & Kronenburg, 2020). Intentionally designed to meet the need for a culminating or integrating experience, a capstone course requires students to integrate and apply their learning from various previous courses holistically as they are approaching the completion of their education (Abad-Jorge & Kronenburg, 2020; Cyclopedia *et al.*, 2020). Usually, capstone courses enable students to incorporate their knowledge and skills acquired in various disciplines or courses to meet the demands of a dynamic workplace and address complex real-world issues (Abernathy, 2019).

A capstone project is typically the final assignment. It enables students to consolidate their academic and professional experiences centered on assimilation, innovation, reflection, and application of previously acquired knowledge and skillsets (Blanford *et al.*, 2020). A capstone project aims at advancing students into well-prepared and well-rounded graduates. Designed to strengthen students' learning with valuable hands-on experience via a real-world problem, the capstone project is vital in preparing students for practical applications and honing students' professional knowledge and skills (Vande Wiele *et al.*, 2017). In essence, the capstone project provides the opportunity for students to showcase their varied skillsets and industry-related

competencies, for example, analytical thinking, communication, innovation, interpersonal skills, project management, teamwork, and writing, through the reflection on and integration of knowledge gained from the entire academic program (Blanford *et al.*, 2020; Vande Wiele *et al.*, 2017). The capstone project learning experiences also offer a transition between academic study and work readiness for career advancements or leadership roles (Blanford *et al.*, 2020).

An ePortfolio platform allows students to collect digital representations of their learning experiences and demonstrate their skills and competencies developed at an academic program or educational institution (Campbell & Tran, 2021; Downer & Slade, 2019). The electronic representations can be badges, certificates, community involvements, club affiliations, photographs, PowerPoint Presentations, newspaper clippings, transcripts, teamwork assignments, reports, research papers, video presentations, and written reflections on both formal and informal learning experiences (Abad-Jorge & Kronenburg, 2020; Lu, 2021). As a pedagogical and professional tool, ePortfolio engages students in an active learning process and enables them to critically reflect on their learning when compiling evidence of learning and skill development, making learning more meaningful (Campbell & Tran, 2021). The ePortfolio application allows students to compile, arrange, appraise, and synthesize meaningful artifacts representing evidence of academic progress and achievement (Abad-Jorge & Kronenburg, 2020). Students make sense of their learning by connecting courses, disciplines, co-curricular activities, and life experiences (Lu, 2021). Students will be able to transfer their learned knowledge and skills to other contexts in the future (Campbell & Tran, 2021).

Sabio *et al.* (2020) affirmed that ePortfolio offers an analytical and reflective way of obtaining knowledge and helps students build their professional identities. While reflecting on their learning in the program, students think critically and become independent and self-directed learners (Anderson *et al.*, 2017; Campbell & Tran, 2021). In addition, an ePortfolio can demonstrate a student's professional and personal growth and provide a planning space for future professional development needs (Lu, 2021). If carried out properly, ePortfolios deepen student learning and make that learning visible to their peers, instructors, and other stakeholders as students integrate their learning experiences and reflect on the significance and relevance of their learning both in the classrooms and in extra-curricular activities (Anderson, *et al.*, 2017). An ePortfolio is a valuable tool for students to demonstrate their key competencies and skills to future employers (Abad-Jorge & Kronenburg, 2020; Slade & Downer, 2020). Heymann *et al.* (2022) argued that ePortfolios become employable when students can reflect on their learning experiences from coursework, extra-curricular activities, and work placements. Because employability is a very complicated, multidimensional construct, it is critically important that higher education institutions and educators develop not only academic knowledge and skills but also students' employability competencies (Heymann *et al.*, 2022).

However, Kuh and Kinzie (2018) advised that incorporating HIPs into curricula can yield high-impact outcomes only if the proper implementation is executed. In addition, university leadership's support and commitment to

quality professional development for faculty are needed to successfully implement the ePortfolio approach in an educational program, across different programs, or within a college in a larger university (Abad-Jorge & Kronenburg, 2020). It is also imperative that higher education institutions and educators assess the effectiveness of ePortfolios, ascertain barriers to implementation, and apply strategies to prompt desired future outcomes.

D. Research Questions

The main objective of this study was to assess the impacts of a course redesign around high-impact practices, ePortfolios and capstone courses and projects. We aimed to investigate the following questions:

1. Are there any different perceptions about the capstone course between students who took the revised MHA courses integrated with ePortfolio prior to capstone and did not take the revised MHA courses integrated with ePortfolio prior to capstone?
2. How do students in the capstone course perceive ePortfolio after they took prior courses to build their ePortfolio?

III. RESEARCH DESIGN AND METHOD

A. The Context of the Study

This study was conducted at a U.S. not-for-profit university in the southwestern region, offering online undergraduate and graduate programs to adult learners from various backgrounds. This study specifically focused on students who enrolled in the capstone course of the master's program in healthcare administration (MHA). The students enrolling in the MHA program are mostly full-time professionals seeking to advance their knowledge and competencies in healthcare management.

The MHA program traditionally presented two discussion questions and one written paper weekly in the 6-week courses. In response to the University's strategic directions, we have utilized real-world issues in healthcare management to foster students' analytic, critical thinking, and problem-solving skills in discussion forums. We have also incorporated ePortfolio and a capstone project that function as a culminating academic and intellectual learning experience in the MHA program. Remarkably, the capstone project allows students to demonstrate their research skills, apply the learned knowledge and experience, and express their learning and competencies orally to various stakeholders.

After the revised course went live, we administered the in-house survey to the students who had enrolled in the capstone course for one year. However, the findings from the in-house survey uncovered those students rated ePortfolio-related question items with the lowest ratings compared to other learning activities such as case-scenario discussion boards, CEO of a Day video presentation, capstone project, etc. (Lu & Smiles, 2022). Students did not build their ePortfolios in the previous 11 MHA courses. We postulated that students might have certain levels of resistance when they first experienced ePortfolio in the last course of the MHA program, especially when they were asked to create and build a comprehensive ePortfolio in five weeks.

Effective ePortfolio requires intense revision and reflection by the students. The one-year journey has taught us many important lessons about successfully implementing a program-wide ePortfolio plan. Unquestionably, we focused too intensely on the ePortfolio as a product and needed more time for students to embrace the process. The lesson learned from our first year of implementing ePortfolio in the capstone course is that we should permit ePortfolio activities to scaffold student learning experience over time to develop their professional identities. An effective ePortfolio is valuable when students build their ePortfolio and construct their professional identity by considering employers' points of view (Heymann *et al.*, 2022), which shapes students' reflections to communicate their readiness for a professional career following the completion of the academic program.

The solution to this identified issue was to incorporate ePortfolio into other MHA courses and allow students to embrace ePortfolio for a longer time period. We implemented the first revised MHA course in December 2021, and the first cohort of students enrolled in the capstone course in May 2022. In this revised MHA course, students are asked to start creating their ePortfolio in a baby step by introducing themselves from a professional perspective, composing their mission statement and career goal, and uploading four earned certificates to familiarize the platform and its functions. We also revised another MHA course by asking students to identify two pieces of coursework from their previous MHA course(s) that align with two of the five executive competencies outlined by the American College of Health Care Executives and upload the identified papers or PP Presentations to their ePortfolio. Once students experience more about the functionalities of the ePortfolio platform, they should appreciate the benefits brought by ePortfolio. As course evaluation is the critical approach to improving the quality of courses that we offer to our students, it is critically important that we evaluate students' experiences and opinions about the ePortfolio capstone course before and after we implement the revised MHA courses.

B. Data Collection and Analysis

This study was carried out with a case study approach in which quantitative and qualitative data were collected from various sources. An in-house survey was conducted anonymously to gauge the students' perceptions and experiences regarding the capstone course before and after two other MHA courses with the integration of ePortfolio were implemented.

The survey was distributed to students at the conclusion of the class. An opted-out option was provided if students wished not to participate. SPSS was used to analyze quantitative data, generate frequency distribution tables, and present descriptive statistics. The qualitative data were studied and identified main themes, including topics, ideas, and patterns.

IV. RESULTS AND DISCUSSIONS

The sample consisted of 265 students in the Before group and 195 in the After group. There were 77 respondents in the Before group, which resulted in a 29% response rate. The findings from the After group were obtained from 31 respondents, which resulted in a 15.8% response rate.

The first research question was to investigate the perceptions of capstone courses between students taking the revised MHA courses incorporated with ePortfolio and students not taking the revised MHA courses incorporated with ePortfolio. Table I displays students' perceptions regarding the capstone course between two groups.

Compared to the Before group, students in the After group gave a lower score on eight out of nine questions. Especially the question regarding the clarity of the instructions was rated with the lowest score at 74.19% among the After group. Indeed, we fine-tuned the instructions several times during the first year of implementing the capstone course, during which we surveyed students in the Before group. Nearly 81% of students in the Before group were either very satisfied or satisfied with the instructions, which is 5.3% higher than those in the After group. This might be due to COVID-19. The United States has had the highest COVID-19 cases globally, and most of our students are frontline healthcare professionals. Numerous research studies have shown that the COVID-19 pandemic has resulted in extreme stress on the already overburdened healthcare workforce in the United States; many healthcare professionals retired early or left their healthcare jobs, causing staff shortages and increasing burnout, exhaustion, and trauma among existing healthcare workers (Chhablani & Choudhari, 2022). Consequently, the stress and burnout at the workplace affected our students' understanding of instructions for assignments in the After group, even though we fine-tuned the instructions more than five times before they enrolled in the capstone course. Similarly, their job statuses and family issues caused by COVID-19 may also interfere with students' learning and objective evaluation.

TABLE I: STUDENTS' RATINGS BETWEEN TWO GROUPS

Survey Item	Before		After		% Change
	n	"Very Satisfied" and "Satisfied"	n	"Very Satisfied" and "Satisfied"	
Case Scenario based Discussion Boards prepared me to deal with critical issues in health care.	75	93.33%	31	87.10%	-6.2
E-Portfolio helped me critically assess my academic work and my accomplishments.	76	77.63%	31	77.42%	-0.2
The CEO For a Day Video Presentation helped me come up with solutions to solve the organization's issues.	77	89.61%	31	93.55%	3.9
The Capstone project helped me integrate the knowledge and skills developed within the MHA program.	77	89.61%	30	86.67%	-2.9
Video Interview Preparation helped me build up my confidence in job interviews.	75	82.67%	31	80.65%	-2.0
This course enables me to wrap up the program as a whole.	76	89.47%	31	87.10%	-2.4
This course further stimulated my interest in a healthcare career.	75	78.67%	30	76.67%	-2.0
This course increased my knowledge of the healthcare industry.	76	86.84%	30	83.33%	-3.5
The instructions for learning activities were clear.	73	80.82%	31	74.19%	-5.3

This could explain why eight out of nine survey questions gained lower ratings in the After group compared to the Before group.

On the other hand, the CEO For a Day Video Presentation received the highest score at 93.55%. This is also the only item that received a higher rating in the After group compared to 89.61% in the Before group. Interestingly, students in the After group liked the video presentation, CEO of a Day. Although some students did not feel they would be a CEO and did not see the benefits of this learning activity, other students provided positive feedback about this learning activity. Here are the examples of students' comments.

"It allowed me to think ahead if I will be a leader." "It was helpful to think from the perspective of the CEO."

"The CEO for a Day allowed me an opportunity to pretend how it would be in real life being the big boss and had to make critical decisions."

"Creating a video is helpful as any leader needs to speak in person and present to groups of people. This is relevant in today's time with teams meetings online."

"In persuading my plan for the business to adopt, it was important for me to have my facts in order and appear to be an expert with the ins and outs of my plan, from describing the culture, to describing follow-through and financial plans."

"I was able to think critically on what my organization would need immediately and long term."

"I appreciate this opportunity to be a CEO and speak up what I want to do if I were CEO in a healthcare organization."

When asked if an e-Portfolio helped me critically assess my academic work and my accomplishments, 77.42% of surveyed students in the After group rated either very satisfied or satisfied. There is no significant difference between the Before and After groups, 77.63% vs. 77.42%. This survey item has the smallest decreased percentage among eight survey items with lower scores in the After group. Thus, we can confidently claim that two additional MHA courses integrated with ePortfolio help students embrace the ePortfolio processes.

The second research question was to ascertain the students' perceptions about ePortfolio in the After group after they took two other MHA courses to build their ePortfolio. We did not see any negative feedback regarding ePortfolio in the students' reflections. Instead, several students voiced their appreciation for doing ePortfolio. Here are some students' comments.

"ePortfolio has made me feel confident in my skills and proud of the work I have completed."

"What I liked the most was the fact that my ePortfolio is personalized with my own voice. I like fact that I can customize and choose my own layouts for personalization purposes. I like how it can demonstrate a student's weakness and strength. I also like ePortfolio because it shows evidence of my achievements and skills and how I can use them well beyond my degree and into the professional world."

Many students saw how the ePortfolio process helped them connect with different contents and think critically about how the learning has prepared them for the future, as evidenced in prior empirical studies (Abad-Jorge & Kronenburg, 2020;

Anderson *et al.*, 2017; Sabio *et al.*, 2020). Below are some typical responses from students.

"Over the past six weeks, the ePortfolio process allowed me to make connections among the various content not only in this course, but in the MHA program."

"The capstone ePortfolios project has helped to foster learning by giving me a chance to evaluate my academic work critically, reflect on my performance and evaluation, and make connections between various courses, assignments, and other activities, like work experience, extracurricular activities, volunteer work, and more. Because they aid in creating my knowledge, make previously hidden components of the learning process visible, and give students agency, which increases learner motivation, ePortfolios are powerful learning aids."

"My ePortfolio helps me learn about myself in a virtual space where I can assess my work history, and it may give me a direction of where I want to go. I found out that extracurricular activities and volunteering are important to show a well-rounded life."

"The ePortfolio is a record of my learning; It boosted my self-esteem to see the projects and classes I have completed and how much I learned in the past couple of years. It is difficult for me to show my accomplishments, and the folio gave me an opportunity to show off and have an electronic live document that can be updated."

In Abad-Jorge and Kronenburg's (2020) study, they found that an ePortfolio is a robust tool for students to demonstrate their key competencies and skills for future employment. The findings in our study resonate with this statement. Here are some great examples of students' feedback.

"After completing my master's program, I would like to look for a job where I can practice all of my newly earned skills. The job market is challenging to get into, especially when so many qualified individuals are in the field. Therefore, prospective employers must be aware of all the valuable skills I possess. For example, communication, critical thinking, and teamwork skills are essential to a good employee. The ePortfolio assignment showcases each talent individually and gives an example of each skill. If the employer wants to see my critical thinking skills in action, they can read the project associated with the skill. In the healthcare industry, there is a significant demand for clear written and spoken communication skills. My ePortfolio showcases these skills in many of the projects I added. For example, prospective employers can look at my critical thinking skills prompt and, at the same time, gauge my writing skills."

"Over the past six weeks, the ePortfolio process allowed me to make connections among the various content not only in this course, but in the MHA program. For example, the project in which we were expected to align coursework with each of the various competencies in healthcare administration enabled me to think more broadly about the coursework and how it is all connected. Within each course of the program, we are made aware of the objectives of the course, but one can easily get tunnel vision and focus only on the work at hand. Having students review and select coursework that most represents each of the competencies encourages reflection of all classes that are a part of this program as part of the evaluation."

"The capstone ePortfolios project has helped to foster learning by giving me a chance to evaluate my academic work critically, reflect on my performance and evaluation, and make connections between various courses,

assignments, and other activities, like work experience, extracurricular activities, volunteer work, and more. Because they aid in creating my knowledge, make previously hidden components of the learning process visible, and give students agency, which increases learner motivation, ePortfolios are powerful learning aids."

"The ePortfolio process has allowed me to consolidate various projects and assignments in one place, to demonstrate what I have learned in the area of healthcare administration." "The E-Portfolio assignment provided me with the opportunity to evaluate and reflect on my previous coursework throughout the program. I spent time looking at every paper and some discussions throughout the program and was amazed by the body of work and the different topics we covered and new skills I have acquired."

"My ePortfolio helps me learn about myself in a virtual space where I can assess my work history, and it may give me a direction of where I want to go. I found out that extracurricular activities and volunteering are important to show a well-rounded life."

"The ePortfolio is a record of my learning; It boosted my self-esteem to see the projects and classes I have completed and how much I learned in the past couple of years. It is difficult for me to show my accomplishments, and the folio gave me an opportunity to show off and have an electronic live document that can be updated."

V. RESEARCH LIMITATIONS AND FUTURE RESEARCH

Similar to other studies, this case study also has limitations that must be acknowledged. First, this case study focused on the students' perceptions and experiences in building ePortfolio in an online capstone course of the master's program in healthcare administration. Hence, the results cannot be generalizable to all graduate courses at other departments in the same university or a different institution nationwide. Consequently, future research needs to be conducted at different programs and universities to understand if HIPs would be as beneficial as this research. The second limitation is a low response rate in the After group. The total number of students in the After group was 195, but only 31 answered the student survey, which resulted in a 15.9% response rate compared to 29% from the Before group. A low response rate poses a non-response bias, which could skew the overall results. The third limitation concerns confounding factors, such as the COVID-19 pandemic. The first study was conducted during the first year of the COVID-19 pandemic. The second study was conducted after students experienced two years of the COVID-19 pandemic. Many of our students are frontline healthcare professionals affected by the pandemic much more than other professionals. Students' job status and family issues may also interfere with students' learning and objective evaluation of the course. For those students in the After group, their perceptions and experiences regarding HIPs might differ if there was no pandemic. As a result, it limits our ability to conclude the effectiveness of HIPs, which is evidenced in our findings. One suggestion for further research is to manage the same research design for future MHA students once the COVID-19 pandemic is over. Such a study will help us understand if the COVID-19 pandemic is a significant confounding factor.

VI. CONCLUSION

The main objective of this case study was to evaluate the impacts of a course redesign around high-impact practices, ePortfolios and capstone courses and projects. Based on the results from our previous study to explore students' experiences in building a comprehensive ePortfolio in the capstone course, we realized that we did not allow enough time for students to create and build their ePortfolio. Hence, we revised the other two MHA courses to incorporate ePortfolio and provided three courses for our students to experience the ePortfolio processes. The current study's findings derived from students who took two MHA courses with ePortfolio before the capstone course shed some light on the implementation of the ePortfolio processes. The best practice of implementing ePortfolios into the curriculum should permit curricular activities to scaffold student learning experience over time to develop their professional identities (Kuh & Kinzie, 2018). ePortfolio, as a pedagogical and professional tool, enables students to demonstrate learning at school, showcase their skills, knowledge, and competencies to future employers, and acquire lifelong reflective practice. To ensure that the implementation of ePortfolio is positively impacting, higher education institutions and educators must have a plan to implement ePortfolio into various courses, programs, or departments. Professional development for faculty and student orientation are two indispensable actionable items to successfully implementing ePortfolio. Although an ePortfolio offers many benefits, it becomes valuable when students build their ePortfolio and construct their professional identity by considering employers' points of view.

CONFLICT OF INTEREST

There is no conflict of interest in the publication of this research.

REFERENCES

- Abad-Jorge, A., & Kronenburg, M. (2020). The value of high impact practices and their implementation in an online undergraduate health care management program for adult learners. *The Journal of Health Administration Education*, 36(4), 355-372.
- Abernathy, D. (2019). ADDIE in action: A transformational course redesign process. *Journal for the Advancement of Educational Research International*, 13(1), 8-19.
- Anderson, K. M., DesLauriers, P., Horvath, C. H., Slota, M., & Farley, J. N. (2017). From metacognition to practice cognition: The DNP e-portfolio to promote integrated learning. *Journal of Nursing Education*, 56(8), 497-500. [10.3928/01484834-20170712-09](https://doi.org/10.3928/01484834-20170712-09).
- Arnold, W. W. (2019). Improving engagement in a lecture course by increasing relevance to student needs and interests. *Contemporary Issues in Education Research*, 12(3), 49-74.
- Blanford, J., Kennelly, P., Kinga, B., Millera, D., & Bracken, T. (2020). Merits of capstone projects in an online graduate program for working professionals. *Journal of Geography in Higher Education*, 44(1), 45-69. <https://doi.org/10.1080/03098265.2019.1694874>.
- Benková, M., Bednářová, D., Bogdanovská, G., & Pavličková, M. (2022). Redesign of the statistics course to improve graduates' skills. *Mathematics* (2227-7390), 10(15), 2569-2569. <https://doi.org/10.3390/math10152569>.
- Budihal, S., Patil, U., & Iyer, N. (2020). An integrated approach of course redesign towards enhancement of experiential learning. In *Procedia Computer Science*, 172, 324-330. <https://doi.org/10.1016/j.procs.2020.05.052>.
- Campbell, R., & Blankenship, B. B. (2020). Leveraging the power of course redesign for student success. *To Improve the Academy*, 39(2), 51-74. <https://doi.org/10.3998/tia.17063888.0039.203>.

- Campbell, C., & Tran, T. L. N. (2021). Using an implementation trial of an ePortfolio system to promote student learning through self-reflection: Leveraging the success. *Education Sciences*, 11(6), 263. <https://doi.org/10.3390/educsci11060263>.
- Casado-Aranda, L., Sánchez-Fernández, J., Montoro-Ríos, F. J., & Horcajadas, M. I. A. (2021). Evaluation of the work-integrated learning methodology: Teaching marketing through practitioner experience in the classroom. *Mathematics*, 9(17), 2164. <https://doi.org/10.3390/math9172164>.
- Chhablani, N., & Choudhari, S. G. (2022). Behind the frontline: A review on the impact of COVID-19 pandemic on healthcare workers. *Cureus*, 14(9), e29349. <https://doi.org/10.7759/cureus.29349>.
- Claro, P. B., & Esteves, N. R. (2021). Teaching sustainability-oriented capabilities using active learning approach. *International Journal of Sustainability in Higher Education*, 22(6), 1246-1265. <https://doi.org.coloradotech.idm.oclc.org/10.1108/IJSHE-07-2020-0263>.
- Collins, M. J., & McLain, N. E. (2021). Pharmacology course redesign using high-impact practices. *Journal of Nursing Education*, 60(9), 529-533. <https://doi.org/10.3928/01484834-20210719-01>.
- Cycyota, C. S., Heppard, K. A., Green, S. G., Heyler, S. G., & Harting, T. R. (2020). Intentionally designed capstone courses: A typology to enhance student learning. *Journal of Education for Business*, 95(7), 458-468. <https://doi.org/10.1080/08832323.2019.1678003>.
- Das, A. K., Nguyen, Q. T., Nguyen, A. T., Nomikoudis, M., Van, D. H. (2019). Course redesign to incorporate flipped delivery: A business degree case in Vietnam. *Issues in Educational Research*, 29(2), 363-383.
- Downer, T., & Slade, C. (2019). Starting early: Using ePortfolios to prepare first year midwifery students for professional practice. In K. Trimmer, T. Newman, & F. Padró (Eds.), *Ensuring quality in professional education volume I*. Cham: Palgrave Macmillan.
- Heymann, P., Bastiaens, E., Jansen, A., van Rosmalen, P., & Beausaert, S. (2022). A conceptual model of students' reflective practice for the development of employability competences, supported by an online learning platform. *Education + Training*, 64(3), 380-397. <https://doi.org/10.1108/ET-05-2021-0161>.
- Kropf, M., Grubbs, S. J., Szmer, J., & Whitaker, B. E. (2019). American politics course redesigns: The effect of propensity score matching on predicting learning outcomes. *Journal of Political Science Education*, 15(4), 459-473. <https://doi.org/10.1080/15512169.2018.1515633>.
- Krsmanovic, M. (2021) Course redesign: Implementing project-based learning to improve students' self-efficacy. *Journal of the Scholarship of Teaching & Learning*, 21(2), 93-106. <https://doi.org/10.14434/josotl.v21i2.2872>.
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. The Association of American Colleges & Universities.
- Kuh, G. D., & Kinzie, J. (2018). *What really makes a "high-impact" practice high impact?* Inside Higher Ed. <https://www.insidehighered.com/views/2018/05/01/kuh-and-kinzie-respond-essay-questioning-high-impact-practices-opinion>.
- Lu, H. (2021). Electronic portfolios in higher education: A review of the literature. *European Journal of Education and Pedagogy*, 2(3), 99-101. <https://doi.org/10.24018/ejedu.2021.2.3.119>.
- Lu, H., & Smiles, R. (2022). Capstone course redesign: A case study in an online academic program. *European Journal of Humanities and Social Sciences*, 2(3), 9-16. <http://dx.doi.org/10.24018/ejsocial.2022.2.3.257>.
- Mishra, S., Sahoo, S., & Pandey, S. (2021). Research trends in online distance learning during the COVID-19 pandemic. *Distance Education*, 42(4), 494-519. <https://doi.org/10.1080/01587919.2021.1>.
- Naciri, A., Radid, M., Kharbach, A., & Chems, G. (2021). E-learning in health professions education during the COVID-19 pandemic: A systematic review. *Journal of Educational Evaluation for Health Professions*, 18, 1-11. <https://doi.org/10.3352/jechp.2021.18.27>.
- Radovan, M. (2019). Should I stay, or should I go? Revisiting student retention models in distance education. *Turkish Online Journal of Distance Education*, 20(3), 29-40.
- Sabio, C., Chen, J., Moxley, E. A., Taylor, L., Kuchinski, A., & Peters, B. T. (2020). Improving portfolio assessment: Addressing challenges in transition to eportfolio. *Journal of Nursing Education*, 59(12), 705-708. <https://doi.org/10.3928/01484834-20201118-09>.
- Slade, C., & Downer, T. (2020). Students' conceptual understanding and attitudes towards technology and user experience before and after use of an ePortfolio. *Journal of Computing in Higher Education*, 32, 529-552. <https://doi.org/10.1007/s12528-019-09245-8>.
- Shi, Y., & Dow, S. (2019, July). International business education at the interface: The raw case study method. *Journal of teaching in international business*, 30(3), 246-268. <https://doi.org/10.1080/08975930.2019.1698392>.
- Theodosiou, N. A., & Corbin, J. D. (2020). Redesign your in-person course for online: Creating connections and promoting engagement for better learning. *Ecology and Evolution*, 10, 12561-12572. <https://doi.org/10.1002/ece3.6844>.
- Vande Wiele, P., Morris, D., Ribiere, V., & J-L, E. (2017). Project based learning for professional identity: A case study of collaborative industry projects in marketing. *The Independent Journal of Teaching and Learning*, 12, 44-63.
- Wilson, D. A., Dondlinger, M. J., Parsons, J. L., & Niu, X. (2018). Exploratory analysis of a blended learning course redesign for developmental writers. *Community College Journal of Research and Practice*, 42(1), 32-48. <https://doi.org/10.1080/10668926.2016.1264898>.



Hwangji Lu holds two master's degrees in nutrition from North Dakota State University in Fargo, ND, and health services administration from Center Michigan University in Mount Pleasant, MI, in the United States. She earned her Ph.D. in management with a specialization in leadership and organizational change from Walden University in Minneapolis, MN. Currently, she is a remote Professor in the master's program of health care administration at the

University of Arizona Global Campus (UAGC). Apart from UAGC, she has taught online courses at several universities since 2006. Prior to this post, she had over 25 years of professional experience in various industries — inside and outside the healthcare arena. Her research interests include high-impact educational practices, student engagement in online learning, educational technology, course evaluation, and leadership development.

Dr. Lu is a member of professional societies such as the Academy of Management, Multimedia Educational Resource for Learning and Online Teaching, and the International Economics Development and Research Center. She is also an advisory member of the International Society for Engineering Research and Development, the Institute of Research Engineers and Scientists, the Universal Conferences Institute, and the International Institute of Engineers and Researchers. Dr. Lu was named the recipients of Provost's Circle Award at some universities in 2009 and 2010. She won the Best Paper Award from IC4E 2016 held in St. Petersburg, Russia. The Academy of Management Health Care Management Division awarded Dr. Lu as an Outstanding Reviewer in 2008 and 2018. In 2021, she received the Distinguished Scholar Award from the European Journal of Scientific Research.



Robert Smiles obtained a Ph.D. in health care administration with a specialization in organizational change resistance from Capella University, a master's degree in health care administration from Bellevue University, and a Bachelor of Science in biology from the University of Maryland.

He started his career as a regional marketing and admissions director for a long-term care organization in middle Tennessee, then began working as an adjunct professor with Ashford (now UAGC) in 2011. His research interests include student success, student engagement, and high impact practices.