December 2018

Full Issue: Journal on Empowering Teaching Excellence, Volume 2, Issue 2, Fall 2018

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THE JOURNAL ON EMPOWERING TEACHING EXCELLENCE

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CENTER FOR INNOVATIVE DESIGN & INSTRUCTION

The Journal on Empowering Teaching Excellence is a bi-annual publication released in the Fall and Spring. We accept articles and multimedia submissions from higher education professionals who have practical, experience-based insights to share with their peers. We value material that is up-to-date, proven, and easy to implement in today's teaching environments.

JETE is a publication from the Center for Innovative Design and Instruction, and Academic and Instructional Services at Utah State University. It is produced in connection with the Empowering Teaching Excellence faculty development program.

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About This Issue

Kim Hales, Editor-in-Chief
Utah State University

This issue of the *Journal on Empowering Teaching Excellence* is filled with the things I love about education. Every submission shows a genuine passion for how we can be the best educators possible and deliver the best of ourselves to our students.

The first three articles are relevant to instructors of all mediums. Beginning with the article by Rodriguez and Sharp (2018), we receive practical tips on helping learners improve their writing through peer feedback, with best practice recommendations for establishing a writing community and designing and implementing assignments effectively. Further tips for facilitating an effective learning community are provided in the article by Jenkins (2018), who shares timely insights and questions designed to help educators evaluate their cultural responsiveness, thereby creating an environment that is supportive of diversity. In article three, Meng and Rentschler (2018) offer suggestions to help faculty bridge the gap between their own research and teaching by sharing their original research with their students in the classroom. Beyond noting the benefits of this approach to students and faculty, the authors share first-hand examples of how they used this approach in their teaching.

The articles by Luongo and O'Brien (2018) and Bowne et al. (2018) are of special interest to faculty developers. Continuing the theme of building vibrant educational communities, Luongo and O'Brien highlight the benefits of providing faculty mentorship to new distance education instructors. Such mentorship, they argue, can make the key to achieving effective distance learning environments. Bowne et al. (2018) add research evidence to this argument. Following a rigorous survey methodology, they report that online students whose instructors successfully completed an online instructor certification program were more likely to rate their course and instructors highly with regard to instructional quality. They suggest certification models in which online instructors act as online students.

Continuing the theme of online education, but from a program design standpoint, Hawks and Gast (2018) provide a valuable case study in program development as they detail their efforts developing an online Masters of Public Health degree. They suggest a competency-centric, backwards design approach built around equivalency theory (Simonson, Schlosser, & Hanson, 1999)—providing useful curriculum plans in the process.

As the new editor of JETE, I thank our contributors for their time, research, passion, and sharing of ideas. This Journal offers all educators interested in the improvement of the academy an opportunity to grow together as educators, and it is a privilege to see all that is being done. I welcome and look forward to future submissions, suggestions, and insights as we grow the Journal of Empowering Teaching Excellence together.

Sincerely,

Kim Hales

Editor-in-Chief

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Five Instructional Practices to Optimize Peer Feedback Activities among Adult Learners

By Regina C. Rodriguez, Ph.D., and Laurie A. Sharp, Ed.D
West Texas A&M University

Abstract

There is a significant need for adult learners to improve their writing proficiency within a variety of contexts. Thus, postsecondary instructors require effective research-based writing strategies to support adult learners hone their writing skills. While studies on peer feedback abound, little has been done to date to consider ways in which postsecondary instructors design quality peer feedback activities within their courses. The purpose of this article was to describe five instructional practices that optimize peer feedback activities among adult learners.

Introduction

Whether teaching adult learners in an online, hybrid, or face-to-face environment, peer feedback can be a valuable teaching and learning tool. Peer feedback provides adult learners with an opportunity to check the accuracy of their learning and modify their understandings (Mory, 2004). Although adult learners may be apprehensive about providing their peers with feedback (Wong, 2016), postsecondary instructors can implement effective instructional practices that support impactful peer feedback experiences. For this article, we combined available literature and our own postsecondary teaching experiences to identify and describe five instructional practices that optimize the use of peer feedback activities among adult learners. These instructional practices are: (1) create a supportive writing community; (2) chunk

writing tasks into shortened assignments; (3) provide mentor texts; (4) offer timely and consistent peer feedback; and (5) focus on content first and conventions later.

Create a Supportive Writing Community

Writing is a social act that combines an individual's historical knowledge, past writing experiences, personal experiences, and social values (Cremin & Myhill, 2012). Among adult learners, this social act can evoke feelings of fear and apprehension during writing, particularly when they undertake a form of writing with which they are unfamiliar or unskilled (Pantelides, 2012). In the early stages of writing, the creation of new types of texts is often messy, consisting of a mixture of opinions, undeveloped thoughts, and unstructured texts (Rodriguez, 2014). In order for adult learners to be willing to share their writing with peers, they must be part of a supportive writing community. Thus, postsecondary instructors must work to establish supportive writing communities among adult learners enrolled in their classes. As noted among andragogical adult learning principles, adult learners must believe that writing activities are purposeful, enhance the mastery of course content, and improve their communication skills (Knowles, 1984; Knowles, Holton, & Swanson, 2012).

Postsecondary instructors establish a supportive writing community among adult learners by fostering the notion that writing is important (Elbow, 1990). Postsecondary instructors must also exhibit teaching practices among adult learners to convey that their ideas expressed through writing are significant, and as writers, they maintain control over their learning (Applebee, 1996). A supportive writing community values the voice of each member and transforms the classroom dynamic from instructor-lead to instructor-guided. In such a classroom environment, postsecondary instructors empower adult learners to actively participate in the feedback process with peers, which with guidance, can be deemed as extremely valuable (Wong, 2016).

Once a supportive writing community has been established, postsecondary instructors must first inform adult learners of the primary purpose for peer feedback activities and how they will be utilized. We highly recommend communicating clear expectations and establishing routine procedures for peer feedback activities. For

example, consider setting a predictable schedule that provides adult learners with time to engage in a cycle of write, review, and revise (see Figure 1).

During the writing phase, adult learners compose a writing draft for a specific topic. During the review phase, adult learners exchange and review each other's writing drafts and provide one another with helpful feedback. During the revise phase, adult learners use the feedback provided by a peer to create a revised writing draft. The phases of this cycle may be repeated multiple times in order to provide adult learners with frequent opportunities to improve their writing (Sommers, 1980).

Write
- Create a writing draft that addresses all required components for a specific writing task.

Review
- Work with a peer partner to provide feedback on their writing draft.

Revise
- Review the feedback provided by a peer partner. Using this feedback, create a final version of writing.
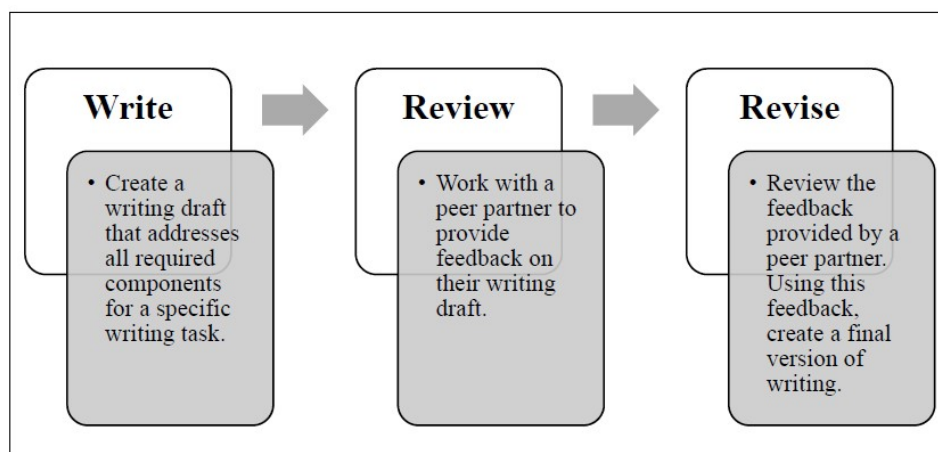
Figure 1. **Adult learners must engage in a cycle of write, review, and revise with writing tasks.**

Completing peer feedback activities in a timely manner is critical in a supportive writing community because feedback becomes useless when the writer has little or no time to consider and use it to guide revisions of their writing. Postsecondary instructors must also emphasize expected behaviors during peer feedback activities, particularly regarding the language used during peer feedback activities. According to Pajares (2003), peer feedback language has a direct impact on a writer's sense of self-efficacy, which in turn, affects their writing motivation and skills. Therefore, peer feedback language must be goal-oriented (Parajes, 2003) and free from criticisms (Bomer, 2010). We have provided examples, as well as non-examples, of desired peer feedback language in Figure 2.

Finally, we highly recommend that postsecondary instructors provide adult learners with a peer review checklist to use while reviewing the writing of peers. Peer review checklists provide adult learners with a tool that promotes the provision of feedback focused on enhancing the quality of writing and limits feedback focused solely on surface-level corrections, such as issues with grammar and spelling (Eli

Review, n.d.). We have provided an example of a peer review checklist as Appendix A. We also encourage postsecondary instructors to ensure every adult learner is a contributing member within a supportive writing community by assigning grades for peer feedback activities. Grades should be performance-based and represent the quality of peer feedback that was provided.

Non-Examples	- Incorporating math and science is a great idea, and one that teachers that teach all subjects have to do. - I do feel this would be well-suited in the body of a larger study. It is a good read, and I would like to see more like the second them than the first. Good job overall. - You did a good job putting the two paragraphs together. I can tell that you proved that they had credibility. Good try.
Examples	- I like how you are giving the reader background information about how literacy develops in early childhood. I noticed that you talked about literacy developing in four basic areas, but you only listed three. I think I know the one you are missing in that sentence. I would recommend changing your sequence to, "Literacy develops in learning and knowing these four basic areas of language: listening, speaking, writing, and reading." - I noticed how you introduced the different viewpoints of parental involvement and the various types of parental involvement. In the first paragraph, you introduced the following paragraphs by writing, ". . . from teachers, students, and parents." However, in the next three paragraphs the order is teachers, parents, and then students. I would recommend making the order of the introductory sentence and the following paragraphs the same, by either rearranging paragraphs 3 and 4 or by changing the sentence to read " . . . from teachers, parents, and students."

Figure 2. **Examples and non-examples of desired peer feedback language.**

Chunk Writing Tasks into Shortened Assignments

While planning the instructional design of a course, postsecondary instructors must consider how to design writing tasks in a way that scaffolds the success of adult learners with the desired final product. Some writing tasks may be informal, low-stakes writing tasks that can be completed in a short period of time. These types of writing tasks help adult learners process information at a faster pace and provide postsecondary instructors with multiple opportunities to correct any misunderstandings early on (Zeiser, 1999). For example, adult learners may explore their initial thoughts about the topic under study, ponder about a discussion topic, or summarize what they learned through low-stakes writing tasks.

Some writing tasks, however, require more extensive engagement from adult learners. With extended writing tasks, we encourage postsecondary instructors to subdivide the final writing product into several shortened writing tasks. With each shortened assignment, adult learners participate in a cycle of write, review, and revise, thereby providing a significant amount of scaffolding to promote their success with the final writing product. In Figure 3, we have provided an example of how we chunked an extended writing task in a graduate-level course entitled Educational Research.

Week	Chunked Writing Tasks	

Week 1	Write: Create a writing draft that:
	  a) Clearly states the education problem.
	  b) Provides context for the education problem in an objective manner.
	  c) Establishes the importance of the education problem.	

Week 2	Review: Work with a peer partner to provide feedback.	Revise: Review the feedback provided by a peer partner. Using this feedback, create a final version of writing.

Week 3	Write: Create a writing draft that:
	  a) Provides a balanced and appropriately comprehensive review of relevant literature.
	  b) Emphasizes primary sources.
	  c) Attends to both historical precedent and more recent work.	

Week 4	Review: Work with a peer partner to provide feedback.	Revise: Review the feedback provided by a peer partner. Using this feedback, create a final version of writing.

Week 5	Write: Create a writing draft that:
	  a) Proposes information about participants.
	  b) Proposes information about procedures.
	  c) Proposes information about data collection tools.	

Week 6	Review: Work with a peer partner to provide feedback.	Revise: Review the feedback provided by a peer partner. Using this feedback, create a final version of writing.

Figure 3. **Example of a chunked extended writing task.**

In this course, the culminating assignment is a research proposal that establishes context and significance for a specific education problem, provides a thorough review of related literature, and outlines an appropriate research methodology with which to explore the education problem. By chunking this large writing task into smaller writing tasks, we create a safe space for adult learners to take writing risks and grapple with new forms of writing. Furthermore, we have anecdotally noted a reduced level of writing anxiety among less confident writers.

Provide Mentor Texts

Mentor texts are model texts that provide adult learners with ideas or examples of writing components (Marchetti & O'Dell, 2015). Mentor texts may be an entire text that focuses on broad concepts, such as how ideas are structured. Mentors texts may also be smaller excerpts of text that illustrate a narrower concept, such as how to structure a paragraph or sentence. Mentor texts are especially beneficial to adult learners who are attempting a new form of writing or completing a writing task for which they feel unskilled.

Postsecondary instructors may locate mentor texts from published works available in their professional field, credible and valid resources on the Internet, or secure permission from a previous or current student who produced exemplary writing. In some cases, postsecondary instructors may choose to create an unpublished work or modify an existing text to serve as a mentor text that demonstrates a specific example. We strongly recommend that postsecondary instructors provide adult learners with mentor texts that contain examples of helpful comments during peer feedback activities. In Appendix B, we have provided an example of a mentor text we created to support our adult learners during a peer feedback activity. This instructor-created mentor text demonstrated examples of helpful feedback provided on a writing draft that established context and significance with a self-selected education problem.

Offer Timely and Consistent Peer Feedback

Mory (2004) stated that in order to be most effective, feedback must be timely and consistent. It is difficult for adult learners to be successful and improve their writing when they do not receive timely and consistent feedback. Thus, postsecondary instructors must avoid assigning extended writing tasks that are at due at the end of a semester and provide adult learners with no feedback prior to submission. As described previously, we encourage postsecondary instructors to subdivide extended writing tasks into several shortened assignments and provide adult learners with well-timed peer feedback for each writing task. By doing so, adult learners have access to more frequent opportunities to receive feedback and make use of all feedback provided to improve future writing performance (Gielen, Peeters, Dochy, Onghena, & Katrien, 2009).

Each time adult learners in our courses complete a peer feedback activity, we facilitate small group or whole group debriefing sessions. During a debriefing session, we may share examples of helpful and non-helpful peer feedback, clarify misunderstandings, or determine whether any explicit instruction needs to take place. Including debriefing sessions as part of peer feedback activities also provides us with rich opportunities to self-evaluate our own teaching practices and identify ways in which we may improve upon them.

Focus on Content First and Conventions Later

Before writing can be an effective way to communicate learning and present new ideas, adult learners must have a focus on writing. Regardless of how writers move from a big idea to a more focused topic (Smith & Swain, 2017), peer feedback plays a vital role in developing and clarifying the ideas that support the central message of the text. Sharing writing drafts during peer feedback activities provides adult learners with the opportunity to have another pair of eyes evaluate the clarity of their underlying message. During initial peer feedback activities, adult learners should analyze the writings of their peers strictly for content and limit the focus of their feedback towards content improvement.

Once the content in a writing draft has been revised to a point where the reader walks away with a clear understanding of the intended message, adult learners can then focus subsequent reviews to address improvement with writing conventions. Writing conventions include appropriate grammar usage, writing mechanics, and style preferences. When postsecondary instructors design peer feedback activities to focus on content first and conventions later, adult learners are strengthened as writers and develop the writing practices needed to be competent and effective writers (National Research Council, 2012).

Conclusion

Training adult learners to engage with peer feedback activities successfully takes a great deal of time and practice. In this article, we described five instructional practices to optimize peer feedback activities for use among adult learners. These instructional practices may be embedded into the instructional design of courses delivered in

online, hybrid, or face-to-face formats. While designing peer feedback activities, postsecondary instructors should first consider the end writing goal and consider the following questions: What do I want my adult learners to write? What content do I want my adult learners to learn through this writing experience? What skills do my adult learners need to develop throughout this writing experience?

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Appendix A: Example of a Peer Review Checklist

✓	Writing Aspect	Guiding Questions
	Content	• Is there a synthesis of ideas supported with valid literature throughout the writing draft? • Are all ideas fully explained? • Is the writing clear and concise?
	Organization	• Throughout the writing draft, are there smooth transitions from one heading to the next? • Within each heading, are there smooth transitions from one idea to the next?
	Stylistics, Grammar, & Mechanics	• Are there issues with APA stylistics? (e.g., in-text citations, entries in the reference list) • Are there errors with grammar? (e.g., verb tense, subject-verb agreement, pronoun references, misplaced or dangling modifiers, adverb use, relative pronoun use, subordinate conjunction use, parallel construction) • Are there errors with mechanics? (e.g., punctuation, spelling, capitalization, italics, abbreviations, numbers)

Appendix B: Example of an Instructor-Created Mentor Text

Technology is everywhere. We are dependent on it. Within technology there are constant new developments that make technology ever-changing. Previous research suggests that when used effectively, it can enable ways of teaching that are much better matched to how children learn, as opposed to the resources of traditional classrooms (Keengwe & Onchwari, 2011; Morgan, 2014; Poole & Evans, 2009; Rochelle, Pea, Oadley, Gordin, & Means, 2001).

Technology allows for students to access mathematical concepts more often, build off of background knowledge, has the ability to "pre-teach" concepts of a lesson to children, as well as give review to previous learned concepts, and technology can add rigor to your curriculum.

The topic of this study is to decipher if teachers truly believe that technology is imperative in the elementary mathematical classroom. Since technology is a big part of human life, this study is to see what teachers are on board with technology being a staple in the classroom, and what teachers are hesitant to jump on board.

Commented [A1]: In this type of writing, the APA manual discourages use of first- and second-person unless you are referring to yourself.

Commented [A2]: According to the APA manual, use past tense when referring to what previous research stated.

Commented [A3]: This is a great point! Specifically, do you mean elementary-aged children? Middle school children? High school children? All of the above? This may be a great place to focus to scope of your proposed study.

Commented [A4]: In order to present the context of your educational problem and establish its significance in a clear and objective manner, you might consider revising the ideas in this paragraph using the following framework:
Paragraph 2: Synthesize and cite literature that described the use of technology in mathematics instruction.
Paragraph: 3: Synthesize and cite literature that described affordances and hindrances of the use of technology in mathematics. Also, are you focusing on a specific grade-level? If so, be sure you only use literature that is relevant to this age group.

Commented [A5]: Since this is the topic of your study, be sure you incorporate literature that addresses teacher perceptions and perspectives regarding technology use in mathematics in the preceding paragraphs. You might even consider adding this as a 4th paragraph.

Educators, Question Your Level of Cultural Responsiveness

By China M. Jenkins, Ph.D., APTD, CFD
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Abstract

Institutions of higher education are becoming increasingly diverse, while the faculty of these institutions generally lack the diversity of the student population they teach. This imbalance necessitates educators implement culturally responsive teaching within their classrooms. The intent of this article is to guide educators in determining whether they practice and implement culturally responsive teaching within their classrooms. To make this examination, I present questions that educators should ask themselves to determine their level of cultural responsiveness. In response, educators should look to investigate their level of cultural competency, analyze social constructions that reflect growth in cultural responsiveness, and verify their transformation as a culturally responsive educator.

Introduction

Institutions of higher education are becoming increasingly diverse, with a growing number of students of color, differing religious faiths, varying sexual orientations, and gender expressions, etc. Meanwhile, the faculty of these institutions generally lack the diversity of the student population they teach. This imbalance underlies many of the problems these schools presently face, such as retention and recruitment, campus climate and student success. Traditional methods of education may fail to support students from varying backgrounds. The challenge of meeting the needs of diverse learners is especially prevalent in classrooms where the instructional styles of the teachers are incompatible with their students' learning preferences (Donkor, 2011). Many students will attend classes with educators who do not understand them or their learning needs. It becomes paramount educators develop an awareness of how the intersectionality of their students' ethnicities, culture, and identities impact the

teaching and learning process so that they may meet the learning needs of their students. Faculty members must employ teaching practices that best serve all students. This requires educators to be culturally responsive in their teaching practices.

Culturally responsive teaching uses the learners' cultural referents to empower them academically, socially, psychologically, and politically (Ladson-Billings, 1992). Such teaching does not fit the school culture to the students' culture but uses students' culture to help students understand themselves and others, structure social interactions and conceptualize knowledge (Ladson-Billings, 1992). Both learners and teachers benefit from the effects of culturally responsive teaching (Maher & Tetreault, 2001; Villegas & Lucas, 2002). Educators and students thrive in a learning environment that integrates the identities and beliefs of all. Educators then understand their own identities, examine their own philosophies, and endeavor to grasp the context within which they are teaching. This article was written to guide educators towards

Cultural responsiveness by helping them know their beliefs within and outside of their classrooms. Educators should ask themselves such questions as: Am I culturally competent? Do I analyze social constructions? Am I undergoing transformation as an educator? Critical reflection on the answers to these questions will aid educators in understanding how to equip themselves better and transform their teaching to increase cultural responsiveness.

Am I a Culturally Competent Educator?

Cultural competence is a set of congruent behaviors, attitudes, and policies that come together to enable effective cross-cultural interactions (Cross, Bazron, Dennis, & Isaacs, 1989). It acknowledges and incorporates the importance of culture, assesses cross-cultural relations, employs vigilance towards the dynamics resulting from cultural differences, expands upon cultural knowledge, and helps one adapt to meet culturally-unique needs (Cross et al., 1989).

McCalman (2007) suggested the first step toward becoming culturally responsive is understanding one's own culture and how it affects her interaction with others. For an educator to be culturally responsive, she must utilize cultural competence to

understand both how to interact with students and first interactions between learners that have cultural diversity from her or each other. How can an educator understand if she is culturally competent? One trait of being a culturally competent educator is the ability to impart multicultural skills to students (Vescio, Bondy, & Poekert, 2009). This teacher does not shy away from the discourse of oft-misunderstood topics of culture, such as white privilege, but instead recognizes the dynamic her own culture can have on the instruction of her students. She also understands and acknowledges the different cultural norms of the students represented in her classroom.

Another trait of this educator is having an appreciation of diversity that is evidenced in her teaching agenda (Richards, Brown & Forde, 2007). She strives to know and comprehend her students' cultural differences and how those differences impact their learning (Richards et al., 2007; Ginsberg & Wlodkowski, 2009; Gollnick & Chinn, 2016). Canniff (2008), Gay (2000), and Sealey-Ruiz (2007) suggested educators who practice culturally responsive pedagogy can have a positive influence on the lives of their students because they develop alternative pedagogies to complement the educational experiences of their students.

A teacher with this trait rejects the notion that ideas of one group are more valuable than the ideas of another group, instead working to normalize differences by teaching from a diversity-centered perspective (Richards et al., 2007). Guy (2009) discussed his commitment to creating an inclusive class environment by stating, "…I work at constructing dialogic, open-ended, and participatory environments in which all individuals, regardless of background or identity, can speak and be heard" (p. 43). She also makes her teaching agenda student-centered, rather than teacher or curriculum focused. She knows each student and is responsive to their learning needs. She has a curriculum that allows for multiple perspectives to be represented (Canniff, 2008; Richards et al., 2007). This educator implements readings and materials that integrate perspectives from beyond mainstream thought; she recognizes the value of showcasing the works of those that resonate with her diverse classroom. She does this through understanding how students of different backgrounds communicate, construct knowledge, and learn.

As opposed to an assimilationist viewpoint, which ascribes to the idea that everyone should forsake their culture and accept the mores of mainstream society, this educator adopts cultural pluralism, a view that all differences should be preserved and accepted as equally valuable (Banks, 2006). She accepts her students' reality is

constructed by their race, class, gender and other aspects of being (Villegas & Lucas, 2002). She can appreciate these differences as the students' strengths and resources, rather than deficits that need to be corrected to enhance their ability to learn (Villegas & Lucas, 2002).

Do I Analyze Societal Effects on Education?

Social and political forces affect the work of educators within the classroom, and especially affect students within and outside of the classroom. Educators "need to understand that social inequalities are produced and perpetuated through systematic discrimination and justified through a societal ideology of merit, social mobility, and individual responsibility" (Villegas & Lucas, 2002, p. 22). A culturally responsive educator not only tries to influence her peers towards understanding these social inequalities; she also encourages other educators to adopt a sociocultural consciousness in the area where they have the most influence: the classroom.

What does it look like when an educator is able to analyze the societal effects on education? To begin, she critically reflects upon her own positionality and understands how it impacts the relationships between herself her students (Canniff, 2008). Through critical self-reflection, she develops a sociocultural consciousness that challenges preconceived ideas and beliefs (Gay & Kirkland, 2003; Villegas & Lucas, 2002). She acknowledges her biases as well as her privileges. She asks herself, "How are we complicit-intentionally or otherwise in maintaining the cycles of oppression that operate in our courses, our universities, our schools, and our society" (Cochran-Smith, 2003, p. 83)? This educator is keenly aware she may teach students designated as societal rejects. Whether due to ethnicity, religious beliefs, gender identity, and expression, or any other quality that defines her students, she understands those in her classroom may have been mentally, emotionally or psychologically harmed by society or even the educational system itself. She also understands the dangers of deficit theory, which paints certain students as intellectually and morally deficient rather than exposing the institutional and structural power imbalance that prevails over society (Gorski, 2008). She analyzes the hegemonic social constructions that undergird social norms, which impacts people within and outside of the education system. She understands "social inequalities are produced and perpetuated through systematic discrimination and justified through a societal ideology of merit, social mobility, and individual responsibility" (Villegas & Lucas, 2002). She impacts her

pedagogical framework through examine her beliefs and knowledge concerning herself, others and society at large.

Once that paradigm has been expanded and rearranged, the framework from which she views the world is foundationally and permanently transformed (Poutiatine, 2009). This educator will infuse diversity and social pluralism in every part of her teaching, regardless of the subject being taught (Gorski, 2006).

Am I Undergoing Transformation as an Educator?

Growth as a culturally responsive educator does not take place without a personal and professional transformation. Transformation is "the process by which we transform our taken-for-granted frames of reference" (Mezirow, 2000, p. 6) and "how we learn to negotiate and act on our own purposes, values, feelings, and meanings rather than those we have uncritically assimilated from others" (Mezirow, 2000, p. 8). Mezirow claimed that transformation happens for people during critical reflection and dialog with others when they critically examine beliefs, emotions, and meanings that they have learned from their environment. Transformation involves more than just a sudden and rational change of mind and behavior. In the case of culturally responsive educators, it is common to begin the process of transformation when they experience an event that invokes critical reflection (Canniff, 2008).

One of the first steps in engaging in critical reflection for cultural responsiveness begins with examining how cultural belief systems influence the experiences of learners and teachers' beliefs about their students (Canniff, 2008; McCalman, 2007). Not only do they question their assumptions and beliefs, but culturally responsive educators also examine their own personal histories, the histories of others, and how each person's history has shaped his or her beliefs and outcomes in society (Richards et al., 2007; Vescio et al., 2009). Therefore, educators should seek to understand not only who they are and how they think, but to challenge their notions of knowledge, question their assumptions, and to perceive the framework from which they are teaching.

What are signs of transformation that an educator can look for to show her transformation? A culturally responsive professor experiences disorienting learning and teaching encounters that cause her to rethink her beliefs. As she changes in her understanding of sociocultural differences and equality, her pedagogy transforms to

match her values. This educator establishes relationships both with like-minded individuals as well as those of a different worldview. These relationships challenge her beliefs and convictions of how she views the world. She is never afraid of correction and welcomes the change in her worldview when she understands her mistakes. This educator cannot choose to "unknow" what she has learned through transformation without intentional denial. Her transformation and cultural responsiveness are therefore constantly evolving. As she ages and encounters diverse people and circumstances that challenge her perspectives, she experiences growth in transformation. Her transformation occurs across time because of the multiple dimensions of being (rational, affective, spiritual, imaginative, somatic, and socio-cultural) experience transformation at varying periods in a lifetime (Tolliver & Tisdell, 2006).

Conclusion

Institutions of higher education have responded to their increasingly diverse student bodies by becoming more diversity-oriented, not only because of the integration of differing voices and beliefs but also due to external pressures from government and society. One of the answers to meeting this challenge is in culturally responsive teaching. Many scholars have argued that culturally responsive teaching is necessary for every educator to ensure the success of their students. However, one does not become culturally responsive on a whim – there is a period of transformation that occurs in the lives of each educator that is necessary for equipping them to take on the challenges associated with culturally relevant teaching.

Even if educators have good intentions, they can still encounter difficulties in the classroom if they are not familiar with their students' cultures, experiences, and communities. This requires the development of cultural consciousness and engagement in critical reflection about the influence of culture in the class, curriculum, and institution. Changing the dominant power structure means educators are obligated to lead the way in making the pedagogical changes before they can impart them to their students.

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Classrooms on the Frontier: Integrating Original Research into Lectures

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Abstract

The role of an academic is often spread across two main areas: researching and teaching. Although some argue that the scarcity of time, energy, and commitment precludes the ability to do both well, and are therefore substitutes, we argue that these roles can be complementary. That is, by incorporating original research into the classroom, several benefits can be gleaned by both faculty and students. We feel that if done correctly, a professor's research and teaching can mutually benefit, as well. To illustrate and support this argument, we have included two specific examples of using original research to teach relevant concepts in the classroom.

Introduction

Academics devote the bulk of their time to two areas: teaching and research. However, it is often the case that research and publishing are more influential in determining rewards and influencing salary decisions (Tuckman & Hagemann, 1976). Many people have pointed to the scarcity of time, energy, and commitment, and noted that devotion to research takes attention away from teaching (Fox, 1992; Trice, 1992). As a result, a common perception is that professors prioritize research to the detriment of their students: that there is a tradeoff in teaching and research quality.

Relatedly, Marsh (1984) posits that there exists a positive relationship between research ability and teaching ability. Indeed, some have argued that the skills and

qualities that lend themselves to good research also predict superior performance in the classroom (Jauch, 1976; Neumann, 1992). However, notwithstanding the positive correlation between abilities in these two arenas, Marsh (1984) suggests that there exists a negative relationship between time spent on research and time spent on teaching.

In this article, we will argue that these two important features of academic life (i.e., research and teaching) are complements and that if professors integrate their own research into their classes, there are benefits for both the students and professors. We are not the first to assert that integrating research into the classroom is beneficial. Brew (2006, p. xiii) convincingly argues that research and teaching ought to be tightly integrated, thus creating "inclusive scholarly knowledge-building communities in universities." Smith and Rust (2011) propose that an undergraduate curriculum that focuses on direct student involvement in research would provide significant benefits for both students and faculty.

The opinions put forth by the authors are at this time backed by anecdotal evidence. However, we strongly feel that implementing the approach of bringing original research into the classroom will improve the classroom dynamic and yield better student outcomes. We feel that providing additional evidence is a fruitful avenue for future research.

Benefits to Students

By bringing original research into the classroom, there are several benefits to the students. First, it allows students to see cutting-edge findings that are a part of an ongoing conversation, rather than simply "receive wisdom." Second, works-in-progress can be presented to students, which allows them to be actively involved in the knowledge generation process in a low-cost and low-risk manner. Third, being close to this knowledge generation process makes it salient that answers are within reach. Students become encouraged and motivated after seeing how the process occurs and how answers can be generated. Fourth, by connecting our findings to practical outcomes, we are able to point out real-world implications. This demonstrates the value proposition for students, often something that is missed when learning theory. Fifth, by reducing social distances between students and "faceless scientists," they are able to connect with the findings at a deeper level. Sixth, the

professor's expertise on their own research allows for a greater discussion and deeper probing by the students, which enables a level of insight that is not usually attainable in the classroom. Finally, exposing students to active research can make them realize that there are a lot of open questions, and much yet to discover. Understanding that knowledge gaps still exist makes the field seem more interesting and less intimidating.

Benefits to Faculty

Similarly, there are several benefits to faculty of bringing their own research into the classroom. First, by presenting works-in-progress, faculty are able to elicit real-time feedback. This often results in students ruminating on the ideas presented, and suggesting research extensions or their own research questions. This can sometimes lead to co-authorship with motivated students. After presenting original research in the classroom, both authors have been approached by a number of students asking to learn more about the topics, sharing their own ideas, and volunteering to be involved in future projects. Involving undergraduate students in research has a positive effect on "fourth-year graduate degree aspirations" (Kilgo & Pascarella, 2015). Second, most faculty members are enthusiastic about their own research. This enthusiasm is often contagious in the classroom and also allows us to create interesting and interactive lesson plans. This results in a more enjoyable classroom experience for both faculty and students. Third, integrating one's own research into lesson plans may reduce preparation time because the materials are on-hand and familiar. Finally, including research in lectures allows faculty to practice presenting an idea in an accessible and compelling way, which can be used when presenting to professional and academic audiences.

Potential Issues

Although there are many benefits to including research in the classroom, this approach is not without its caveats. First and foremost, the research needs to be relevant to the subject being taught. This is often not an issue for those teaching classes directly related to their area of expertise, as is the case for the current authors, but if there is not an obvious parallel between the class topic and the research, then students may become bored and unengaged. Second, it is important to ensure that

the main "takeaways" from the research are sufficiently general to appeal to all of the students. The point is to use our research to highlight and demonstrate larger concepts that fit within the theme of the course.

Illustrations of Using Research in the Classroom

To illustrate how to incorporate original research into the classroom, we have included several specific examples. We provide examples of how research can be integrated into classes that focus on introducing students to analytical tools, such as statistics and game theory. We also provide examples of how learned knowledge and theories can be applied to solve real-world problems in the classroom.

Economics Example

In an advanced statistics class, the focus is often on the statistical techniques, and it can be difficult to engage the class. To demonstrate the relevance of the material, as well as to provide an interactive classroom exercise, the second author uses data sets generated in economics experiments from his own research.

To illustrate, when studying linear probability models, in which the variable of interest is binary, the data set used in the classroom exercise involved an experiment investigating the determinants of entry into conflict games. The class first discussed the assumptions that would have to be made to use a linear probability model to answer this question. Afterward, students were asked to open the data in Stata (a statistical software package) and estimate the model themselves. They were then asked to interpret the results, and we discussed it as a class. This exercise demonstrated the value of the technique by showing how the professor used it in his own research. In addition, it reinforced the statistical method by having the students actually perform and interpret the results of the relevant statistical tests. It also provided an interactive dynamic to the lesson, which improved student engagement. Several students approached the second author after the class to ask about the research methodology, and to inquire about what related research was ongoing.

In a course on game theory, the focus is often on concepts of equilibrium, and how to solve for equilibrium in a particular game. To illustrate Bayes Nash Equilibrium, the second author provided the class with one of his manuscripts, which

derived Nash equilibrium in a particular type of incomplete all-pay auction. The class went through the analysis, which provided an excellent demonstration of the mathematical techniques involved in finding equilibrium in a larger class of games. The student's interest in this complex topic was heightened by the fact that this exercise demonstrated the value of the techniques (they were used to generate the manuscript), as well as by the professor's enthusiasm for the topic. In addition, once students understood the process, they became excited by the fact that extensions they proposed had yet to be answered, and that they now had the tools that would allow them to address them.

Consumer Behavior Example

In a consumer behavior class, there is a continual discussion of the importance of research. That is, researching consumers can reveal paths forward when making marketing decisions. However, many students do not initially make the connection between research, knowledge generation, and fact-based decision making. The first author brings his own research into the classroom to illustrate this.

Beginning with the broad question "Is paper recyclable?," 100% of the students will raise their hand to indicate "yes." This question is followed by statistics that reveal that 25% of paper that is disposed of is not recycled (EPA 2010), and 60% of what is in landfills could have been recycled (EPA, 2013). Conversation is then steered towards why recyclable materials might end up in the trash. The first factor discussed is a lack of education or knowledge (Andrews, Gregoire, Rasmussen, & Witowich, 2013), but in situations where the vast majority of consumers are aware that paper is recyclable, this is less of an issue. The second factor is effort (Ludwig, Gray, & Rowell, 1998). That is, is it too much effort for people to go out of their way to recycle a product? However, most trash cans have a companion recycle bin next to them, meaning effort is less of an issue in modern society. This is when students are lead to think about what else could explain why consumers dispose of known recyclable products, and thus, explicitly draw attention to a formulated research question.

Discussion then switches to specific research projects undertaken to address this question. The project reveals that when a product has been distorted (e.g., crumpled or torn paper, crushed soda cans), it is less likely to be recycled because it is incorrectly viewed as being less useful and therefore erroneously categorized as "trash" (Trudel & Argo, 2013; Trudel, Argo, & Meng 2016). To directly connect this finding to the

marketing world, examples of an advertising campaign run by Coca-Cola that uses crushed cans in order to encourage recycling are shown. Students are often inspired by seeing the direct connection with original research and a large company's decision making.

The distortion example above reflects how a tangible aspect of a product can influence when/if it is recycled, whereas the second example focuses on an intangible aspect of the product. Specifically, the second project reveals that consumers are more likely to recycle a product if it reflects part of their self-identity (e.g., social roles, personality traits, and defining characteristics that express who we are); otherwise, they would be "trashing" a part of their "self" (Trudel, Argo, & Meng 2016). This section begins by establishing that physical and digital representations of aspects of their self-identity can be imbued with deeper meaning. That is, products that reinforce or express part of an individual's self-identity are connected to the individual via a "possession-self link." After discussing individual experiments and the findings, the class is asked how this information can be used in marketing to encourage recycling. This allows students to solve a recognized problem using a new concept.

Finally, as a more practical, applied example, a project that uses emoticons (e.g., red frowny faces) to activate an injunctive norm (e.g., that "trashing recyclable products is unacceptable"), which results in an increase in recyclable materials being placed in the correct bin is discussed. The lesson is concluded by summarizing how consumers disposing of products is an important area to consider, and how we can use consumer behavior knowledge and research to encourage positive behaviors.

Conclusions

While it may seem daunting to plan lessons using research on the frontier of individual discipline, we have found that such research can be integrated into a wide variety of classes in a way that adds value for students. In particular, the research of the professor can be used to reinforce the learning objectives of the class in a novel and engaging way.

It is important to tailor the level to the students. In our view, it is less important that students completely understand all aspects of the research discussed than it is to engage students in the research itself, even if at a relatively superficial level. In fact, if

part of the research is too advanced for students, instructors can highlight this in class, and use this to interest students in future classes.

In this paper, we have highlighted the benefits of integrating one's own research into the class. However, it is important to note that many of the benefits to students can also be realized by discussing research at the frontier done by other academics. One approach that is particularly appealing is discussing the research of faculty at the lecturer's home institution, not least because the researcher can come to the classroom to discuss the topic with the students in person.

There are many implications of introducing your research into the classroom for future classroom practice. However, we would like to highlight two that seem like particularly interesting avenues to explore. First, our approach suggests designing lesson plans with your research in mind. That is, to actively look for ways that your research can enhance your classroom dynamic. We feel that this could be taken a step further so that individual research becomes part of the classroom dynamic. For example, professors could bring research questions to the class and design lesson plans about answering these questions. This could involve, for example, designing a statistical plan of analysis for a data set or formulating experiments to address research questions. This deeper integration would directly involve students in the knowledge generation process.

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Empowering Faculty Using Distance Learning Mentoring Programs

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Abstract

This article discusses the value of developing mentoring programs for the empowerment of distance learning faculty. The paper describes various ways mentoring relationships enhance the development and teaching of distance learning courses. Distance learning faculty mentoring programs consist of a process where a more experienced faculty member assists a newer faculty member in developing a distance learning course. By creating and supporting distance learning faculty mentoring programs, higher education institutions can provide an efficient and valuable way for new distance learning faculty to gain empowerment as well as the skills and knowledge they need to teach online. This article asserts that mentoring programs for faculty interested in teaching online may help transform universities from archaic institutions reliant on paper and pencil into living entities that meet the needs of the modern learner.

Introduction

Institutions of higher education in the United States have recently acknowledged the need for more distance learning courses and programs. Current statistics indicate that distance learning enrollments have increased for the fourteenth straight year (Allen & Seaman, 2017; Radicioni, 2018; Seaman, Allen, & Seaman, 2018), and this growth does not seem to be slowing down. It is estimated that six percent of all students take at least one distance learning course, and the number continues to grow as more institutions add distance learning options to the curricula. Laura Howe, the Vice President of Global Media and Communities at Pearson, claims, "It is

encouraging to see the upward trend in distance learning enrollments continue as students take advantage of flexible, high-quality education opportunities that position them for lifelong success," (Radicioni, para. 5.). These promising statistics have led many researchers to examine ways to empower faculty while developing and teaching in this innovative way.

Empowerment of faculty is a critical component of any successful distance learning program. Arenas, Gray, and Hamner (2009) define empowerment as giving individuals the opportunity to grow and to use their experiences to contribute to decision-making processes. By providing them with new online course and program options, faculty are able to teach varied courses in areas they may not have been formerly offered in a face-to-face environment. Similarly, online instructors are encouraged to use new, innovative techniques in order to reach this wider, more diverse audience. The CEO and Executive Director of the Online Learning Consortium (OLC), Kathleen S. Ives asserts, "The growth in distance learning enrollments, in part, reflects the commitment to quality and innovation by those designing and delivering distance programs" (Radicioni, 2018, para. 6).

Although this transition from face-to-face instruction to distance learning seems like a positive one, some traditional, face-to-face professors resist this change and are hesitant to teach online (Lloyd, Byrne, & McCoy, 2012; Maguire, 2005). There are various reasons for this reluctance and fear. The process of redesigning face-to-face instruction to a distance learning format is a major paradigm shift for many faculty members (Arenas, Gray, & Hamner, 2009). The shift includes changing methodology, modifying media, and learning new technological applications. Traditional face-to-face instructors cite a variety of reasons for their hesitancy to switch to a distance learning format, including unfamiliarity with the pedagogy, lack of technical skills, uncertainty about the future of distance learning and the increased time involved learning a new way of teaching. Although these faculty members may be highly skilled in research and various forms of on-ground classroom instruction, they have little knowledge of online course design, the development of digital media, and the use of online learning management software. In order to feel empowered to teach distance learning courses, these faculty members need to feel the support of other instructors who have successfully transitioned from teaching face-to-face to teaching from a distance. This article will examine how higher education institutions can develop faculty mentoring programs to empower faculty during this process.

Background of Distance Learning and Faculty Involvement

Distance learning, otherwise known as distance education, has been defined as an institution-based form of teaching and learning where students are physically separated from instructors, and interactive telecommunication systems connect students with resources (Simonson, Smaldino, & Zvacek, 2014). There are four main characteristics that define distance learning. Primarily, distance learning is carried out through an institution. Students who succeed in distance learning courses are awarded college or university credit. Geographic separation is inherent in distance learning; learners and instructors are located in different areas. Interactive telecommunications connect the learning group with each other and with the instructor. Most often, electronic communications such as electronic mail or web-based tools are used, but traditional forms of communication such as the postal system may also play a role. Finally, distance learning establishes an official learning community, which is composed of students and an instructor.

There are specific motivating and inhibiting factors affecting faculty involvement in distance teaching and learning. Despite the demand and growth of distance learning courses and programs, the level of skepticism among faculty remains high (Wingo, Ivankova, & Moss, 2017). Certainly, faculty perceptions are important for a variety of reasons (Mandernach, Mason, Forrest, & Hackathorn, 2012). It is critical that faculty are onboard with technologically related initiatives and understand how to implement effective online courses. "In essence, successful online instruction does not happen by magic. It is a collaboration of instructors, administrators, students, and the community at large" (Yang & Cornelious, 2005, p. 13).

Rovai (2002) discusses the development of a community of distance learners and teachers. Community can be viewed as what people do together, rather than any specific place. Using this definition, community becomes separated from the actual location. Community is no longer tied to the physical college campus; it encompasses the idea of becoming part of a group (Wellman & Gulia, 1999). If created in an appropriate manner, members of educational communities can develop feelings of belonging and trust no matter the time or space. These feelings can help instructors feel empowered to transition to a distance learning modality of teaching. Members of a community believe that "they matter to one another and to the group; that they

have duties and obligations to each other and to the school; and that they possess a shared faith that members' educational needs will be met through their commitment to shared goals" (Rovai, para. 9).

The learning community is traditionally conceived as a group of students and professors located on the university campus or another physical location, and therefore many traditional faculty and administrators are constrained by a view of community tightly bound to the notion of students sharing ideas in a physical classroom (Haythornthwaite, Kazmer, Robins, & Shoemaker, 2000). However, Wellman and Gulia (1999) suggest that virtual communities are comparable face to face communities. Individuals who interact in an online environment can develop strong ties and trust which can lead to a sense of community. Brown (2001) studied the development of virtual communities in distance learning courses and claims there is a three-stage process. First, students develop virtual friendships with others in the course. Secondly, students develop community acceptance as they participate in a threaded discussion on a meaningful topic, and finally, camaraderie is achieved after a long-term, intense association involving personal communication with others in the course. Brown's work with online students can be applied to distance learning instructors.

Community empowerment among distance learning faculty can be promoted by including collaboration between instructors, administrators, and students (Mandernach, Donnelli, Dailey, & Schulte, 2005; Yang & Cornelious, 2005). To develop a strong distance learning community, colleges and universities may choose to establish informal or formal faculty mentoring programs. Mentors answer questions of new online instructors and facilitate the process. This support is a critical piece in overcoming the challenges and self-perceived barriers that many new distance learning instructors encounter. This article will suggest several possibilities for the development and maintenance of these distance learning mentoring communities.

Distance Learning Mentoring Programs

In order to empower faculty and develop a sense of community in the distance learning community, higher education institutions can implement mentoring programs for distance learning instructors (Green, Alejandro, & Brown, 2009). "Mentoring has long been recognized as an effective method for enabling new

employees to develop the knowledge, skills, attitudes, and behaviors required to successfully discharge their responsibilities; in addition, mentors can help new employees better understand the organizational culture and institution-specific norms" (Wild, Canale, & Herdklotz, 2017, p. 37). Mentoring in terms of distance learning denotes a process where a more experienced faculty member or committee observes and assists a newer faculty member in developing a new distance learning course or migrating an existing course from face-to-face to an online or a hybrid version. Veteran distance educators are compensated for their services or volunteer to serve as mentors to new distance learning instructors. These mentors provide guidance and support on various distance learning designs and instructional issues. Mentoring may also include a time period where the mentor works with and supports the newer faculty member during the initial running of the course.

A mentoring program is a sign of an institution's commitment to professional development and the general distance learning initiative (Mandernach, Donnelli, Dailey, & Schulte, 2005). Mentoring has the potential to increase feelings of empowerment and connectedness between faculty and the university (Brannagan & Oriol, 2014). Wild, Canale, & Herdklotz (2017) assert that the single mentor model has developed into mentoring networks or programs. These networks or programs can include one-on-one and group mentoring as well as providing multiple mentoring types and a variety of mentors. Mentors can provide individualized professional development activities such as how to facilitate online discussions, how to present a live video lecture, how to create engaging distance learning lessons, and how to assess online participation (Arenas, Gray, & Hamne, 2009). This variety and choice can create an open dialogue between veteran and novice faculty while cultivating a well-rounded and engaged campus community.

By creating and supporting a strong mentoring distance learning faculty network or program, higher education institutions can provide an efficient and valuable way for new distance learning faculty to gain empowerment as well as the skills and knowledge they need to teach online. A distance learning mentoring program can provide faculty with a community where they can seek help and ask questions without judgment (Green, Alejandro, & Brown, 2009). "Mentors should be available in each department or college who can answer questions that come up from faculty who have limited experience in teaching online courses" (Yang & Cornelious, 2005, p. 14). A mentoring team can include members who are experienced with distance learning practices and philosophy (Arenas, Gray, & Hamner, 2009). It is understood that the

veterans in the mentoring program have experienced the same process, so they are able to assist and support these new instructors. These members will help orient the newer individuals who are not familiar with distance learning practices. Mentors should include faculty from a variety of academic areas. This community of learners can stand by and facilitate the often lonely and intimidating process of online course development and teaching.

Furthermore, veteran distance learning faculty often view mentoring as a way to help their colleagues and give back to their institution (Parker, 2003). This collaboration can motivate, empower, and retain both new and veteran faculty members. Once teaching within the community of distance learning, many faculty feel their relationships with online colleagues are stronger than their relationships with colleagues in the traditional face to face setting (Muirhead, 2000). These relationships help empower them to continue their journey into distance learning and teaching. Many instructors who work from home offices report closer professional relationships with online colleagues than with colleagues in traditional school settings because they are able to reach out with questions or issues at any time. The continuous bonds create a sense of belonging and empowerment that extend outside the office or classroom doors.

Bower (2001) describes a variety of communication strategies that can be used to further empower faculty when they are involved in distance learning mentoring efforts. Bower suggests open communication throughout the planning and implementation stages of any distance learning mentoring program development. When faculty are actively involved in the decision-making regarding distance learning efforts, their concerns about the quality of the distance learning experience can be lessened. Arenas, Gray, and Hamne (2009) agree that faculty should be actively involved in all planning to personalize training. Various forms of technology (wikis, blogs, video conferencing, online discussion boards) can be used during this process to assist in the practice and application of tools.

Green, Alejandro, and Brown (2009) assert a mentoring program creates positive peer models and that mentoring can be used for various reasons. Most importantly, in this case, mentoring can be used as a quality control tool. When an experienced faculty member observes and assists a new distance learning faculty member in migrating a face-to-face course to an online or hybrid format, the main objective is to make sure the new course format meets required accreditation and university

standards. The second element of the mentoring process is course observation. The senior distance educator can access the new instructor's course shell in order to provide feedback during the initial teaching of the course. This process is similar to traditional, on-campus relationships where a veteran faculty member observes a new instructor in the classroom and offers suggestions to improve his or her pedagogy.

In addition to providing important instruction and support, a strong mentoring program can help assimilate new full-time, part-time or adjunct faculty into the higher education institution. The experiences and camaraderie the faculty share help the newcomers feel welcomed and a part of the academic community (Brown, 2001, Slade, Robb, Sherrod, & Hunker, 2017). Parker (2003) also suggests hosting faculty roundtables to allow seasoned faculty to share their distance teaching experiences with the interested faculty of all levels. These roundtables may be held in person or virtually using online conferencing tools such as Google Hangout or Zoom. Arenas, Gray, and Hamne (2009) suggest including professional development activities such as video presentations, online discussions, and face-to-face discussions. Using this model, a mentoring strategy can help to retain both new and the established faculty members. The primary goal of the mentoring program is to have faculty learn from each other rather from an external expert.

Brannagan and Oriol (2014) describe a mentoring program model that could be used with adjunct faculty members. This model involves pairing experienced full-time faculty mentors with adjunct faculty. The mentors and mentees are matched based on educational background, professional experiences and course assignments. Other considerations include communication preferences, which are assessed to increase the likelihood of compatibility. Before the mentee teaches his first distance learning course, the mentor introduces him to the content and materials that are required for teaching a distance learning course at the institution. Then, ongoing communication and support are encouraged during the mentee's development and initial teaching. Brannagan and Oriol suggest, "Mentor and mentee must discuss the requirements for each module as it opens and then resolve any questions, issues, or conflicts as they occur. Mentors provide feedback as adjuncts grade written submissions, thus presenting an excellent opportunity to ensure consistency in grading, effective response techniques, and program stability. As the course progresses and the adjunct becomes more comfortable with content, materials, and format, the intensity of interactions between the mentor and mentee diminish" (p. 129).

Likewise, Slade, Robb, Sherrod, and Hunker (2017) found that both formal and informal mentoring experiences can be used as a strategy for facilitating adjunct professors involvement in the distance teaching community by enhancing their sense of belonging and connectedness. Mentoring relationships may provide an adjunct faculty member with a "go-to person" who can address situational concerns when the needs arise. Although mentoring can help all faculty, adjuncts are a different breed since many of them hold other full-time jobs and are often teaching fully from a distance. Wild, Canale, and Herdklotz (2017) claim that faculty members who invest time and energy in their mentoring relationships are much more likely to benefit from the experiences of others than are their peers who try to "go it alone" (p. 40).

Conclusion

This article addresses ways that faculty can be empowered to design and teach distance learning courses as higher education institutions develop accompanying mentoring programs. Faculty mentoring programs provide a valuable way for instructors to gain empowerment as well as obtain the knowledge, skills, and support necessary to teach online. The mentoring concept is crucial for institutions of higher learning; mentoring programs in distance learning may, in fact, be the missing link in transforming universities from archaic institutions reliant on the paper, pencil, and podium into living entities that meet the needs of the modern learner. These institutions can benefit from supporting faculty interested in distance learning through effective mentoring programs as new and veteran faculty alike strive to teach effectively in today's technological world.

Compliance with Ethical Standards:

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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The Relative Influence of Instructor Training on Student Perceptions of Online Courses and Instruction

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Abstract

Online learning opportunities have greatly increased in past years. Various studies have examined online courses and instructor practices but have not examined students' perceptions of their online courses and online instructors who were offered a voluntary online certification program. Students who took online courses at a Midwestern university completed a survey related to their perceptions of their individual online course and instructor. Results showed that instructors who were certified received higher, positive ratings than instructors who were not certified. The certification program utilizes a "faculty as student' model, where faculty take courses from a student learner perspective to provide experiential learning about the pedagogy needed for successful online learning and effective teaching.

Introduction

Online learning opportunities have greatly increased throughout the United States (Online Learning Consortium, 2016). The expansion of online education has notable benefits, such as improved flexibility and convenience of learning opportunities for students, compared to traditional face-to-face course delivery (Sher, 2008). However, online teaching is different from traditional face-to-face learning environments, particularly because students must self-regulate much of their own learning (Boyd,

2004) and the nature of interactions among students and between students and instructors differs (Smith et al., 2001).

A growing number of studies have examined various aspects of online course design and instructor practices in enhancing student learning and satisfaction (Kuo et al., 2013, Yukselturk & Yildirim, 2008; Sessums et al., 2006; Jiang & Ting, 1998; among others), yet many of these studies provide unclear or contradictory information. For example, strategies that promote online "connectedness" between students have been proven critical for learner success in some studies (So & Brush, 2008; So & Kim, 2005). Other studies suggest that the major predictor of success and satisfaction is the student's "skill at learning to learn," followed by student-faculty contact, program factors such as relevance and integration, and opportunities to learn outside the traditional framework (Neumann & Neumann, 2016). This research has yet to provide a uniform set of data and recommendations for student satisfaction and success in distance education.

In response to the increased demand for online education, some institutions have increased online enrollment opportunities without necessarily thinking much about the qualitative aspects of online teaching and learning. Others have offered varied professional development opportunities to support both the quantitative and qualitative aspects of online success.

The nature of professional development opportunities for online learning is also varied and changing. In 2016, 94% of 2- and 4-year institutions developed their own distance education courses (IES NCES, 2016). Eighty percent of all institutions offered faculty training for online teaching, while 20% did not (Herman, 2012). In addition, a recent and comprehensive survey revealed that the following most common types of faculty development programs are offered by 75% or more of higher education institutions include website/LMS with resources, technical service (without content or pedagogy), printed and multi-media materials, consultation/informal exchanges, internal workshops (<4hrs), conference attendance, and critical review of courses. Finally, fifty-four percent of institutions offer online synchronous training (Herman, 2012).

The survey also revealed seventy percent of faculty described their institutional support of online instruction as average or below average, while one third described online development and teaching as requiring more time than traditional courses

(Herman, 2012). Previous studies did not control for the previous training of the faculty to teach online and thus, may be a partial contributor to the conflicting results.

Based on this research, we, a group of certified online faculty members at a Midwestern university, wanted to learn more about the university's online students, specifically their perceptions of their current online courses and instructors. Since we were certified through the university's voluntary Online Instructor Certification Program (OICP), we wanted to find out if the students would report greater online satisfaction and success with faculty who had participated in the OICP compared to faculty who had not participated in the program. The primary objective of this study was to compare students' perceptions between students who took from a certified instructor versus those who took the course from a non-certified instructor.

Overview

Online Instructor Certification Program (OICP)

The Online Instructor Certification Program (OICP) offered at the Midwestern university where this study was conducted was designed and is currently being used to teach the skills, knowledge, and best practices required of quality online/hybrid instruction. The voluntary program allows online/hybrid instructors to choose to become certified at one of three levels: Basic, Advanced, and Master. In order to better understand online pedagogy, faculty who are involved in this certification are treated as online students as they complete the levels through the university's LMS, directed by the Instructional Design Services on campus. The program's content includes an understanding of the course review process, measurable course objectives and learning outcomes, types of assessment, communication strategies, collaboration, social networking, Cloud services and applications, copyright, multi-media, and alignment of goals, content, and assessment. Faculty who wish to obtain the Master's Level must have taught online for four semesters, while faculty who wish to obtain the Basic Level must have taught online for only one semester, prior to starting the training. As faculty move through the levels within the OICP, the content becomes more in-depth and the activities become larger and more collaborative.

Methods

Survey Planning

We decided first to identify a survey that focused primarily on the students' perceptions of various online components with a particular emphasis on online course and online faculty satisfaction. We utilized portions of the Distance Education Course Evaluation Instrument survey, developed by an academic working group at the University of Florida (Sessums, Irani, Telg, & Roberts, 2006). The survey includes sections on instructor preparedness, student preparedness, technology, and course design. Adaptations to this survey include supplemental questions to identify relevant student demographics (see Appendix A). Broadly, the survey was used to evaluate online students' perceptions of their respective online instructor and course. The electronic survey was administered via an electronic survey program (QuestionPro®). The research project was approved by the university's Institutional Review Board (IRB-16020170-EXM). The survey was piloted by thirty-five students within three online courses prior to full implementation.

Recruitment of Respondents

All online instructors (both certified and uncertified) were informed of the survey through an email sent by the research group as well as via a weekly email newsletter from the university's president. Instructors were also informed of the survey that the university would allow the survey results to be used as an effective teacher evaluation tool as required for annual, individual staff evaluations, since class results would be provided back to them individually. Instructors were to inform their students of the survey through a generated email we created that was to be sent to all students of the selected courses. To increase response rates, we incentivized student participation by offering one entry into a drawing to win four, $100 gift cards to the SDSU Bookstore for completing the survey. Both instructor and student participation in the survey was voluntary.

Student responses were categorized into one of two groups: Certified Instructor or Non-Certified Instructor. Instructors who were certified had completed 1-3 levels of certification within the OICP. Non-certified instructors were faculty who had not obtained any level of certification within the OICP.

Factors Measured

Students answered multiple-choice and Likert-based scale questions pertaining to various items demographics and perceptions of their online instructor and their online class. Students were asked to select one response for each item.

Specific demographic questions included the following: age, overall GPA, whether the course was required for the student's degree program, how many credits the student was enrolled in, how many hours per week the student worked outside of schoolwork, how many hours per week the student spent on family obligations, how many online courses the student had taken prior to the current one being analyzed, and which device they used to access their online course.

Specific factors that were analyzed for overall rating of *online course quality* between the two groups of faculty included the following: relationship between exams and learning activities, appropriateness of assigned materials to the nature and subject of the course, reliability of the technology used to deliver the course, coordination of the learning activities with the technology, technical support's ability to resolve technical difficulties, availability of necessary library resources, and convenience of registration procedures.

Specific factors that were analyzed for overall rating of *online instructor quality* between the two groups of faculty included the following: description of course objectives and assignments, communication of ideas and information, expression of expectations for performance in the class, timeliness in responding to students; timeliness in returning assignments; respect and concern for students, interaction opportunities with other students, stimulation of interest in course, coordination of the learning activities with the technology, enthusiasm for the subject, and encouragement of independent, creative, and critical thinking (see Appendix A).

Data Analysis

The research team used SPSS-23 (Statistical Package for the Social Sciences) for statistical analysis. Students' demographics were quantified using descriptive statistics and were reported as the percent of respondents by category. Researchers then divided the respondents by the category of the instructor: 1) students who took an online course from a Certified Instructor; and 2) students who took an online course

from a Non-Certified Instructor. Students' perceptions of their online course and their instructor were then summarized by these two groups, and potential differences in perceptions were determined using multi-nominal regression. Statistical significance was determined at $\alpha = 0.05$.

Findings

Thirty-one faculty members who taught 45 sections of online courses sent the online survey to their students via email. Of the 31 faculty members who volunteered, 14 of them had enrolled in the OICP offered on campus through the state regents online learning management system. Of the 14 faculty members who participated in the program, seven had completed and maintained the Masters Certification Level, the highest level obtainable through the OICP, six had obtained the Advanced Certification Level, and one had obtained the Basic Certification Level.

The electronic survey was administered to at least 505 undergraduate students, and 322 students completed the survey in its entirety (an approximately 84% response rate). Of the 322 students, 152 were enrolled in a course taught by a faculty who had completed an OICP course, whereas 170 students were enrolled in a course taught by faculty who had not completed any portion of the OICP. By course, the number of students completing the survey was 0 to 28. Students completed the survey within 6 minutes on average. Most students (95%) used their desktop or laptop computers; the remaining students completed the survey on a smartphone.

Results from this research study showed similar demographics between the students who took an online course from a Certified Instructor versus students who took an online course from a Non-Certified Instructor. Of high interest was that nearly 70% of students within both groups indicated they had previously taken 3 or more online courses prior to taking the selected online course for this study. Other majority responses included the following:

- being between 19-22 years of age
- having an overall GPA of 2.8-4.0
- having an A or B grade expectation for the enrolled course
- taking 12-17 credits per semester
- devoting similar amounts of time to work and to family members.

Results also indicated that students tended to rate themselves with "Completely True" responses related to their individual comfort level using technology. Specifically, a large portion (93%) of students indicated that they do not give up easily when confronted with technology-related obstacles, consider themselves "good" at completing tasks independently (98%), achieve goals set for themselves (99%), and regulate their behaviors to complete course requirements (99%).

Specific variables that demonstrated significant and positive results of students' perceptions with *quality online courses* included relationships between exams and learning activities, appropriateness of assignment materials to the nature and subject of the course, timeliness in delivering required materials, and technical support's ability to resolve technical difficulties. Specific variables that demonstrated significant and positive results for students' perceptions of *quality online instructors* included relationships between exams and learning activities, appropriateness of assignment materials to the nature and subject of the course, timeliness in delivering required materials, and technical support's ability to resolve technical difficulties.

Nominal regressions indicated that those faculty who had participated in online certification programs did, in fact, receive higher excellent scores on all questions related to both quality online courses (Pseudo R^2 = .76; p ‹ .05) (see Figure 1), as well as quality online instruction (Pseudo R^2 = .91; p ‹ .05) (see Figure 2). Specifically, Certified Instructors obtained higher positive results than Non-Certified Instructors for both overall course quality and overall instructor quality. Forty-five percent of the instructors had achieved at least some level of certification in the OICP; of these, approximately half were certified as "Master Online Instructors".

Discussion and Future Directions

Overall, results from our study showed that Certified Instructors obtained higher positive results than Non-Certified Instructors for both *overall course quality* and *overall instructor quality*. This demonstrates the value for ongoing professional development for online instructors, particularly classes and programs that are easily accessible either on campus or online. It also suggests the value to create professional development opportunities where instructors act as student learners, to understand student perceptions, viewpoints, and the reasoning and purpose behind using various online

pedagogical tools. The OICP offers these opportunities for students at the respective university.

It is also important to note that the results from this research study showed similar demographics between the groups of students who were enrolled in courses taught by instructors who had versus had not obtained any level of certification within the OICP. The results also showed significant and positive relationships within several of the course design aspects, instructor practices, and student perceptions of their online course.

Research has noted that students often select online courses as they fit better in students' daily schedules (Willging and Johnson, 2009). The majority of students in this study were working > 10 hours per week and/or taking full-time credit loads ($\geq$ 12 credit hours), thus potentially drawn to the flexibility of online courses. Sanford et al. (2014) noted that some students may perceive an online course as "successful" if it is convenient for them, regardless of their own personal preferences to learn online or face to face. Thus, other factors not identified in this study may be contributing to the overall positive perceptions noted by students.

Motivation to take an online course may play a role in these results as well. Two motivating factors may have informed this study: 1) the online course was a requirement for the student's major; and 2) online courses provide convenience in the student's schedule. A majority of students may have taken an online course as part of their degree program. These students may have been more motivated to engage with their online course, thus increasing the time spent on the course to achieve deeper learning (Wuellner, 2015) and therefore increasing their satisfaction with the course. Additionally, students who take an online course within their major or program may more readily recognize the course relevancy in their future careers and view the course as meaningful or useful (Summers et al., 2005). Thus, students may be more satisfied with online courses within their degree programs than in other online courses that fulfill general education requirements.

Students reported very high levels of comfort with using technology. At face value, these findings may not be surprising given that other commentary about Millennials, who were largely represented in this study, has described this generation as "digital natives" (Meyer, 2015). However, other research has shown that Millennials frequently have low skills in solving problems with technology (Schaffhauser, 2015). These results beg the question of whether students are overconfident in their

assessment of their own technology skills, or whether they truly do possess the specific technology skills needed to be successful in online courses. Certainly, students who struggle with technology may not do as well in or are less likely to be satisfied with online courses (Rodriguez et al., 2008). A growing number of students nationwide are taking online classes due to the offerings of particular degree programs or personal time constraints (Allen & Seaman, 2014) but perhaps do not possess the technology skills needed to be successful or enjoy their experience. Further research is needed to examine which specific technological skills students must possess in order to successfully navigate and learn online and whether Millennial students possess those skills.

Course design, defined broadly, greatly impacts retention and completion. A key component of course design assessment is student perception, and students tend to judge a distance education course by the level of interaction of their instructor and course qualities, or lack thereof. In addition, an expanding view of the effective design of distance education includes requirements of the instructor such as past experience in learning online as a student, a higher technology skill set including safety and implementation, and an ability to use data analytics and other findings from assessment to modify courses.

Professional development opportunities, where faculty have practical experiences as student learners, is often identified as one of the most effective means of learning more about online teaching. Additionally, because instructors work at a variety of locations, online training opportunities reach more faculty than on-campus offerings. Because of these items, professional development should be offered online, and it should be a continuous process of improvement, supported by online mentoring and monitoring. (Southern Regional Educational Board, 2009). These trainings must also focus on online pedagogy, specifically, having faculty act as students within an online certification program such as the OICP utilized at the respective university. This helps with a differing viewpoint of a student learner, rather than an instructor, knowing and understanding the pedagogy needed for successful online teaching and learning. Training and programs of online instructors in the areas of both course design and student interaction should also consider focusing on the variables identified in the study.

Conclusion

The changing faces and goals of today's college students and the barriers to broad and effective professional development for faculty all prove a need for significant reforms in distance education. It must start with a better understanding of the students and their perceptions of online learning and teaching along with offering quality professional development opportunities to faculty who teach online. Professional development opportunities are necessary for faculty to build on current online pedagogical strategies. Offering concentrated training modules and programs related to course design and instructor practices where faculty view the course from a student learner perspective, such as the OICP, provides faculty continuous improvement opportunities to further their teaching abilities to support students learning.

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Appendix A: Survey Questions

	Excellent	Above Average	Average	Below Average	Poor
Description of course objectives and assignments	❏	❏	❏	❏	❏
Communication of ideas and information	❏	❏	❏	❏	❏
Expression of expectations for performance in this class	❏	❏	❏	❏	❏
Timeliness in responding to students	❏	❏	❏	❏	❏
Timeliness in returning assignments	❏	❏	❏	❏	❏
Respect and concern for students	❏	❏	❏	❏	❏
Interaction opportunities with other students	❏	❏	❏	❏	❏
Stimulation of interest in course	❏	❏	❏	❏	❏
Coordination of the learning activities with the technology	❏	❏	❏	❏	❏
Enthusiasm for the subject	❏	❏	❏	❏	❏
Encouragement of independent, creative, and critical thinking	❏	❏	❏	❏	❏
Overall rating of instructor	❏	❏	❏	❏	❏

	Excellent	Above Average	Average	Below Average	Poor	Not sure
Relationship between examinations and learning activities	❏	❏	❏	❏	❏	❏
Appropriateness of assigned materials (readings, video, etc.) to the nature and subject of the course	❏	❏	❏	❏	❏	❏
Timeliness in delivering required materials	❏	❏	❏	❏	❏	❏
Reliability of the technology(ies) used to deliver this course	❏	❏	❏	❏	❏	❏
Technical support's ability to resolve technical difficulties	❏	❏	❏	❏	❏	❏
Availability of necessary library resources	❏	❏	❏	❏	❏	❏
Convenience of registration procedures	❏	❏	❏	❏	❏	❏

	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree	Not sure
The course is well organized and easy to navigate.	❏	❏	❏	❏	❏	❏
An easy to follow schedule is posted with expected due dates.	❏	❏	❏	❏	❏	❏
The instructor provides timely announcements and reminders.	❏	❏	❏	❏	❏	❏
The instructor provides constructive feedback on assignments.	❏	❏	❏	❏	❏	❏
The instructor promotes a supportive online learning environment.	❏	❏	❏	❏	❏	❏
The instructor effectively uses various media and active learning strategies throughout the course.	❏	❏	❏	❏	❏	❏
The instructor effectively uses various assessment tools throughout the course.	❏	❏	❏	❏	❏	❏

Please rate the overall quality of your online course(s) this semester.

1. Excellent
2. Above Average
3. Average
4. Below Average
5. Poor

	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree	Not sure
I can troubleshoot my own issues when I cannot connect to the internet.	❏	❏	❏	❏	❏	❏
I know who to contact in the event that I have a computer issue that I cannot solve.	❏	❏	❏	❏	❏	❏
I can properly format a document in Microsoft Word.	❏	❏	❏	❏	❏	❏
I can identify file extensions for standard applications such as .doc, .xls, .pdf, .ppt, .jpg, .wav, and .mp3.	❏	❏	❏	❏	❏	❏
I can send e-mail with little to no issues.	❏	❏	❏	❏	❏	❏
I can properly attach files to e-mail messages I send.	❏	❏	❏	❏	❏	❏
I can find reliable sources of information on the internet.	❏	❏	❏	❏	❏	❏
I can efficiently search the internet for my own personal needs.	❏	❏	❏	❏	❏	❏
I can use social media effectively to create a positive online presence.	❏	❏	❏	❏	❏	❏

	Completely true	More true than false	More false than true	Completely false	Not sure
I believe online courses are less rigorous than their face-to-face counterparts.	❏	❏	❏	❏	❏
I believe I am responsible for my own education; what I learn is ultimately my responsibility.	❏	❏	❏	❏	❏
I do not give up easily when confronted with technology-related obstacles (e.g., internet connection issues, inability to contact the instructor immediately, etc.).	❏	❏	❏	❏	❏
I am comfortable working in alternative learning environments outside of the traditional classroom (e.g., online, the library, at home).	❏	❏	❏	❏	❏
I work well in a group. For example, I am an active participant and do at least my fair share of the work.	❏	❏	❏	❏	❏
I am good at completing tasks independently.	❏	❏	❏	❏	❏
I organize my time to complete course requirements in a timely manner.	❏	❏	❏	❏	❏
I regulate and adjust my behavior to complete course requirements.	❏	❏	❏	❏	❏
I understand the main ideas and important issues of readings without guidance from my instructor.	❏	❏	❏	❏	❏
I achieve goals that I set for myself.	❏	❏	❏	❏	❏

Was this course required for your degree program?

1. Yes
2. No

What is your overall GPA?

1. 1.9 or less
2. 2.0 - 2.2
3. 2.3 - 2.7
4. 2.8 - 3.3
5. 3.4 - 4.0

What grade do you expect to earn in this course at the end of the semester?

1. A
2. B
3. C
4. D
5. F
6. Not sure

How many credits are you taking this semester?

1. Less than 12
2. 12 - 14
3. 15 - 17
4. 18 or more

How many hours per week on average are you working this semester?

1. 0
2. 1 - 10
3. 11 - 20
4. 21 - 30
5. More than 30

How many hours per week on average are spent attending to family obligations/needs this semester?

1. 0
2. 1 - 10
3. 11 - 20
4. 21 - 30
5. More than 30

What is your age?

1. 18 or younger
2. 19 - 20
3. 21 - 22
4. 23 or older

How many online courses have you taken prior to this one?

1. 0
2. 1
3. 2
4. 3 or more

Which devices do you use to access your online course? (Select ALL that apply.)

1. Laptop
2. Smartphone
3. Tablet
4. Smartwatch
5. Other

Figure 1. Comparison of Overall Course Quality Ratings between respondents who took an online course from a certified online instructor versus those who took an online course from a non-certified online instructor.

Figure 2. Comparison of Overall Instructor Quality Ratings between respondents who took an online course from a certified online instructor versus those who took an online course from a non-certified online instructor.
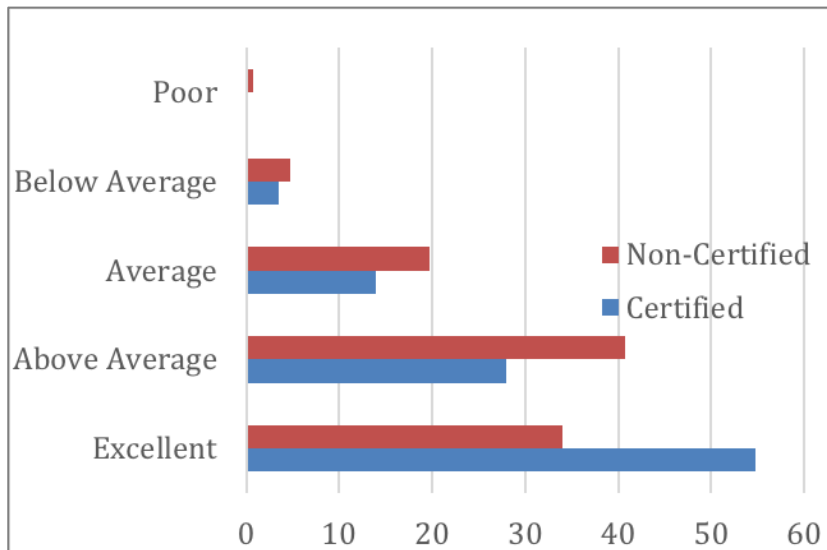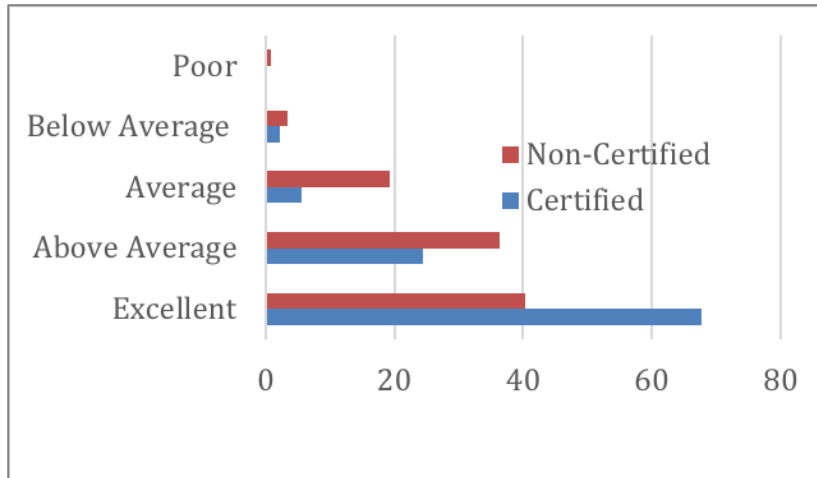
Design and Development of an MPH Program for Online Delivery

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Abstract

The Master of Public Health (MPH) degree is growing in popularity and is now delivered fully online by a large number of highly respected, fully accredited universities. This paper offers an overview of program design and development strategies that promote successful online delivery of MPH programs. Design and development challenges are discussed in terms of new accreditation standards, student demand, faculty development, user needs, course content, and plan of study. The development of an online MPH program at Utah State University with a concentration in health education and promotion is used to highlight and consider various aspects of this important but challenging process.

I. Introduction

The Master of Public Health (MPH) degree is experiencing increased demand throughout the world as the need and expectation for high-quality public health services continues to grow (Lane, 2000). Growing health inequities among diverse populations and expanded responsibilities for public health workers has resulted in higher demand for public health services even as resources for public health education are diminishing in many settings (Alexander, Igumbor, & Sanders, 2009; Bell & MacDougall, 2013; Shalauta, Burke, Gordon, Stern, & Tran, 1999). As such, it is important to find effective educational strategies that can reach a broader audience in raising the competence of public health workers.

In many public health disciplines, new educational methods that go beyond traditional classroom experiences are needed to help current practitioners, and new students carry out core public health functions, update skill areas, and achieve broad

public health objectives (Dodds, Laraia, & Carbone, 2003). As a result, distance education delivery methods are being evaluated as possible avenues for bringing MPH training to diverse populations of public health workers and new students who may otherwise not have access to training (Cannon, Umble, Steckler, & Shay, 2001; Jimbo, 2002; Laraia, Dodds, Benjamin, Jones, & Carbone, 2008; Schwimmer, 1999; Umble, Shay, & Sollecito, 2003).

Various distance education strategies have been evaluated for content delivery in a large number of public health disciplines, including epidemiology (Patel, 2000; Treloar, 1998), maternal and child health (Polhamus, Farel, & Trester, 2000; Steckler et al., 2001), public health nutrition (Dodds et al., 2003; Laraia et al., 2008), preventive medicine (Khonsari & Fabri, 1997; Lane, 2000; Mackenzie, 1983), occupational hygiene (Vincent, 2005), biostatistics (de Jong, Verstegen, Tan, & O'Connor, 2013; Gemmell, Sandars, Taylor, & Reed, 2011), qualitative research methods (Steckler et al., 2001), and tobacco control (Leatherdale, Viehbeck, Murphy, Norman, & Schultz, 2007). These evaluations have taken place in culturally-, economically-, and geographically-diverse settings including countries such as Mexico (The Working Group of the Innovation Program in Health Systems and Professional Training, 1995), Brazil (Buss, 1999), Latin American countries (Members of the European Latin American Public Health Network, 2001), Hungary (The Tempus Consortium for a New Public Health in Hungary, 1992), Poland (Szosland & Marcinkiewicz, 2004), other European countries (Members of the European Latin American Public Health Network, 2001), various African nations (Alexander et al., 2009); and the United States (Davis, Sollecito, Shay, & Williamson, 2004), Canada (Bell & MacDougall, 2013), and Australia (Treloar, 1998).

Throughout the U.S., a large number of institutions are beginning to offer an MPH degree via distance education methods (Best Colleges, 2018; Woodhouse, Auld, Livingood, & Mulligan, 2006). The Kinesiology and Health Science (KHS) Department at Utah State University (USU) is currently in the early stages of developing and offering an MPH program in health education and promotion for online delivery at the main campus in Logan, and throughout USU's Regional Campus system.

The goal of this paper is to:

- briefly review the literature in relation to key outcomes of distance-delivered MPH programs;

- outline steps for determining program need, student demand, and institutional readiness;
- consider theoretical and curriculum design strategies in the context of evolving accreditation demands; and
- propose a meaningful process for designing, developing, and implementing an MPH program via online delivery given a number of challenges.

II. Key Outcomes of Distance Delivered MPH Programs

In a 2000 publication, Birnbaum and Greenhalgh argued that we "should proceed with caution and systematic evaluation" as we move toward the delivery of distance education programs which offer both "rewards and pitfalls" (Birnbaum & Greenhalgh, 2000). Perhaps in response to this call for caution and systematic evaluation, a number of rigorous evaluations have since demonstrated the effectiveness of distance education methods for delivering high-quality MPH instruction in a number of disciplines and in a variety of settings. Distance education MPH programs, in particular, have been shown to positively impact student academic achievement, career success, knowledge, attitudes, practices, and satisfaction (Davis et al., 2004). In most cases the outcomes achieved through distance education are comparable to traditional face-to-face, on-campus programs (Davis et al., 2004; de Jong et al., 2013; Galway, Corbett, Takaro, Tairyan, & Frank, 2014; George et al., 2014; Liu et al., 2016; Riley & Anderson, 2006; Treloar, 1998; Umble et al., 2003).

A. Student Achievement

A study that compared graduates from a traditional MPH program against students from a distance education MPH program found that course grades and grade point averages were similar for both programs as determined by the Fisher exact test (Laraia et al., 2008). The authors concluded that distance education strategies were suitable for delivering an MPH curriculum (Laraia et al., 2008). An Australian study of distance education instruction found that completion rates and grades did not differ between on- and off-campus programs. Qualitative data confirmed that

distance education was as successful as on-campus teaching in providing clinical epidemiology programs at the postgraduate level (Treloar, 1998).

One study that evaluated the impact of a satellite training program for public health professionals concluded that the broadcast created a statistically significant gain in knowledge, improved attitudes about the importance of public health activities, and follow-up actions that were recommended in the broadcast (Peddecord et al., 2007). Another study found that a year-long web-based module targeting maternal and child health workers resulted in higher levels of self-efficacy and perceived skill level in performing functions covered in the six-unit training module (Steckler et al., 2001). Students in a third study reported that enrollment in a distance education MPH program resulted in increased knowledge, perspective, skill, technical facility, confidence, and job performance in relation to improving job performance in leadership and career advancement (Umble et al., 2003).

B. Career Success and Student Satisfaction

Using pre- and post-test measures, one study of mid-career professionals found that 75% of graduates from a distance education MPH program in the U.S. had developed new professional affiliations and 31% experienced job promotions (Davis et al., 2004). A similar study used post-graduation interviews to conclude that all graduates from a distance education MPH program experienced advancement in the workplace (Laraia et al., 2008).

A study conducted at the University of North Carolina, Chapel Hill, found that 97% of graduates from a distance education MPH program would recommend the program to others, and 75% said that their overall opinion about the program had improved since graduation (Davis et al., 2004). Other studies have also reported high levels of student satisfaction for MPH programs delivered via distance education (Peddecord et al., 2007; Umble et al., 2003).

Different delivery modes for distance education MPH programs that have been evaluated include: web-based courses (Polhamus et al., 2000), video courses (Leatherdale et al., 2007), satellite broadcast (Peddecord et al., 2007), internet (Jimbo, 2002), and computer conferencing (The Tempus Consortium for a New Public Health in Hungary, 1992). In general, distance education MPH programs using these delivery modes have been found to be accessible, affordable, acceptable, and

appropriate for working professionals, and, in most respects, equivalent to residential programs (Umble et al., 2003). Based on these types of findings, several authors have argued that distance education will be a key component of MPH program delivery in the future, especially if we are to meet the demand for a more competent public health workforce in an age of diminishing resources (Buss, 1999; Lane, 2000; Leatherdale et al., 2007; Shalauta et al., 1999; Umble et al., 2003; Vincent, 2005).

III. Determining Program Need, Demand, and Institutional Readiness

A. Program Need

Prior to receiving institutional approval to offer an MPH degree program at USU, a thorough market analysis was conducted to identify unmet public health training needs for several geographic regions in Utah with a focus on rural and underserved regions (Dodds et al., 2003). Data collection included an assessment of public health workforce readiness, job demand, pay levels, and an analysis of available training and educational programs already in place. Much of the workforce data was found to be available through federal, state, and local public health departments, the Bureau of Labor Statistics, and the Utah Department of Workforce Services (Bureau of Labor Statistics, 2018; Department of Workforce Services, 2018). Additionally, candid conversations were held with colleagues at the University of Utah (the only other public institution in Utah that offers an MPH program) to understand unique program goals and avoid duplication of offerings. Unlike the program at the University of Utah, the MPH program at USU will be delivered fully online with an emphasis on meeting the public health needs of rural and underserved areas. Because of that unique fit, support from the University of Utah was strong.

B. Public Health Job Market

It was determined that students seeking an MPH degree with a health education and promotion emphasis in Utah can pursue a wide variety of high-demand and high-paying occupational options—including (but not limited to) epidemiologist/statistician, disaster and emergency specialist, medical and health

services managers, public health educator, public health nurse, and medical social workers (Bureau of Labor Statistics, 2018).

The job outlook for an epidemiologist during 2014-2024 is projected to grow at an annual rate of 6% with median pay in 2015 of $69,450 per year, and typically requiring a master's degree for an entry-level position (Bureau of Labor Statistics, 2018). Detailed data for an epidemiologist position in Utah does not exist. However, the salary range for a statistician in Utah (a similar job category) is $50,250-$117,830 with a 10-year projected growth rate of 42% (Department of Workforce Services, 2018).

Utah based health educators can expect an annual growth rate of 3% (higher than the national projection of 1.9%). In Utah, the median salary for public health workers who have a bachelor's degree is $42,300. Medical and health service managers who live in Utah and have a bachelor's degree earn a median salary of $85,330 (the annual change rate for 2012-2022 is 3.5%, which is higher than the national rate of 2.3%).

Healthcare social workers in Utah earn a median salary of $54,890 with a master's degree. Utah data for healthcare social workers show that the annual change rate for 2012-2022 is 4% (higher than the national rate of 2.7%). Emergency management directors in Utah have a projected annual change rate of 2012-2022 of 1.6% as compared to the US at .8%. The annual median salary for 2014 in Utah was $64,230 with a bachelor's degree.

It appears that the demand in Utah for public health professionals will exceed the projected national growth rate. It is also expected that employers will seek out applicants who have advanced training and education (i.e. a MPH degree, which is more desirable than an MS degree in the health education profession).

C. Student Demand Analysis

Once it was determined that public health training needs were substantial, job demand was high, and unique training needs could be met through an online MPH program, a detailed analysis of student needs and demand was conducted (Dodds et al., 2003; The Working Group of the Innovation Program in Health Systems and Professional Training, 1995). Student interest surveys were conducted among undergraduate health education and promotion students on the USU Logan campus

and among working professionals at established distance education sites throughout Utah.

A total of 62 health education and promotion undergraduate students completed the MPH interest survey. The majority planned on pursuing a graduate degree within 1-2 years of graduation (55%). When specifically asked about their intent to pursue an MPH (anywhere, in any format), 36% of the respondents indicated that "Yes," they would be interested in pursuing this type of degree, and 48% indicated that they "Might" be interested in doing so. In terms of delivery format, the majority of current undergraduate students were interested in a blended/hybrid format (40%). Students' motivation to obtain an MPH degree include increased skill set (84%), increased salary (69%), and the ability to apply to new professional positions (63%).

A total of 108 health education professionals responded to the survey with 78% indicating they were full-time employees at the time of the survey. Most worked in either a public health setting (29%) or health care/clinical setting (37%). Of the 108 responding, 36% were interested in obtaining an MPH degree (n=40) while 27% indicated they were maybe interested (n=30). Both online only (46%) and blended/hybrid delivery (46%) were of most interest. Over half of the professionals indicated that their employer would offer tuition assistance (51%). Health professionals were interested in the MPH degree to increase their salary (71%) and earning potential (70%), broaden their skill set (70%), and increase their ability to qualify for new professional positions (75%). If an online USU program were available, 43% noted they would be extremely likely to apply, and 38% noted they would be somewhat likely to apply.

D. Program Infrastructure

An important and challenging step is to assess and ensure an appropriate program infrastructure that takes into consideration available online delivery technologies, cost of delivery, availability of student support services (recruitment, registration, advising, testing, mentoring, supervising, etc.), course scheduling and sequencing (that can accommodate student needs), faculty workloads, and other functions that will support the program. Utah State University already has a well-established distance education/online infrastructure that utilizes web-based instruction and interactive video conferencing, and that has numerous student support systems already in place. Conceptualizing an appropriate infrastructure that solves course scheduling

challenges, faculty workloads, and student mentoring and supervision has entailed close collaboration between the originating department (KHS), the Regional Campus system, and Academic and Instructional Services at Utah State University. An MOU has been put in place that details financial relationships and the respective responsibilities of each entity.

E. Faculty Resources and Development

An important step in designing the program infrastructure was an analysis of faculty resources related to instructional needs (The Working Group of the Innovation Program in Health Systems and Professional Training, 1995). Based on market and student analyses, including anticipated student demand, it was determined that two new faculty lines would be required to support instructional delivery of the new MPH program. Upper administration at USU was convinced of the value of the new MPH program and committed two new faculty lines to the KHS department, one based on the Logan campus, and one at a USU Regional campus. Training for faculty to successfully transition from teaching traditional face-to-face courses to fully online courses with new technology was also an important component provided by Academic and Instructional Services at USU on a course-by-course contract basis.

IV. Theory and Curriculum Design

Table 1 outlines theoretical concepts, curriculum design, and competency mastery outcomes that can guide the development of MPH programs delivered online.

A. Theoretical Foundation

Equivalency Theory represents an approach to distance education that is built on the concept of 'equivalence of learning experiences' between local learners and distant learners (Simonson, Schlosser, & Hanson, 1999). Building upon existing educational theories, Equivalency Theory posits that the more similar the learning experiences, the more similar the outcomes will be (Simonson et al., 1999). Given advances in technology that provide various modes of distance learning, this theory may be an appropriate beginning point for considering the design and development of an MPH curriculum for online delivery (Simonson et al., 1999).

As noted in Table 1, Equivalency Theory has five key elements that can inform curriculum design: (1) Equivalency: learning experiences should be designed that provide experiences with equal value for learners; (2) Learning Experience: students in different locations at different times may require a different mix of learning experiences; (3) Appropriate Application: availability of learning experiences should be proper and timely; (4) Students: students should be defined by their enrollment in the course rather than their location; and (5) Outcomes: outcomes should be similar for learners regardless of location. These five elements provide a sound theoretical basis for beginning the process of curriculum design (Simonson et al., 1999).

TABLE I: Design and Development of the MPH Distance Curriculum

Equivalency Theory

1. Equivalency
2. Learning experiences
3. Appropriate application
4. Students
5. Outcomes

Curriculum Design Process—Backward Design

1. Identify desired results (competency driven)
2. Determine assessment evidence
3. Plan learning experiences and activities
4. Let go of book driven course design, duplicating existing course, using old syllabus

Plan of Study for Competency Mastery

Health Education/Promotion Competencies	CEPH Foundational Competencies
1. Health needs assessment 2. Program planning 3. Program implementation 4. Program evaluation 5. Administer health ed programs 6. Serve as health ed resource person 7. Communicate and advocate for health ed 8. Systems thinking	1. Evidence-based approaches to public health 2. Public health and health care systems 3. Planning and management to promote health 4. Policy in public health 5. Leadership 6. Communication 7. Inferprofessional practice

B. Curriculum Design

Previous research has identified a number of elements for the successful design of distance education MPH programs that have proven effective (Dodds et al., 2003; The Working Group of the Innovation Program in Health Systems and Professional Training, 1995). However, with the release of new accreditation criteria by the Council on Education for Public Health (CEPH) in 2016, the educational focus has changed from an orientation-based approach (covering core topics) to demonstrated achievement in foundational competencies (Council on Education for Public Health, 2018a). This change in orientation has opened the door to curriculum development that is based on a "backward design" that starts with delineating the competencies to be mastered, followed by the design of assessment evidence, and finally the development of appropriate learning activities (Arcari & McMillan, 2018; Bowen, 2017).

Foundational competencies are mapped to appropriate courses (Council on Education for Public Health, 2018b) that are then backward designed to develop learning activities and experiences that can be assessed in ways that clearly demonstrate mastery of competencies. For programs entrenched in the earlier topical approach, the reinvestment in curriculum design focused on competencies can pose significant challenges (Bowen, 2017).

C. Competency Mastery

The 2016 CEPH accreditation criteria revolve around competency mastery. Specifically, CEPH has delineated 23 foundational competencies, clustered into eight thematic areas, that must be met by all accredited MPH programs. In addition, at least five concentration competencies must be established for each program. The health education and promotion concentration within the MPH program at USU has developed six concentration competencies that have been assigned to specific courses that align with the professional practice of health promotion.

D. Management of Field Work and Practical Experiences

Online education can pose unique challenges for courses that require supervision and mentoring of practical or field-based experiences. Fortunately, best practices in online education related to the design, development, and implementation of practicum and field-based public health experiences in diverse settings are beginning

to be defined in the literature (Jung, Galyon-Keramidas, Collins, & Ludlow, 2006; Knapczyk, Hew, & Frey, 2005; Sachau, 2009). At USU, best practices are being used to craft two online courses that can support high-level learning outcomes related to Applied Practice Experiences (APE), Inter-professional Practice Experiences (IPE), and Integrative Learning Experiences (ILE) as required by CEPH in the new accreditation criteria for MPH programs (Council on Education for Public Health, 2018a).

A multi-step process is being used to design and implement practical MPH experiences for online delivery through:

- A thorough review of the literature, professional association materials, and CEPH training guidelines to identify best practices in online-based practicum and fieldwork education.
- A site visit to at least one MPH program that has been identified by CEPH as excelling in online delivery of APE, IPE, and ILE experiences, and a visit with faculty and students at that site relative to their perspectives, outcomes, and recommendations.
- A one-hour consultation with CEPH staff during the American Public Health Association annual meeting in San Diego in November 2018 to gain further insights into accreditation expectations regarding online delivery of APE, IPE, and ILE learning activities and outcomes.
- A preliminary design of basic curriculum components for APE, IPE, and ILE experiences.
- A qualtrics survey of MPH faculty and students to get stakeholder input and refine curricular components and concepts based on feedback.

E. Plan of Study for Public Health Curriculum

The plan of study for MPH students at USU includes a two-year cycle of course offerings that reflect a balance between faculty workload constraints, the needs of working professionals attending part-time at regional campuses, and the needs of full-time students taking classes on the Logan campus. Per CEPH guidelines, the program requires a minimum of 42 credits. All but two courses are offered at least once per year—thereby providing students with maximum flexibility as they work with their

major professor to plan their course of study. (See Appendix A for a draft of the two-year MPH schedule.)

VI. Challenges

Numerous challenges must be addressed in designing and successfully delivering a distance education MPH program. Specific challenges cited by MPH distance education planners include the potential difficulty in attracting sufficient enrollment numbers over time to justify the initial and ongoing expense of developing and initiating a program (Buss, 1999). Others have found that distance education delivery demands intensive resources to sustain and support (Patel, 2000). It has been found that not all students are well suited for distance learning, which may require a higher level of motivation, and that field support of students is a key to success which places high demands on academic staff (Patel, 2000). Many of these challenges can be anticipated and addressed in the design process and have been carefully addressed in the design and development phase of the new MPH program at Utah State University.

VII. Conclusion

It seems clear that distance delivery of MPH programs represents an important avenue for addressing workforce training needs in public health. While such programs require careful planning and may incur higher resource costs, the end result is a broader dissemination of training that will help support the growth and development of public health professionals that would otherwise not have access to such training (Alexander et al., 2009; Bell & MacDougall, 2013; Cannon et al., 2001; Jung et al., 2006; Laraia et al., 2008; Liu et al., 2016; Umble et al., 2003). This paper has attempted to outline some of the key considerations and strategies for designing and developing a successful distance education MPH program.

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Appendix A: Two-year Degree Plan for MPH: Health Education and Promotion

YEAR ONE (24 credits)

Fall Semester	Credits	Faculty
HEP 6050: Foundations of Public Health (required for all students who did not graduate from a CEPH accredited undergraduate program)	3	Peterson
HEP 6020: Introduction to Biostatistics and Epidemiology	3	DasGupta Prerequisite: Pass on skills quiz
HEP 6800: Health Behavior	3	Waite
HEP 6200: Health Administration, Organizations and Systems	3	Hawks

Spring Semester	Credits	Faculty
HEP 6400: Policy, Leadership, and Advocacy in Public Health	3	Hawks
HEP 6000: Advanced Program Planning and Evaluation	3	DasGupta
HEP 6450: Research Methods in Population Health	3	DasGupta
HEP 6010: Health Communication for Public Health; or HEP 6650: Holistic Health	3/ offered alternating years (Both courses are required, take one each spring.)	Sulzer

Summer Semester	Credits	Faculty
IPE Experience	Capstone credits	Hawks
HEP 6120: Foundations of Global Health (study abroad option)	3/offered only once each year, either summer or fall. If taken in the summer a study abroad experience is required.	Hawks

YEAR TWO (18 credits)

Fall Semester	Credits	Faculty
HEP 6120: Foundations of Global Health (fully online option)	3/offered only once each year, either fall or summer. If taken in the fall the course is fully online.	Hawks
HEP 6550: Qualitative Methods for Public Health	3	Gast
HEP 6350: Social Determinates of Health	3	DasGupta

Spring Semester	Credits	Info and Notes
HEP 6150: Global and Maternal Health	3	Hawks
HEP 6600: Practicum or HEP 6970: Thesis	3	Chair approval needed
HEP 6850: Capstone in Public Health	3	Hawks
HEP 6010: Health Communication for Public Health; or HEP 6650: Holistic Health	3/ offered alternating years (Both courses are required, take one each spring.)	Sulzer

Summer Semester	Credits	Faculty
HEP 6600: Practicum or HEP 6970: Thesis	3 (if not completed in an earlier semester)	Chair approval needed