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MENTORING PROGRAMS IN ORGANIZATIONS: AN ONLINE GRADUATE-LEVEL COURSE DESIGN CASE

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In this article, I present the design case of a fully online graduate-level course intended to prepare instructional designers and human performance improvement practitioners with an introduction to the knowledge and skills that are foundational for the design and implementation of mentoring systems to improve individuals' and organizational performance. In addition, the course design case provides an opportunity for instructional designers and faculty instructors to observe how learners can engage in an organizational mentoring systems feasibility study and as mentees in a mentoring relationship, in a fully asynchronous online course. The purpose of these two projects is to provide learners with an experience to reflect upon their personal mentoring systems experiences thereby becoming better informed for future engagement in the design, development, implementation, and maintenance, of an organizational mentoring system that would deliver desired results. Further, the political environment in which the design case took place, the theoretical framework, and instructional sequencing, are made transparent so that other professional instructional designers and instructors can "observe" the decision inputs and immediate outcomes of the design to add to their store of design knowledge.

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INTRODUCTION

Professional graduate programs strive to prepare individuals who can enter the workplace with the theoretical knowledge and applied skills to solve complex problems creatively with state-of-the-art solutions (Leckie, 2011; Solem et al., 2008). Course instructional designers and graduate-level instructional faculty often face a challenge to provide a motivational design for learning opportunities and experiences that capture students' attention, are relevant, build their confidence, and result in satisfaction (Keller, 2010). Further, these learning experiences would ideally transfer to the workplace. This is generally achieved through a balance between providing instruction on theoretical underpinnings and scaffolding authentic tasks that allow learners to stretch their abilities and in their zone of proximal development (Vygotsky, 1978), to produce example work artifacts, which can be shared in interviews and portfolios.

Hence in this course design case, I describe the design decisions I made related to a special topics course about mentoring programs in organizational performance and workplace learning within the context of an online master's degree program focused on performance improvement at Boise State University. First, I share the context, key stakeholders, and approach to course design. Then, I describe the design decisions made. Finally, I share the results and new design decisions for the next iteration.

Context of the Design

When I first started working at Boise State University in the fall of 2015, institutional leaders had just completed a university-wide program prioritization the year before. As part of the study, there was a heavy focus on retention and graduation. When I heard the dean of our College of Engineering speak at college-wide meetings (i.e., August 19, 2015, August 17, 2016) she advocated for "an unshakable focus on student success." My department was in transition, with an emeritus chair stepping down and a new chair filling the role. Unsurprisingly, the new department chair and manager for marketing and outreach services and academic

advisor were looking for innovative ways to support student retention and graduation rates.

I had just started as a tenure-track assistant professor. A new Associate Director for the Center for Teaching and Learning and Professor of Communication organized the university's new faculty orientation and included me in the brand-new mentoring program. Much of the advice that I received at the new faculty orientation and from more senior faculty across campus with whom I met was that one should try to merge research interests with one's teaching responsibilities. The university was in transition, decision-makers had just reclassified it as a Carnegie Mellon metropolitan research university. Several of my senior department faculty colleagues also suggested that I explore new areas of research with a focus on workplace learning, from a performance improvement system view, and spend time seeking out grant opportunities. I saw the National Science Foundation (NSF) soliciting grant applications for mentoring programs and was eager to get involved in grant work.

Thus, when a discussion in a bi-monthly faculty meeting turned to our need for coaching and mentoring interventions for our graduate students, I realized I had opportunities to align a system view of mentoring program research with my teaching assignments. Hence, I volunteered to create

SITUATIONAL FACTORS	FINDINGS
Changes in the job market and degree-seeking student profile	Job targets are increasingly more complex. Before 2008, instructor-led training, print materials, and some e-learning knowledge was sufficient. Now employers are looking for applicants who can also design and support on-the-job learning programs (ATD Research, 2016). Curriculum targets are more complex; in the past basic theories, models, and principles were enough. Now, students want to engage with practical applications and how do I do this in the workplace (EAB, 2015). Student profiles have evolved from being comprised mainly of experienced professionals looking for a promotion in the field to at least one-third being new to careers, changing careers, or returning to the workplace after an absence, without professional network contacts in the field (J. Fenner, personal communication, November 1, 2018).
Potential course audience	Some students find the topic interesting. Some students want to make new, strong network contacts. Some students want a very personalized, high touch experience. Some students want to start mentoring programs or make mentoring program improvements at their workplaces. Some students want a variety of synchronous communication components throughout their study and enroll in our online program because there are not any comparable programs available in their location.
Competitor program analysis	Many instructional design Master's programs are delivered online. One mentoring program exists for employed instructional designers, hosted by Penn State and Educause (Lieberman, 2018), but no instructional design or performance improvement Master's program was found to offer a personalized, systematic formal mentoring experience for students matched with experienced professionals by desired skills and knowledge.
Faculty strength	One program faculty held experience with formal mentoring programs and a research interest in formal mentoring.
University resources	Financial incentives in the form of small stipends (e.g., $3,000.00) exist at the university to support select new online course development projects associated with a Quality Matters review. A 12-week online professional development course, instructional design consultant, and 20 hours of course development support, are made available to select applicants who wish to develop new online courses.

TABLE 1. Curricular design situational factors.

a course on mentoring to support workplace learning and performance improvement.

Situational factors

A summary of the situational factors that would influence this project is in Table 1. A major driving force was a change in jobs after the financial crash in 2008 and a shift in the program student population. In 2008, 2.7 million jobs were lost (Goldmann, 2009). By early 2010, 8.7 million jobs were lost (Center on Budget and Policy Priorities, 2018). These jobs were not coming back, and people needed to find new expertise and skills, which were valued in the workplace. Before 2008, the student body of the program was comprised of full-time professionals that worked in the training and development division of an organization (J. Fenner, personal communication, October 29, 2018). After 2008, one-third of the student body in the program were either career changers that needed to enhance their skills so they could work again or new undergraduates that did not have employable skills (J. Fenner, personal communication, October 29, 2018). Consequently, our students are coming in with interest, and sometimes experience, as well as a desire to gain skills, experience, and formal study. I was the only faculty who had prior experience as well as a research and teaching interest in formal mentoring programs. Lastly, there were some university resources, advertised across campus in the form of funding, professional development, and design consultation that helped shape the unfolding of this design case.

Stakeholders and Multiple Perspectives Design Team

We used multiple perspectives, team-based approach to the design and development of the course. There were four groups of stakeholders involved in this design case: Boise State University, eCampus, Organizational Performance and Workplace Learning (OPWL) department leadership, instructors, and students. The following individuals primarily represented these groups:

- An instructional designer, who has an M.S. in OPWL, for eCampus at Boise State University
- The department chair and professor, who has a Ph.D. in instructional systems technology, for OPWL, at Boise State University.
- The manager for marketing and outreach services and academic advisor, who has an M.S. in OPWL, for OPWL at Boise State University.
- The manager of two mentoring programs for the Department of Homeland Security who has an M.S. in OPWL, is an adjunct instructor for the OPWL department at Boise State University, and was a contributing graduate student.
- A Bay Area Boise State (BABS) ISPI chapter board member, who has an M.S. in OPWL, and was a contributing graduate student assistant.
- A graduate student assistant, who has an M.S. in environmental studies, and is a current OPWL M.S. student.

The author of this design case, who has a Ph.D. in educational technology, was an assistant professor of OPWL at Boise State University at the time of this project, led the design project, and served as the co-instructor during the pilot implementation.

The instructional designer provided instructional design consultation and a campus-level perspective, by sharing online instructional practices she has observed and helped create with faculty instructors across each of the colleges at Boise State University. The department chair and department manager of marketing/advisement provided program-level input in consideration for both current students, department staffing, and curricular, needs. I invited all the full-time and adjunct OPWL faculty members to review chunks of the associated course design documents and provide feedback. The people who provided feedback included two associate professors of the OPWL department, another full professor of the OPWL department, two OPWL assistant professors, two OPWL adjunct instructors, a former OPWL graduate student, and an OPWL graduate student assistant who provided their practitioner-manager perspective based on their previous work experience, coursework, and scholarly research experience. A third OPWL graduate student assistant provided a student perspective on the design of the prototype instructional materials, the organization in Blackboard, and helped upload some of the materials in Blackboard.

Approach to Course Design

My teaching philosophy shaped the strategies that I chose to use as the foundation for the instructional materials and learning activities design. I find that learners flourish when I integrate a blend of constructivist and instructional design theories. For the conceptualization of this course, I drew upon three learning theories to comprise a constructivist paradigm: situated learning (Lave et al., 1991), cognitive apprenticeships (Ghefaili, 2003), and communities of practice (Wenger et al., 2002), to build the learning theory framework shown in Figure 1. Mentoring systems speak to situated learning or knowledge that learners can acquire in an authentic context and through social interaction (Lave et al., 1991). A cognitive apprenticeship approach offered structure to the conceptual design of the learning environment and learning process (Collins et al., 1991; Ghefaili, 2003). A community of practice approach in the course design allowed learners to connect through discussion relevant to their shared experiences and support their work through common problems. Within these frameworks, I situated the two major course projects. In the feasibility, design, and evaluation (FDE) project, learners write an unfolding case study about a workplace learning mentoring program based on a select authentic workplace context. In the professional

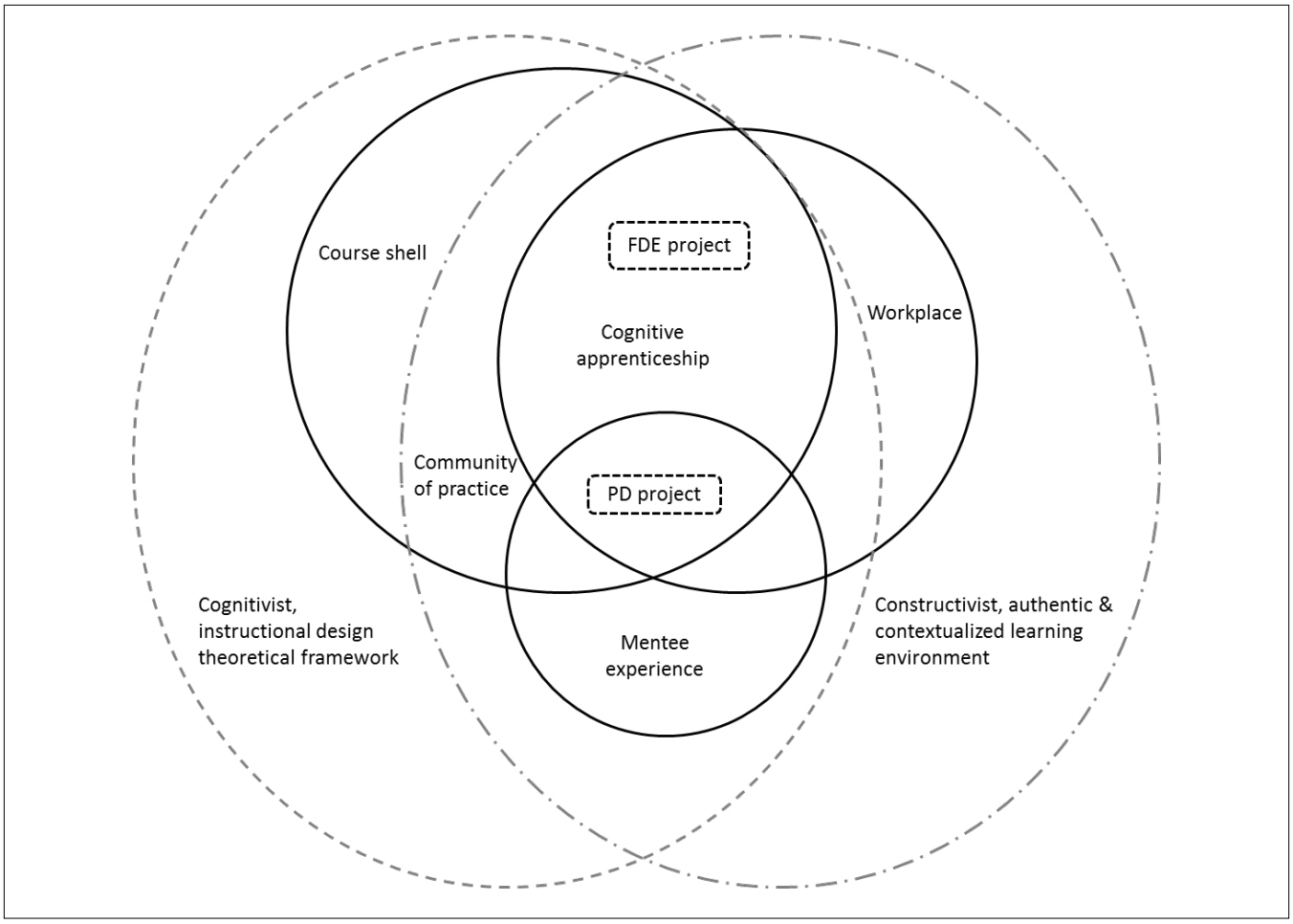

FIGURE 1. Learning theoretical framework. FDE project refers to a feasibility, design, and evaluation project proposal. PD project refers to a professional development project where learners work with self-selected mentors for a period, to meet agreed upon goals.

development (PD) project, learners are matched with a mentor, work towards individualized professional development goals, reflect upon their experiences as a mentee, observe others' experiences as mentees, and consider how they can transfer their knowledge and experiences to developmental mentoring activities design and program coordination.

In addition to the constructivist theories mentioned, I also relied on Merrill's (2012) First Principles of Instruction and Keller's (2010) ARCS model for motivation design, as I developed the instructional materials as shown in Table 2 (next page). I found that many characteristics of the design choices I made fell into more than one theoretical framework, such as describing goals, providing examples, and scaffolding. However, some characteristics were unique to a cognitivist framework such as requiring learners to produce specific learning activity deliverables. Other characteristics were specific to a constructivist framework such as ensuring the learners had an authentic workplace context or mentee experience. In the next sections, I describe how I conceptualize the previously described theoretical and contextual inputs into functional design approaches to support the learning process.

As part of my Ph.D. preparation and subsequent experience working as an instructional designer for two community colleges, one college, two universities, one nonprofit, two small businesses, an international nongovernmental organization, and a multinational for-profit organization, I learned to place great value on multiple perspectives and a collaborative approach to project work. In this case, multiple perspectives mean that I included a variety of stakeholder roles (i.e., administrator, instructor, student, and campus-wide support staff) and multiple representatives for each role whenever possible. Over the years, I also learned that talking about design cases with other instructional designers could result in elegant approaches, that neither individual would have originated on their own but when focused on a specific need together often are produced. In my experience as a designer, I have also learned to embrace an iterative design approach and rapid prototyping process. This approach and process of alternating development time and feedback reviews influence shifts in product design, such that significant

PARADIGM	THEORY	EXAMPLE DESIGN CHOICES
Cognitivism (instructional design)	First principles of task-centered instruction	• Appropriate guidance is provided through multiple relevant readings, videos, and lectures, which can be compared in discussion. • Solve real-world organizational problems with mentoring intervention(s). • Show examples of completed learning activities (tasks or problems to solve) through multiple unfolding (live) case studies, which can be compared in discussion. • Required deliverables. • Coaching is provided and gradually withdrawn. • Faded scaffolding for repeated activities. • Learners reflect and discuss takeaways.
	ARCS model for motivational design	• Attention - Inquiry, identify problem(s) to solve and how. - Simulated, hands-on experiences. - Variety of stories of others in similar real-world situations. • Relevance - Matched needs between mentees and mentors. - New knowledge or skills should be immediately applicable in an authentic setting. • Confidence - Learner control, learners self-assess inputs and outcomes. - Personalized choices (i.e., optional template use, context, performance problem, individual vs. team). • Satisfaction - Instructor responses include positive feedback and reinforcement for appropriate choices. - Rubrics are shared with students and guide consistent performance standards and consequences.
Constructivism—situated learning *(learning design)*	Cognitive apprenticeship	• Authentic workplace context (i.e., performance gap, constraints, client feedback). • Authentic mentee experience. • Metacognitive scaffolds are provided as needed. • Process (e.g., heuristic and control strategies) is provided. • Modeling, coaching, articulation, reflection, exploration, are utilized or prompted by instructor and mentor (experts). • Draft small parts of feasibility, design, and evaluation, project before finalizing comprehensive deliverable. • Provide overview of entire project with desired outcomes before breaking down part tasks. • In-class discussions allow for cooperation and productive competition.
	Community of practice	• Observe and compare authentic examples of mentoring systems designs and relationships. • Share and discuss authentic examples of mentoring systems designs and relationships. • Peer reviews.

TABLE 2. Instructional design approach to support learning.

transformation usually occurs between the first, subsequent, and last, iterations. These experiences and understanding shaped the design and development process.

eCampus instructional design course, stipend, and instructional design consultant support

With a university-wide push to grow online course offerings and develop active learning strategies beyond quiz questions, faculty instructors can propose a course design project and enroll in a twelve-week, online, course design and development seminar. If the eCampus instructional design (ID) team manager and an instructor's department chair accepts a proposal, the ID team manager assigns an instructional design consultant to support the project. In addition, the faculty instructor earns a small stipend once he or she successfully completes the seminar and course development project, which includes a Quality Matters review and corresponding revisions after a pilot implementation with learners.

The OPWL course included both instructional design modules and materials development modules. Based on the course instructions, I shared chunks of my design plans and examples of the instructional materials that I developed with fellow OPWL department faculty instructors for review and feedback. This course requirement was handy because these types of conversations had not occurred with the entire department faculty since my arrival on campus. I really did not know how the OPWL department members would perceive the course design. I now had a good reason to proceed with asking for input from my department faculty colleagues. I did this with group emails because I took the seminar over the summer. As previously mentioned, two full professors, two associate professors, two newly hired assistant professors, and two adjunct professors, provided input.

During the summer, my instructional design consultant met with me every other week during the materials development modules. During these meetings, we discussed the project, and she shared some standard eCampus templates as well as specific approaches she had observed being used by instructors across campus. She also provided input on the potential use of some of the newer tools that Blackboard had recently implemented, which might better facilitate the user experience for future learners. The perspective she brought, including knowledge of the broader university's online course design culture was both reassuring and useful. When I had questions about design choices, she provided support. Occasionally, when I wanted to build something new or different from what I had seen or done previously she shared example materials. I found that these samples helped decrease some of the development time workload.

Iterative design process

Researchers of design suggest that communication with stakeholders and users about design iterations should be prioritized by instructional designers (Kirschner et al., 2002). An iterative design process is a method whereby designers incrementally develop a design based on peer feedback and evaluation (Xu et al., 2015). A process of soliciting feedback and ongoing formative evaluations leads to better design products (Dow et al., 2010). Thus, the context and situational factors I previously described, in addition to the structure of the summer seminar and constant flow of feedback from the stakeholders (e.g., instructional design consultant, fellow departmental faculty instructors, the department manager for marketing and outreach services and academic advisor, and graduate students) who helped work on the design and materials development, meant that I worked through an iterative design process.

The constant flow of feedback that I received during the design phases was requested and shared through email messages to our departments' full-time and part-time members. As I worked with my consultant instructional designer, I completed the design templates that she provided. Once each template was complete, I would send out emails with a template as an attachment. In the body of the email, I would ask the stakeholders to review the information in the template and provide feedback. I received responses from most of the department members during each phase. Their feedback helped me refine my concept for the design and better articulate the rationale for each design component. I would use that insight to revise the template information. These revisions to the design template information then guided the development of the materials later.

Additionally, I invited graduate students enrolled in our program an opportunity to participate in some of the design iterations and rapid prototype development. These two individuals brought another role perspective, as potential users. Further, they helped me build some of the prototype materials. Their participation was a win-win situation for all. These graduate students were interested in working as instructional designers or continuing to Ph.D. programs later, with opportunities to engage in teaching and research. By offering the opportunity to work with me during their master's degree program to design chunks of materials or develop portions of Blackboard, I was able to build on their potential user perspective feedback and offer them authentic experience in an iterative design and development process. I captured additional user feedback on the design during the pilot implementation.

You might wonder if there were times when this iterative process could have broken down. I must say, the graduate students and my colleagues in the department routinely responded promptly with feedback when asked during the iterative phases of the design process. Their feedback was

useful and helped inform the evolving design. However, there was one instance when I received feedback from a veteran full professor about the course outcomes and module learning objectives well after the requested deadline. In that instance, I thanked the individual and let them know that I would not be able to incorporate the feedback because it would have structurally changed the course and all the course content was already loaded into the LMS. I assured this member that I would be happy to revisit it for consideration in the next version of the course. The professor then agreed this would be the best course of action.

Unfolding case study approach

Case studies are one strategy that instructors and designers use in teaching and learning environments to facilitate learners' development of critical thinking and decision-making skills, in simulated client situations that mimic real life (West et al., 2012). In unfolding case studies, learners consider and respond to small chunks of information before moving on to integrate additional information chunks into later responses over a period of time (Azzarello & Wood, 2006). I conceptualized the feasibility, design, and evaluation (FDE) and professional development (PD) projects as unfolding case studies. For each project type, students were able to observe several examples of how a mentoring systems project proposal or mentoring relationships unfolded in workplace learning contexts. As the cases unfolded, students would discuss the examples and experiences with each other, offering feedback, asking questions, and suggesting alternative decisions.

The FDE project is an opportunity to solve a real-world problem and facilitate learners' identification of an organizational achievement gap that could be addressed through a mentoring program intervention. The learners built upon their previous knowledge of an organization and encountered new concepts related to the feasibility, design, and evaluation of a workplace-mentoring program. I segmented and sequenced the course content like how one could build a proposal for a new workplace-mentoring program to achieve a specified business or organizational goal. During each module, learners read or watched relevant content, which corresponds with a chunk of a mentoring program proposal. Learners then developed a chunk of a proposal contextualized in an organization of their choice, into a rough draft and shared it openly for comments, questions, and suggestions. In this way, learners replicated a process that instructional designers (IDs) would use on the job to propose a mentoring program. In addition, learners could follow a variety of unfolding case study examples of the challenges and design process used to conduct a mentoring program [quick and dirty] feasibility study, with a corresponding design and evaluation proposal. The act of authoring a case study, individually or in pairs, allowed learners to have some personalized choices in the context, performance problem selection, a simulated hands-on experience, use an inquiry approach to facilitate a feasible design, and build new knowledge immediately applicable in their own areas of work. The following opportunity for learners and the instructor to read others' unfolding case examples then openly comment, question, and suggest alternative ideas, offered learners examples of completed activities, stories of others in a similar situation, and an as-needed coaching approach. Further, IDs regularly interact with each other like this in the workplace.

Similarly, the PD project also offers the opportunity to engage as a mentee in a formal mentoring system. Each week, the learners prepared for meetings with a mentor or engaged in self-selected professional development activities. In addition, they openly shared their experience and process or reflections on their progress and takeaways about formal mentoring program design or developmental activities. Similarly, to the FDE unfolding case study examples, the shared PD project reflections allowed learners and the instructor to observe others' unfolding case examples of mentoring relationships and then openly comment, question, and suggest alternative ways forward.

Experiential, contextualized theory to evidence-based practice

As learners create an FDE project proposal and engage in a formal mentoring program as a mentee in their PD project they develop their ability to apply mentoring program design theory, principles, and models, to evidence-based practice. Therefore, I designed the course to guide learners towards applying the theory and examples of evidence-based practice described in the assigned readings and videos to a context that made the most sense to them. One of the goals of this course design was to avoid a potential situation where individuals who have studied the theoretical underpinnings of a specific intervention type but never actually experienced it, in this case mentoring programs, are later called upon to design and, or implement the intervention. After all, we know from extensive research in online learning that new online instructors should be trained in teaching and facilitation practices online (instead of in a traditional classroom) so that they can experience the intervention as a student before attempting to manage others' learning experiences online (Baran et al., 2011; Hampel & Stickler, 2005).

Simulated project

I designed the FDE project to provide learners with an opportunity to learn how to create a mentoring program proposal based on an authentic workplace context. I structured the course such that learners followed a systematic process and had access to templates and models of mentoring program proposals. I provided encouragement and feedback as they developed their proposals, in conjunction with other students in the course. I provided the learners with faded scaffolding, diminished coaching, and required goals as

well. The intent of this design was that learners would be able to reflect upon the process and documentation they created during and after this project to conceptualize and implement their next mentoring program feasibility and iterative design project independently while on the job. In addition, I intentionally asked students to include a high-level evaluation plan as part of the program design document. The purpose of this activity was to model the practice of thinking through subsequent evaluation activities as part of the design process to encourage an iterative approach to program design. Further, this activity mimics a typical design phase deliverable in larger-scale instructional systems design projects.

Personalized

Personalized forms of learning are authentic learner-centered approaches that vary and adapt to individuals based on their readiness and interest, which provide independent learning opportunities, increased choice, and voice (Song et al., 2012). While a personalized experience can be challenging to achieve in an online course environment, I combined several design approaches to support individual learner needs and interests. Song et al. (2012) recommends that learners consciously personalize their experiences because it is "the key to nurture life-long learners who can practice and develop agency to learn" (p. 699). I designed the PD project to guide learners to work on self-selected goals, a process that would result in a customized mentor match, and choice in professional development activities. In the FDE project, learners had a choice in their project contexts (i.e., any workplace was acceptable) and whether they wanted to complete the project individually or as part of a virtual team.

For both projects, I also provided flexible templates. A template supported every deliverable. At the top of all templates, was a list of goals. If learners could meet the goals, I encouraged them to modify the template or use their own process entirely, to demonstrate the goals. This allowed flexibility for experienced learners to use tried and true approaches to demonstrate their goals while also supporting less experienced learners who may struggle with ideas about how to get started.

Community of practice framework

I conceptualized the design of the course discussions around a community of practice (Wenger et al., 2002). I saw them as spaces where learners can participate in an idea incubator setting; try out new ideas in a low-risk environment, while developing ideas collaboratively, that could not have been conceived of alone. As such, while learners worked through each of the project steps, I encouraged them to post any questions they had about or challenges encountered with their drafts, experiences, or reflections, in the discussion assignment instructions. In addition, in the discussion assignment instructions, I encouraged learners to ask each other clarifying questions if they read something that did not quite make sense, share their perspective on similar encounters, suggest alternative approaches, and reframe ideas, to further the conversation. In this spirit, I also participated in the community of practice discussions.

Peer review

I asked learners to conduct a formal peer review of one-half of the FDE project, including the feasibility study and the design and evaluation proposal. I provided instruction on how to provide actionable, constructive, positive feedback. I also provided a peer review guide and set expectations for students to provide constructive feedback. The learners had experienced multiple examples of my own constructive, positive feedback during the semester as a model. Learners also shared their peer reviews by posting them in a discussion area to serve as examples as well.

Self-assessment

I asked learners to self-assess in two key formats. First, I ask learners to complete a self-assessment of the course goals before they began the course and upon completion of the course. I share the aggregated results of the whole class at the start and again in comparison of the results at the finish so that learners could have a sense of their individual growth and can compare it with the experience of the group. Second, I asked learners to keep track of the hours they spend on coursework each week and note any concerns they had with their work. I shared the aggregated results along with a personal reflection that I wrote to emphasize the key points and summarize takeaways as we progressed each week through the course. Learners reported very few concerns with their progress and the amount of time their study took as they can compare their own experience to the aggregated group experience.

Iterative design process

Researchers suggest that communication with stakeholders and users about design iterations should be prioritized by instructional designers (Kirschner et al., 2002). An iterative design process is a method whereby designers incrementally develop a design based on peer feedback and evaluation (Xu et al., 2015). A process of soliciting feedback and ongoing formative evaluations leads to better design products (Dow et al., 2010). Thus, a constant flow of feedback from the stakeholders described previously who helped work on the design and materials development meant that I worked through an iterative design process.

Course development process and decisions points

As part of the iterative design approach, three graduate students and I worked through the development of prototype materials for the pilot course. I shared many of the prototype

materials, for review and feedback, with the department chair; the department manager for marketing and outreach services and academic advisor; and the other department faculty members as well. Additionally, the decisions I made regarding the prototype materials design and development as well as the organization of Blackboard, the LMS where the pilot course would be delivered, were also supported with the help of one of the graduate student assistants. Our process is described in the following sections.

COURSE GOALS	ASSOCIATED LEARNING OBJECTIVES
A. Describe the benefits and challenges of professional development mentoring relationships, given scholarly research, personal experiences, and case studies of mentoring relationships.	A1: Engage in a mentoring experience as a mentee. A2: Reflect upon other mentees' experience. A3: Reflect upon your mentee experience. A4: Apply strategies mentees can use to work continuously with mentors to improve the mentoring relationship, their learning, and new skills application in the workplace.
B. Apply evidence-based facilitated mentoring program best practices in an HPI-grounded proposal development process, given a template.	B1: Define mentoring relationships. B2: Describe when mentoring is an appropriate performance improvement intervention. B3: Identify current mentoring program trends and practices in organizations. B4: Identify strengths and limitations of mentoring in organizations. B5: Align mentoring programs with organization goals and worthwhile performance gaps. B6: Align mentoring programs with organizational culture. B7: Identify key roles in facilitated mentoring programs. B8: Select mentor and mentee pools aligned with mentoring program goals. B9: Identify technology applications, which can be used to support mentoring. B10: Determine roles and responsibilities for mentors and mentees. B11: Determine mentor qualifications. B12: Determine mentee qualifications. B13: Determine recruitment and marketing strategies aligned with mentor program goals. B14: Describe mentor and mentee matching strategies. B15: Describe mentoring program orientation and training needs
C. Determine when organizations would benefit from a facilitated mentoring program vs. marketed informal mentoring events.	C1: Differentiate between informal and formal mentoring relationships. C2: Determine when mentoring is an appropriate performance improvement intervention. C3: Identify formal and informal mentoring event opportunities
D. Create a high-level evaluation plan for a facilitated mentoring program, given a template.	D1: Given a mentoring program aligned to organizational goals, create a program logic model. D2: Describe common mentoring program evaluation activities.

TABLE 3. Course goals and associated learning objectives.

Reading and video content

After two of the graduate students and I had completed the initial steps of a systematic multiple studies literature review on workplace mentoring programs and had a first draft written of the research manuscript (Giacumo et al., 2020), we started to work on the course design content. I shared information about the need for the course, the potential course audience, and the potential opportunity to apply for eCampus support. By the time we began to think about the course design project, it was already almost the end of the semester and while one graduate student would continue to work as my graduate assistant during the next semester, the other would move on to preparing her program capstone project and defense. Therefore, we scoped the first chunk of our work towards thinking about a list of topics and potential reading material. We chose the topics and reading materials based on the systematic literature review research we had just conducted and articles we read on mentoring programs in workplace learning. This first step was a natural progression from the extensive literature review and content analysis we had just conducted together. Later, after the course goals, learning objectives, assessments planned, and assignment instructions were finalized, the selected readings and videos were updated.

Course goals and learning objectives

As mentioned previously, I wanted to build a course where learners would be able to respond with a knowledgeable, experienced, professional, evidence-based perspective to any employer request for the design or implementation of a formal workplace mentoring systems program. Therefore, I drafted four course goals relevant to a human performance improvement lens, the application of theory to practice, the ability to support business decisions leading to valued results, and proposal development. In addition, I proposed associated enabling learning objectives aligned to each course outcome. Table 3 shows the course goals and learning objectives.

Syllabus

I had seen example course syllabi from a variety of courses offered by my department and during my own studies as a graduate student. Additionally, my eCampus instructional design consultant shared another template. In the end, I combined some common elements that I found in the department template examples with elements and formatting shown in the eCampus template. The elements I borrowed from the consultant's template were additions to the department's template. These additions included: (a) a description of the delivery format, (b) a list of all the course activities, (c) a description of the course format for each module, and (d) information about Netiquette.

These elements were added all at once when I built the syllabus because they were shown in the consultant's template, recommended by Quality Matters, and seemed helpful for students. The delivery format notes the following technology elements: discussion forums, blogs, optional team collaboration tools in the LMS and Google Office, LMS submission tools, and for live discussions a headphone or speakers, or mobile device, and optionally a microphone, are required. I chose these tools so that the learners would be able to share their deliverables with each other.

The list of course activities included lectures, reading and/or videos, blog assignments, discussion assignments, two major project deliverables, optional web conferencing meetings, a module wrap-up, an Entrance Knowledge Assessment, and an Exit Knowledge Assessment. I chose these activities because they fit learners' needs for instruction, practice, and feedback. The knowledge assessments prompt learners to rate their confidence with being able to talk about their experience demonstrating each of the course outcomes in job interview questions so we could observe the changes in the aggregated responses between the start and end of the course. I chose this tool to support learners' confidence building and to assist learners with making connections between course activities and their career development goals. The course format description added two to three sentences to describe each of the course activities.

The information about Netiquette requested that learners take care when posting in discussions and demonstrate respect for diverse perspectives in their writing. Also, it pointed to additional resources about Netiquette expectations. I added this information because I noticed that some learners' comments posted in my previous courses did not always acknowledge multiple perspectives. I thought perhaps this reminder would be useful for those learners.

Two-week modules

Altogether, the course is 15 weeks long. I set seven modules up to span across two weeks. During the first week, learners would have a chance to read and, or watch presentations, about mentoring systems in organizations and discuss the theories, principles, and models, covered during the first week. Then, during the second week, they would have an opportunity to apply the new concepts covered to assigned FDE project proposal chunks and share the drafts in an open, whole-class discussion forum. In the meantime, they would engage in the PD project each week in the role of a mentee. The eighth and last module was only one week, set aside for a peer review and last revision of the FDE proposal and to discuss takeaways from the course. I opened each module to learners one week before the completion of the previous module.

Professional development (PD) project

The entire project was described in an overview at the start of the course and individual activities were split into chunks that got released with each module. I set up a survey to ask the mentors to assess their experience, determine any potential need for job aids or orientation training materials, and whether they would be willing to mentor future OPWL students. I did not originally provide any mentor training or job aids because I focused on building templates and a process that would help the mentees prepare and meet their mentors with detailed meeting agenda proposals.

Mentoring program feasibility, design, and evaluation, (FDE) project

I also provided learners with an overview of the FDE project at the start of the course and released instructions on how to complete each chunk one module at a time. Learners conducted peer reviews just before major deliverables were due to reinforce opportunities to learn from a variety of case study examples. This step also helped to ensure they had all the required components together before submitting their projects for grading.

Content sharing

I provided most of the pre-planned, instructor-generated content via links to Google Docs because of accessibility and the nature of the pilot course. It is far easier for learners to save key lecture information in their personal files when it is in a Google Doc vs. a Blackboard link. In addition, I knew the content would evolve and Google Docs would make revisions far more efficient. The instructor-generated content included mini-lectures, deliverable directions, and optional templates. Whenever possible, I embedded links to the readings and videos into the module materials. I used the Bb discussion board and blogs to support all the student-to-student and student-to-teacher interactions.

Kick-off and mid-course huddle; optional, live, recorded meetings

Twice during the semester, I pre-planned synchronous, optional, live, recorded meetings, for learners who were available and desired video interaction. The purpose of the first meeting was to provide an orientation to the course and answer any questions that arose during the first week of the course. The purpose of the mid-term check-in meeting was to talk about where we had been, where we would go next, answer any questions that arose, and explore feedback from learners.

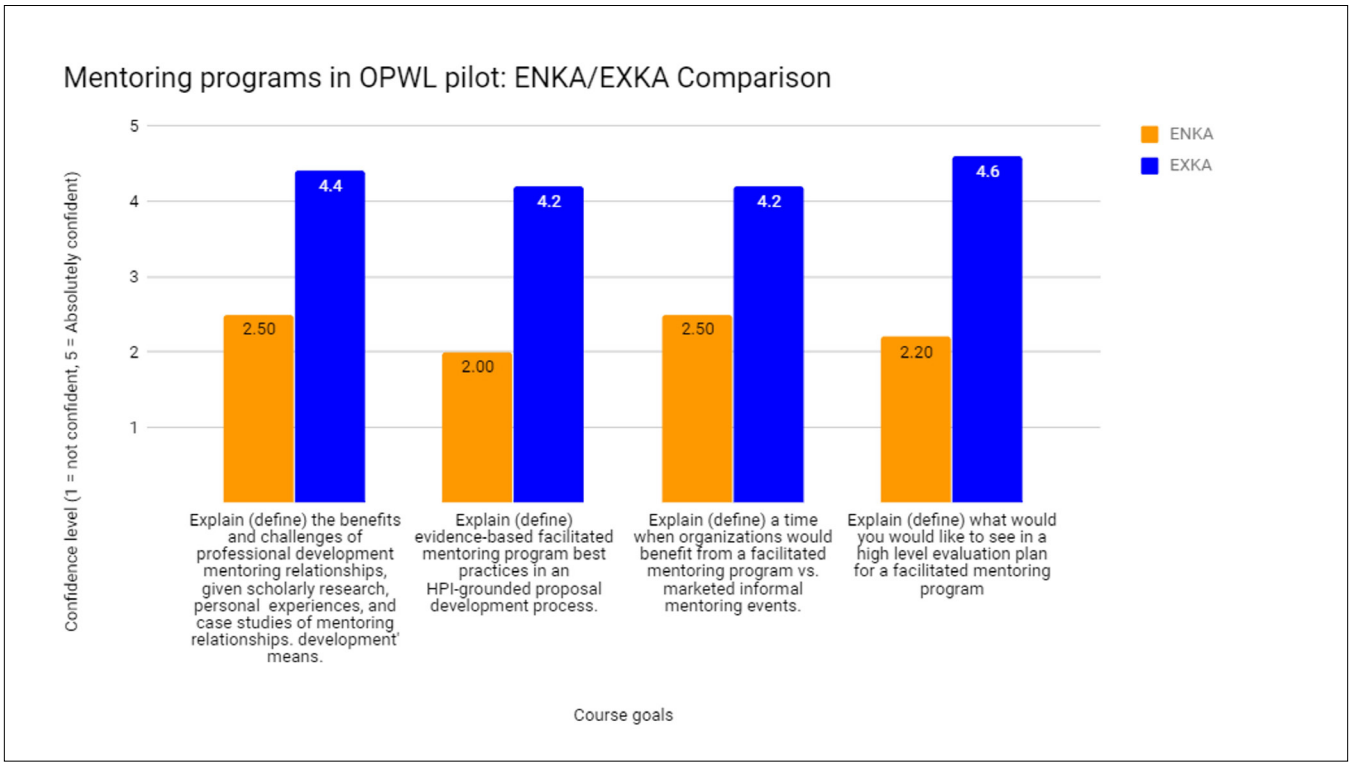

FIGURE 2. A comparison of the ENKA (n = 5) and EXKA (n = 5) survey results for the pilot mentoring programs in OPWL spring 2018 course. 10 students registered and started the course. During the first week two students dropped the course and during the semester three students withdrew due to personal reasons. When the responses of the five students' who did not complete the course were removed the ENKA averages did not change.

ENtrance knowledge assessment (ENKA) / EXit knowledge assessment (EXKA) surveys

I aligned the ENKA and EXKA surveys with the course goals, to measure learners' beliefs in their ability to take actions to manage a prospective situation (Chyung, 2007). For example, both self-assessments ask learners to imagine that they recently applied for a learning and development position, and the hiring manager selected them as one of the finalists. If the interview committee were to ask about some of the following items, they should determine their confidence ratings for each of the following items. Both survey question items (i.e., course goals) were identical as well as the five-point Likert scale-type response items asked them to rate how confident they were at being able to demonstrate the course goals (i.e., absolutely, confident, not confident). The surveys were not anonymous and were delivered via links to Google Forms. I asked for learners' names so that I could follow up with anyone after the EXKA who was still not confident, assign a completion point, and get full participation. Responses to all items were required. Figure 2 shows the results of the ENKA/EXKA comparison for the pilot program.

Weekly hour check surveys

Learners had access to the weekly hour check surveys each week, to help students monitor their workload and as another way to voice any concerns as they may arise. They were not anonymous, but I never approached a learner unless he/she asked for a concern to be addressed or for help to find approaches that are more efficient to manage their course workload. I also planned to track this information to inform future revisions and make any necessary adjustments along the way. The first two (required) questions asked for their names and the week of the semester. The following (required) questions asked how much time learners spent on the readings and videos, course discussions, chunked project work, and final project deliverables, in one-hour increments. The last (optional) item allowed the respondent to address any concerns.

Mid-semester evaluation survey

During week 7, I used Google Forms to distribute a mid-semester evaluation survey to solicit anonymous feedback from students about their experience with the course. 66% (3 out of 5) of the learners responded. Almost all the questions were open-ended. I coded, aggregated the responses, wrote reflections about the themes that arose, and shared the results with students during week 8. Figure 3 shows the mid-semester evaluation survey questions.

Course Design Failures

Based on feedback and user experience data collected from the learners enrolled in the pilot course, there were three main design failures. Learners felt there was a split focus, they reported too many contact hours, and they experienced confusion with the course schedule. In this section, I respond to these failures and explain my findings.

Do you usually understand what is expected of you in preparing for and participating in this class? If not, please explain why not. (free text)

1. I feel comfortable approaching the instructor with questions or comments. (Yes or no)
2. I find the on-going class discussions help me in understanding the readings. (free text)
3. I find the on-going class discussions help me in understanding key ideas in the course. (free text)
4. What would you like to see more of between now and the end of the semester? (free text)
5. What do you think we could cut down on? (free text)
6. What specific advice would you give to help your instructor improve your learning in this course? (free text)
7. What other ideas would you suggest to improve this course (e.g., changes in course structure, assignments, or exams)? (free text)
8. What have you learned so far, that is new to you or helped you change/refine/broaden your professional opinion or practice? Bullet points are fine. (free text)
9. How much do you value the knowledge and/or skills and/or experiences, you noted above?
10. If you have comments about the class not covered in the above questions, please use this space to make them. (free text)

FIGURE 3. Mid semester evaluation survey questions.

Split focus

Responses to the mid-semester evaluation survey and the university's end-of-course survey showed that the learners struggled with a split focus. Respondents perceived the two projects, where they engaged as a mentee (PD project) and worked on a feasibility, design, and evaluation proposal (FDE project) at the same time, as disjointed. However, the responses also showed that the learners valued both projects and the associated assigned readings and video content. This finding indicates an unmitigated integration risk where the two course components did not form an integrated whole. Clearly, the lectures and other instructional materials did not adequately shape students' expectations that a personal mentoring experience would be useful to inform potential future mentoring program proposals, design, and management responsibilities.

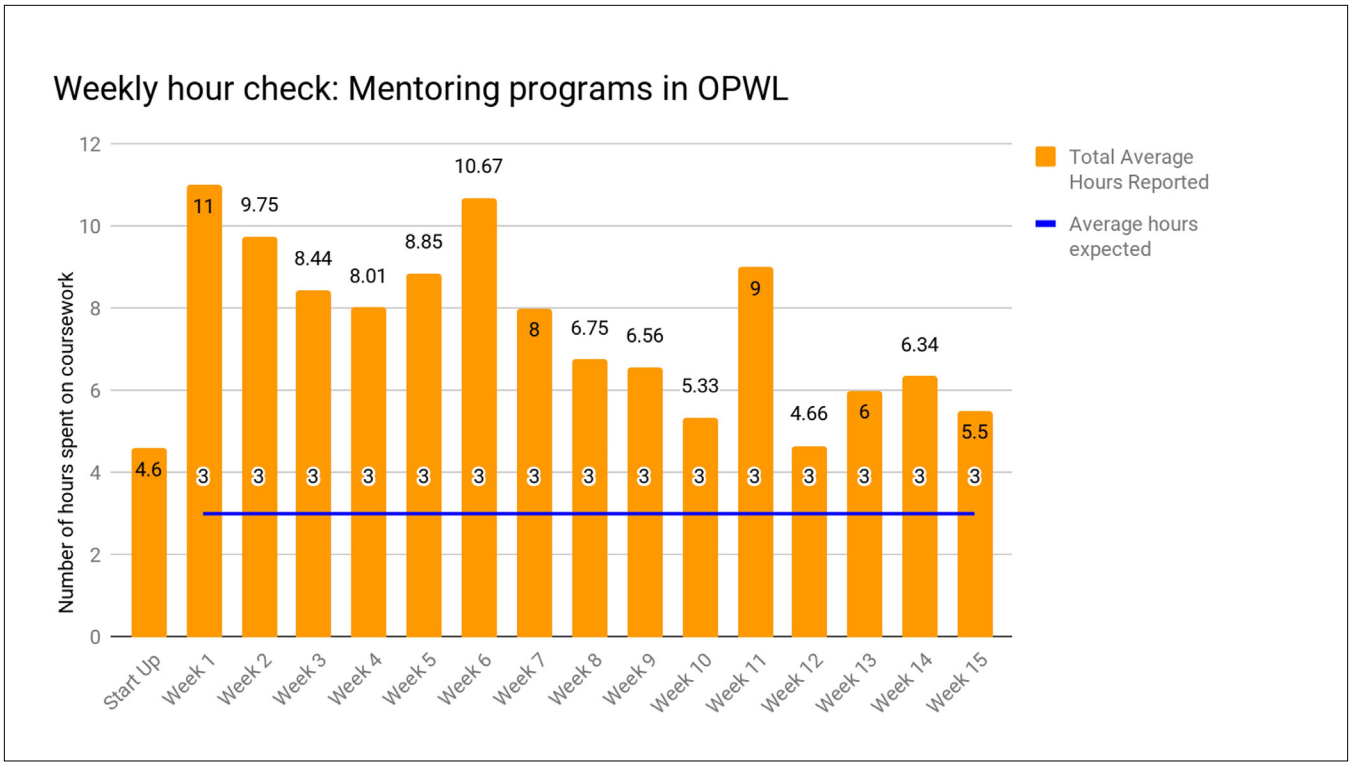

FIGURE 4. The number of hours students reported spending on coursework each week. N = five, each week two - five students responded. There are no hours expected during the startup week; it is optional for those who would like to orient themselves to the course. During week 8, we decided to let students choose to either finish either both the FDE and PD projects, or just one of the two, if they needed to manage the amount of time they spent on coursework for this one credit course.

Contact hours

During the course design, I created time estimates for activities based on the amount of content to be read or watched and the writing deliverables assigned. However, responses to the weekly hour check and the mid-semester evaluation survey showed that students were putting in more time than expected for the one-credit course contact hours. While we only expected students to complete an average of three hours per week, they were choosing to put in as many as 10 or more hours during some weeks. Learners base these estimates on either the hours they track as they complete work, or their best guesses, and each submission is rounded up to the nearest 60-minute mark. Therefore, the actual total average hours learner reported spending on coursework may be slightly less than shown in Figure 4. The co-instructor and I felt confident that they were likely putting in more than the three average hours expected each week. Therefore, after week seven the pilot course co-instructor and I decided to give learners the option to complete both the PDE and PD projects or choose one project to complete and drop the other project. Figure 4 shows the average expected time on task and the average results of the hour check survey responses for the pilot course each week during the semester.

Course schedule

The course schedule was set up such that each two-week module occupied one line item. Throughout the first seven weeks of the course, at least two or three learners, out of five total course participants, would either send emails voicing confusion or forget to complete assignments each week. They attributed the confusion or missed assignments to the design of the course schedule. This course schedule design is an example of a hygiene issue; it confuses learners and is not intrinsic to the design of the course (Chyung & Vachon, 2013). Clearly, hygiene factors in online course design can affect students' experience. One main module page in Blackboard is shown in Figure 5 (next page).

Blackboard learning management system (LMS) course shell

LMS providers, like Blackboard, strive to offer standardized designs that will work across large groups of users. Therefore, these LMS packages possess many features and attributes that cannot be modified for single implementations while other features and attributes can be modified. Ideally, I planned to create two different discussion board instances in Blackboard and label one for the general course discussions, including the FDE project, and label one for the PD project discussions. This would minimize scrolling and make individual forums easier to find. However, I learned that I could not set up two different discussion board areas in a Blackboard

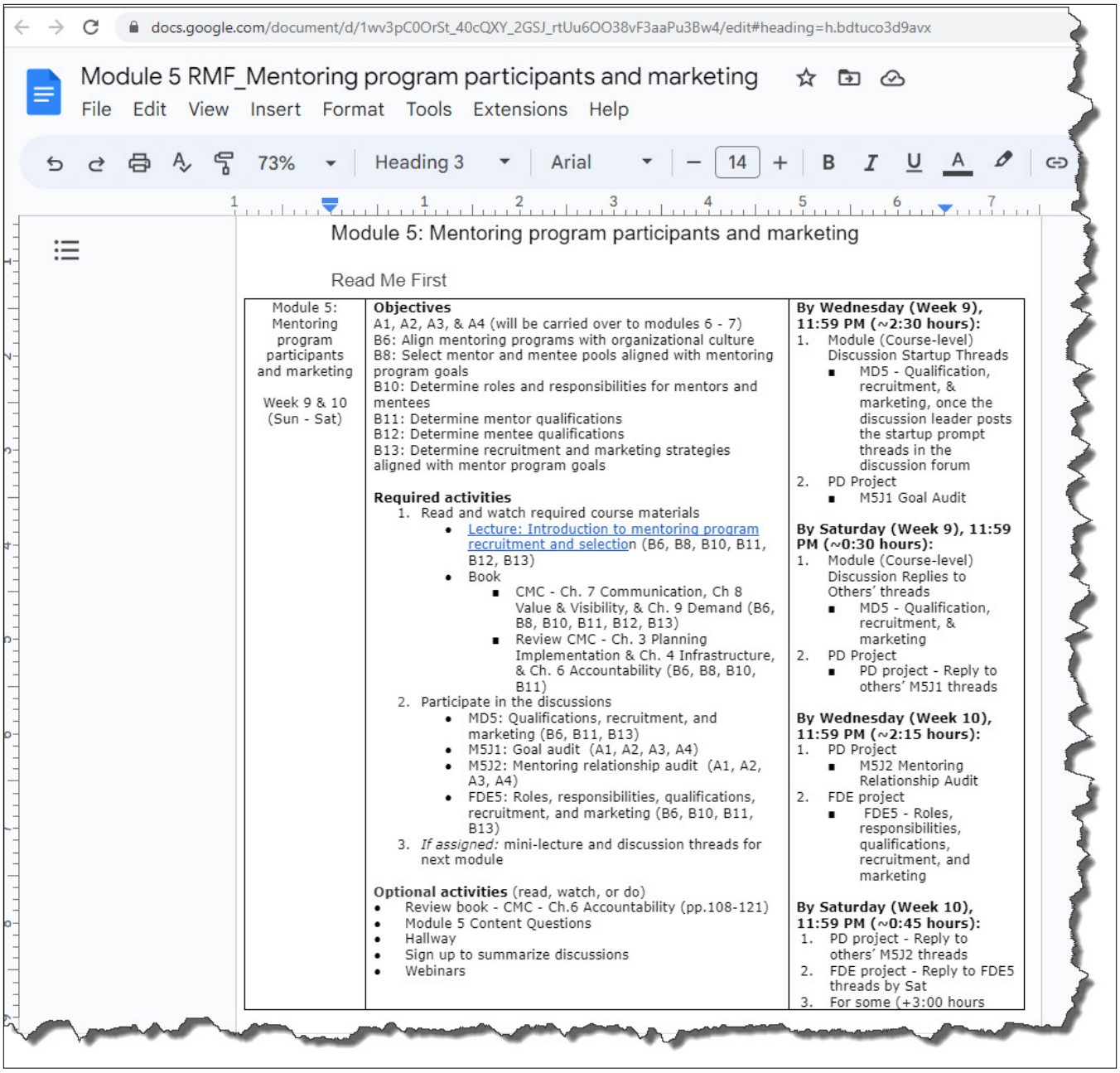

FIGURE 5. Module 5: Read Me First link in Blackboard goes to a Google Doc.

LMS course shell. So, I settled on using a single discussion board in Blackboard for the general module discussions that happened during week 1 and the FDE project discussions that happened during week 2, of each module. I planned to use the group area and journal tool to facilitate the PD project discussions in small groups of 3 - 4 students.

However, during the first week, I learned that the small group journal tool in Blackboard prevents learners from commenting on other small group members' posts and prevents people in other groups from viewing others' posts. Therefore, I moved the journal entries into the Blackboard blog tool because then other students could comment on the entries and a discussion can be public. However, students in one small group area could not see the posts made in other's small group areas and three of the ten learners enrolled in the course dropped the course in the first two weeks. All three who dropped the course participated in one small group, which brought the small group down to two learners. Thus, the discussions in the small group blog areas became more difficult with some students forgetting to post assignments due to the two-week module implementation. Finally, I switched all journal entries into the main discussion board and then this piece of the course started to work well, despite the increased scrolling required for navigation to the correct forum.

CONCLUSION

This design case was situated in a fully online master's degree program at Boise State University. The context of the university, the College of Engineering, eCampus, multiple perspectives gathered from a wide variety of stakeholders, and the author's experience as an online student and instructor working with learners in a variety of programs (i.e., teacher preparation, educational technology, and performance improvement) all contributed to the conceptualization and design of this course.

Overall, students who took the pilot course were pleased with the elective course topic area and project work as was I. Members of the department are excited to have another strategy in the department toolkit, which helps students who are new as well as those with experience. The topic area will help all learners build new contacts and advance their careers by adding an increasingly popular non-instructional performance improvement workplace learning strategy (ATD Research, 2016). The course is valuable enough for the department operations team and students to keep improving. I will work to revise the course for the next iteration implementation.

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