Chapter 3
Integrated e-Learning Paradigm in the Twenty-First Century: Management Education

Barbara K. Son

Abstract Since the early 2000s, online degree programs have been rapidly growing nationally and globally. Even traditional universities have been adopting learning-management systems to offer flexible, hybrid, and online classes. Concomitantly, textbook publishers have been improving e-Learning platforms and add-ons. The plethora of interactive e-Learning materials has produced a profound shift in the ways today's students acquire and apply knowledge, and poses growing challenges for online programs, instructional designers, and instructors to customize e-Learning materials for different learning styles. To fit students' learning needs, tailored instruction should be equipped with high-performing adaptable multimedia tools. We see the growing impact of live e-Learning and web collaboration technologies on the constructivist- and connectivist-based pedagogies. Accordingly, curricula of the twenty-first century digital age should foster collaborative learning, experiential learning, multimedia learning, and active learning. This chapter proposes a learner-centered integrated e-Learning paradigm that consists of these four interwoven learning components. Using the example of a global online MBA course, we also closely examine innovative e-Learning strategies that are vital to cultivating highly engaging and applied learning in the twenty-first century. Finally, we consider the implications of an integrated e-Learning paradigm in management education, discussing the most effective uses of pedagogical techniques.

1 Introduction

In today's technologically enhanced society, we need to close the gap between teachers' knowledge about technology and the integration of technology in their classes. Technology has impacted pedagogies significantly as flexible technology-based instructional design is a critical factor in the creation of an effective

B. K. Son (✉)
Anaheim University, Anaheim, CA, USA
e-mail: bson@anaheim.edu

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e-Learning environment. This requires a significant commitment of teachers' effort and time so that they can acquire technological skills, develop technology-based classes, and deliver relevant and customized education. Rapid progress in educational software, mobile devices, and learning-management systems can help teachers customize their lessons to fit each student's learning style. This customized education is vital in developing students' twenty-first century skills.

Curriculum is an integral part of the customized and applied learning of the modern world. The constructivist pedagogy, which has been dramatically impacted by technology, stresses the role of teachers as facilitators in the learning process, while assigning learning responsibilities to students. In our previous studies, we examined these challenges by closely looking at innovative interactive learning approaches (Son & Goldstone, 2012; Son & Simonian, 2013, 2016). In this chapter, we will discuss how learner-centered innovative pedagogical techniques should be designed to improve these approaches. In particular, we will address how the twenty-first century pedagogies should meet online learners' needs by evolving e-Learning technologies (Kolb, 2015; Veletsianos & Shepherdson, 2016). Accordingly, we will explore integrated e-Learning strategies using the twenty-first century management education as the subject matter. We'll conclude with the practical implications and future potential of these strategies in modern classrooms.

2 New Paradigm in Twenty-First Century e-Learning

Rapidly evolving learning technologies are transforming teaching methods, learning design, and learning analytics at large. Popular open source learning management systems (LMS) such as Moodle (Modular Object-Oriented Dynamic Learning Environment) and Canvas embody collaborative learning and active learning pedagogies. The Moodle LMS offers an excellent e-Learning portal and development platform to build communities of learners. Students can use discussion forums, wikis, glossaries, and messaging to network with fellow students. This encourages them to build knowledge through collaborative learning and active learning. Meanwhile, asynchronous activities allow students to collaborate at different times. Hence, social constructivism-based Moodle triggers learners to contribute to learner-centric collaborative learning environments (Al-Ani, 2013).

Similarly, the Canvas LMS is designed to enhance collaborative learning through flexible customized educational tools. Its intuitive app allows teachers to cater to a wide variety of learning needs, while monitoring their students' performance. They can explore the active learning pedagogical approach by disseminating their courses through diverse learning channels, including videos, blogs, and wikis (Johnson & Sanders, 2015). Moreover, the Canvas platform, which fosters pedagogical flexibility, can enhance connectivist cognitive presence in blogs, social media posts, and webcasts. Learning through social networks requires a cognitive process. Connectivism is based on a constructivist model of learning, and its pedagogical

foundation is that learning happens as learners connect newly acquired knowledge to their previous knowledge (Anderson & Dron, 2011).

Massive open online courses (MOOCs) based on connectivism also offer collaborative social learning tools, such as blogs, chat, forums, and group activities. As students in a MOOC develop problem-solving skills through case studies, constructivism-based MOOCs can persuade learners to contribute to discovery-learning environments (Ross, Sinclair, Knox, Bayne, & Macleod, 2014). Furthermore, MOOC providers can facilitate learning swarms through open pedagogy strategies such as Open Educational Resources (OER). However, MOOCs face a huge challenge of engaging all their students in order to prevent massive dropout rates (Spector, Ifenthaler, & Sampson, 2016). Pedagogical innovation that promotes high levels of interaction is vital to overcoming these challenges.

We see the growing impact of live e-Learning and web collaboration technologies on the constructivist- and connectivist-based pedagogies (Veletsianos & Shepherdson, 2016). Accordingly, the student-centered pedagogy of the modern digital age must address four vital learning components: collaborative learning, experiential learning, multimedia learning, and active learning. Hence, this chapter proposes a learner-centered integrated e-Learning paradigm that consists of these four interwoven learning components, as depicted in Fig. 3.1. Under the Integrated e-Learning approach, learners are able to:

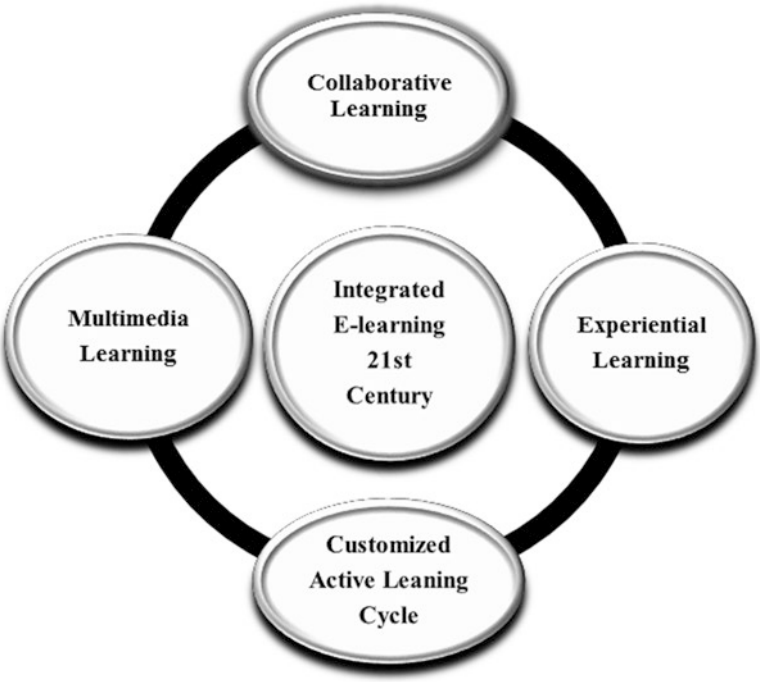

Fig. 3.1 Integrated e-Learning in the twenty-first century

- Develop collaborative learning through diverse applied e-learning activities.
- Develop experiential learning through continuous practice in areas that are related to the student's learning goals and experiences.
- Develop multimedia learning by applying different learning tools flexibly.
- Contribute to the active learning cycle by utilizing integrated active-learning modalities.

Using the example of our MBA class at Anaheim University, we look at the integrated e-Learning components in more detail. We also relate them to innovative flipped-learning strategies that are vital to cultivating highly engaging and applied learning in the twenty-first century.

2.1 Collaborative Learning

Table 3.1 highlights the goals and practices of collaborative learning. Collaborative knowledge creation is facilitated by social constructivism-based learning platforms such as Moodle and Canvas. The situated learning theory and expectancy-value theory see learning as more effective through challenging interactive activities that facilitate learner participation in practicing communities (Cook & Artino, 2016). The constructivist learning theory observes that interactivity leads to deeper learning (Krippel, McKee, & Moody, 2010). Asynchronous activities on flexible learning platforms allow students to collaborate at different times. In our MBA class, we emphasize collaborative learning practices through which our active learners share their perspectives toward complex global business markets, analyze multidimensional management challenges, and sharpen leadership and management skills.

Students have to actively participate in collaborative learning through joint problem-solving activities, joint sharing of ideas, group case studies, and projects (Al-Ani, 2013; Spector, Ifenthaler, & Sampson, 2016). Our MBA class adopts collaborative-learning pedagogical techniques through learner-centered multidisciplinary case studies and team projects. Our MBA students, who are mostly global business professionals (Reuters, 2008), are familiar with team learning and projects

Table 3.1 Collaborative learning goals and practices

Goals	Practices
Collaborative creation of knowledge	Social constructivism-based learning platforms, asynchronous activities to collaborate at different times
Students' learning responsibilities	Joint problem-solving activities, joint sharing of ideas, group case studies, and projects
Communities of learners	Collaboration of students on authentic tasks and on a common endeavor under the guidance of their teachers/facilitators of learning
Dynamic and interactive learning environment	Networking through collaborative social learning tools, such as blogs, chat, discussion forums, social media sites, wikis, and glossaries

in multinational and multicultural organizations. To build high-order entrepreneurial thinking and analytical skills, they are required to perform an analysis of the practical applications of entrepreneurship in our innovation and entrepreneurship class. To promote these learning outcomes, we created the following team activity:

Each team participates in the study of successful entrepreneurship. The team members conduct research on successful entrepreneurship strategies and prepare a "Successful Entrepreneurship" document.

The document must discuss each of the following aspects:

- Entrepreneurship successes and failures
- Key implementation steps
- Entrepreneurship resources
- Entrepreneurship opportunities

The written submission should then reflect their team study experiences.

As organizational complexity grows, global management education has to prepare students to be effective leaders who drive organizational performance and competitiveness. To build communities of learners, students have to construct their knowledge, build self-directed learning skills, and collaborate on authentic tasks and on a common endeavor under the guidance of their teachers, who are facilitators of learning.

Students' cognitive load is reduced by scaffolded learning, which helps them investigate and solve complex problems. Scaffolded learning is very useful for problem-based learning, inquiry learning, and self-directed learning (Hmelo-Silver, Duncan, & Chinn, 2007). We apply the scaffolded learning model in our class as weekly student hosts take responsibility for promoting active discussion in the discussion forum during the entire week, while receiving guidance and feedback from professors. Scaffolded collaborative learning is facilitated by weekly student hosts who motivate and encourage their peers to share knowledge and experiences together on the assigned topics.

Technology facilitates constructivist pedagogy and collaborative learning as learners engage in social interaction (Spector, Ifenthaler, Sampson, & Isaias, 2016). They network through collaborative social learning tools, such as blogs, chat, discussion forums, social media sites, wikis, and glossaries (Veletsianos & Shepherdson, 2016). Social media tools may improve collaborative learning when students share ideas and learning materials and collaborate virtually with each other for joint problem-solving. In our class, students utilize various collaborative tools such as chat and discussion forums for sharing and building knowledge, which creates a dynamic and interactive learning environment.

2.2 Experiential Learning

According to the experiential learning theory, experience is involved in all learning cycles of grasping experience and transforming experience. Accordingly, learners' experiences are not just limited to experiential exercises, games, and internships.

Table 3.2 Experiential learning goals and practices

Goals	Practices
Critical reasoning skills	Explore real-life issues and develop greater skills to solve unfamiliar problems in experiential settings
Diverse multiple perspectives	Interact with people who have different perspectives, backgrounds, and cultures in experiential settings
Lifelong learning	Lifelong learning related to academic and career interests in experiential settings
Social responsibility	Understanding social and environmental issues and participating in social action

Their experiences also include abstract experience, reflective observations, and active experiments (Kolb, 2015). According to the 2015 Global Management Education Survey, business school students prefer experiential learning (Plompen, 2015).

As Table 3.2 summarizes, the first goal of experiential learning is developing critical reasoning skills. To achieve this goal, students must explore real-life issues and develop greater skills to solve unfamiliar problems in experiential settings. Working students generally are interested in applying their work and life experiences to learning and also in applying their classroom learning to their work lives. There is a reciprocal relationship between work-life experiences and class learning. Hence, instructors need to deliver practical experiential learning that extends into the real workplace (Son & Goldstone, 2012).

To embed experiential learning in our innovation and entrepreneurship class, we draw on our work and life experiences to apply experiential learning methods such as real case studies, consulting exercises, and multinational group collaborations. Through these methods, we help MBA students become critical and creative thinkers and problem solvers, and also help them build management competencies (Caligiuri & Tarique, 2012). Through digitally networked learning, our students are also able to cocreate knowledge with professors. Learners' digital-network experience is becoming an increasingly important form of experiential learning in the twenty-first century (Campbell, 2016).

Building multiple diverse perspectives is the second goal of experiential learning, which is facilitated by interacting with people who have different perspectives, backgrounds, and cultures in experiential settings (Ifenthaler, Masduki, & Seel, 2011). Today's leaders are called upon to develop diverse and inclusive workplaces. It is critical for them to build cultural intelligence (Gutierrez, Spencer, & Zhu, 2012). Accordingly, MBA curriculums in the twenty-first century must address experiential learning so that students learn and build these leadership skills in experiential settings. The third goal of experiential learning is lifelong learning, which calls for a culture of continuous improvement. We see students seeking advanced degrees and certifications. In the rapidly changing technology-driven world, as teachers engage in a lifelong learning process through their professional development, they can better help their students become lifelong learners. We apply this approach to our class as the professor and students are lifelong learners. We

promote lifelong learning related to academic and career interests in experiential settings. Our experienced middle- and senior-level manager students clearly understand the culture of continuous improvement.

Social responsibility is the last goal of experiential learning. This goal is enhanced by students learning about and understanding social and environmental issues, and by their participation in social action. As the United Nations' Principles for Responsible Management Education advocates, today's management curriculums must address corporate social responsibility and sustainable management (Alcaraz & Thiruvattal, 2010). Interdisciplinary pedagogies are further required to facilitate positive social changes and social action. Our innovation and entrepreneurship class examines the broad impacts of these values and sustainable management practices in multinational organizations. We also explore social responsibility, social entrepreneurship, and sustainability issues in the case studies, reflective exercises, and group practices.

2.3 Multimedia Learning

The cognitive theory of multimedia learning suggests that cognitive load should be a key factor in multimedia instruction (Mayer & Moreno, 2003). According to Moreno and Mayer (2007), interactive multimodal learning environments alone do not produce meaningful learning. Since multimedia technologies are just tools, effective learning relies on the successful integration of customized multimedia materials into course activities. The Astleitner and Wiesner model expanded on Mayer's cognitive model and suggested different components of motivation. In the view of a cognitive theory of motivation, video information results in higher learning motivation than just audio information (Astleitner & Wiesner, 2004). As shown in Table 3.3, the first goal of multimedia learning is effective and engaged learning (Neo, 2007). To pursue this goal, learner-centered multimedia designs must be customized based on students' learning styles. According to the expectancy-value theory, learning motivation increases with relevant learning materials and meaningful and challenging activities (Leacock & Nesbit, 2007). Instructors must make their course lessons more connected, more relevant, and more interesting. In addition, they need to offer interactive and challenging activities to facilitate learner

Table 3.3 Multimedia learning goals and practices

Goals	Practices
Effective and engaged learning	Learner-centered multimedia designs and interactive and challenging activities that facilitate learner participation
Support system for learning through doing	Collaborative multimedia applications and practices
Flexible learning	Provide wide choices of flexible multimedia tools including tutorials
Adapted learning	Adapt multimedia design materials to learners' characteristics

participation. The overall effectiveness of this approach has been documented (Son, 2016; Son & Simonian, 2016). Customized multimedia learning tools can help motivate students through learner-centered applications and practices (Son & Simonian, 2013, 2014).

The cultural historical activity theory views learning technologies as representing a support system for learning through doing. Accordingly, successful learning through doing depends on how teachers and learners use learning technologies (DeVane & Squire, 2012). The pedagogies associated with the activity theory have been increasingly impacted by technology's influence on learning components. To promote learning through doing with the support of technology, teachers must commit a heavy investment of time and effort to preparing collaborative multimedia applications and practices on the learning platforms. Applications are shared on electronic whiteboards, which stirs collaborative visual learning (Son, 2016). Learners should be treated as actors who manage their own learning processes. In our class, students can view lectures and videos on their own time before joining the real-time live seminars through a customized web-based portal. We offer our global manager students live session platforms for project discussion and collaborative problem-solving (Anaheim University, 2015). In real-time online classes, we encourage engaged and collaborative learning through the latest high-definition video webcam technology (Gutierrez et al., 2012).

The third goal of multimedia learning is flexible learning, in which learners have wide choices of flexible multimedia tools including hypermedia and adaptive tutorials (Beetham, 2007). In addition to the intrinsic benefits of this flexibility, learners still need to receive feedback and support from teachers who facilitate deeper learning. Accordingly, we embed learning materials in appropriate graded activities in our innovation and entrepreneurship class. We adopt flexible multimedia learning tools. Our students, who are mostly global business professionals, can engage in discussion, seminars, and project forums through iPod, DVD, streaming video webcast, and video podcasts (Anaheim University, 2015). We help them practice different learning tools flexibly in order to comprehend complex management issues.

Adaptive learning is the last goal of multimedia learning. As learning facilitators, we need to adapt learning materials to learners' characteristics. Diagnostic tools such as analytics in Canvas offer the possibility of adapting materials to learner characteristics (Brown, Dehoney, & Millichap, 2015; Ifenthaler, Demetrios, Sampson, & Spector, 2018). Through examining learners' behavior in terms of participation, submissions, and scores, instructors can not only lend individual support to struggling students but also can adjust learning activities per learning needs. New innovative video platforms such as Arc also offer analytics. This enables instructors to examine their learners' video-based learning behavior to create more effective videos. This approach promotes the adaptive learning goal. In addition, Arc allows two-way interaction between instructors and learners through a commenting feature, which facilitates collaborative engaged learning ("Instructure", 2016). Meanwhile, adaptive and personalized mobile learning systems are becoming more important due to the growing demand for customized mobile applications for colleges (Sampson & Zervas, 2013; Son & Simonian, 2014). It is easy to customize

mobile applications through iMobileU (Keller, 2011), while the jQuery Mobile platform automatically adjusts "the video content for the device it is viewed on, extending clear video functionality to all mobile visitors" (Duo Consulting, 2012, p. 1).

To match the more interactive and engaging digital content available to students outside of the classroom, multimedia learning tools can assist and help motivate students by supplementing traditional teaching modalities with learner-centered learning, through application and practice. The evolving mobile learning technology of the twenty-first century requires innovative and flexible adaptation of the students' learning behavior, which leads to higher learning effectiveness and learner satisfaction (Son & Simonian, 2016; Su & Yeh, 2015).

2.4 Active Learning Cycle

Active learning is based on the social constructivism theory, which emphasizes interactivity. According to the theory, learners build knowledge primarily through social interaction (Krippel et al., 2010). Active learning is also consistent with an inquiry-based, constructivist learning theory that relies on the principles of discovery learning through problem-solving, experimenting, and experiences (Bell, Urhahne, Schanze, & Ploetzner, 2010). Active learning demands online instructors who are committed to a constructive approach that facilitates learners through student-centered collaborative-learning activities (Son & Simonian, 2014, 2016). Facilitative instructors need to constantly draw forth learning feedback to support continuous inquiry-based active learning. As shown in Table 3.4, the learner-centered active learning cycle enables bridging the gap between theory and practice. This cycle is further facilitated by learner-centered active teaching, which is the second goal of active learning. Teachers and active learners have to be active-learning partners to keep the "active learning cycle" (Fig. 3.2) moving forward.

Table 3.4 Active learning goals and practices

Goals	Practices
Bridging the gap between active learning theory and practice	Learner-centered active learning cycle
Learner-centered active teaching	Interactive learning, practice planner and active coach; discussion/participation facilitator and motivator; and facilitator of discovery learning and applied learning
Thought-stimulating active learning	Thought-stimulating activities, problem-solving exercises/presentations, debating, brainstorming, cooperative group work/presentations, customized interactive multimedia exercises, case studies/presentations, role-playing exercises, and reflection exercises
Active assessments	Self-reflection with teacher assessment, peer assessment, sharing of assessment criteria, active feedback, and adapting teaching to assessment results

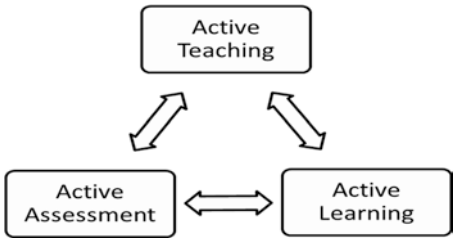

Fig. 3.2 Active learning cycle

Teachers must act as mentors and active learning facilitators to guide students to expand their knowledge and to practice experiential applied learning (Ash & Clayton, 2009). Concomitantly, they have to be engaged in active teaching to successfully apply student-centered innovative pedagogical techniques. Active teaching methods require facilitative instructors to act as interactive learning and practice planners, active coaches, discussion and participation motivators, and facilitators of discovery learning and applied learning. By being proactively involved and encouraging, instructors can nurture an active learning environment and can expand collaborative discovery learning (Son & Goldstone, 2010). They need to prepare effective teaching materials, facilitate learner-centered active learning, and provide rich feedback through active learning assessments, which creates a continuous active learning cycle. To facilitate this cycle, we apply the following active teaching techniques in our class, utilizing integrated active learning modalities:

- Serve as a coach and a learning facilitator
- Use questions to help learners explore, reflect on, understand, practice, and apply what they have learned
- Facilitate critical-thinking questions and active discussion

As described in Table 3.4, thought-stimulating active learning is the third goal of active learning. To facilitate this goal, innovative pedagogical techniques must be incorporated into modern online education curricula. Accordingly, teachers have to facilitate the following practices to foster thought-stimulating active learning: problem-solving exercises, debating, brainstorming, cooperative group work and presentations, interactive multimedia exercises, case studies, simulations, games, role-playing exercises, and reflection exercises (Shaw, 2010; Son, 2017). We apply flipped-learning pedagogical techniques through collaborative and active learning in our class. Flipped learning is consistent with the constructivist learning theory, which promotes discovery learning, and the practice-based behaviorist learning theory (Roach, 2014).

In the evolving complex global environment, the scope of management education has to be broadened, and active learning needs to be incorporated into the student-centered nurturing pedagogy (Son, 2017). Our global management students realize the actual roles they collectively play in the class.

To facilitate their active learning cycle, we apply the following active learning techniques in our class:

1. Reflection exercises and presentations.
2. Students seeing the material in context and exploring their own beliefs.
3. Application of course material to practical contexts.
4. Brainstorming in group activities and discussions.
5. Working on continuous solutions in a cooperative group.
6. Students identifying and organizing information and establishing meaningful relationships between the pieces of information.

We encourage students' critical reflections about their experiences and various aspects of the strategies and techniques that drive successful entrepreneurship. Critical reflections serve as an effective active learning tool for students to add their creative insights to the body of knowledge (Ash & Clayton, 2009; Son, 2017). In addition, brainstorming and presentations through flexible interactive tools encourage engaged learning and critical thinking skills. To help students understand the theoretical and practical arguments underlying many of the global management issues, we tailor customized active learning activities to a variety of contexts. To draw from students' rich perspectives, we look into the relevant theories, cases, and testimonials. Through rigorous critical thinking activities, our students analyze and explain interwoven complex entrepreneurship issues. Active teaching and active learning principles are incorporated into customized concept-application lectures in a variety of global management contexts. We need to actively research to create customized lecture materials that include entrepreneurship case exercises and scaffolding of activities. We carefully develop them to instill responsible and experiential educational values in entrepreneurial management (Dean & Forray, 2017). We explore complex entrepreneurship challenges and integrate ethical leadership and corporate social responsibility issues in the case studies, reflective exercises, and group practices.

The last goal of active learning is active and systematic assessment. Teachers have to find creative avenues to provide active learners with continuous active assessments (Eseryel, Ifenthaler, & Ge, 2011). They can creatively apply knowledge maps to assess students' performances in relation to their peers (Ifenthaler et al., 2011). As described in Table 3.4, they should flexibly adopt the following active assessment tools that are central to connectivist pedagogy: self-reflection with teacher assessment, peer assessment, sharing of assessment criteria, active feedback, and adapting teaching to assessment results (Veletsianos & Shepherdson, 2016). The following are some of the assessment tools we use in our class:

- Students' self-assessment and surveys
- Giving students more time to answer challenging questions
- Using suggested questions from the students to model the most effective assignment questions
- Setting group activities aimed at getting students to assess their own views

As depicted in Fig. 3.2, reciprocal linkages between active teaching, active learning, and active assessment complete the full active learning cycle. Under the active assessment approach, teachers should adopt real-life assessments that are pivotal for nurturing applied learning in real-world contexts.

3 Integrated e-Learning Environment in the Twenty-First Century

In the previous section, we closely examined the learner-centered integrated e-Learning paradigm in the twenty-first century, which consists of four interwoven components: collaborative learning, experiential learning, multimedia learning, and active learning. These components are facilitated by the continuous progress in e-Learning portal-development platforms. Social constructivism-based learning platforms that foster connectivist cognitive presence allow students to develop collaborative learning through diverse applied e-Learning activities (Veletsianos & Shepherdson, 2016). As flexible learning platforms facilitate learners' digital network experience, pedagogical techniques must facilitate practical experiential learning for twenty-first century students (Campbell, 2016; Consiglio & Van der Veer, 2015). The pedagogies associated with the cognitive theory of multimedia learning have been increasingly impacted by multimedia technologies. Accordingly, wide choices of flexible multimedia and diagnostic tools foster adaptive multimedia learning (Son & Simonian, 2016). Flipped-learning pedagogical techniques facilitate active learning, which promotes practice-based discovery learning (Roach, 2014).

The learner-centered integrated e-Learning paradigm in the twenty-first century requires an integrated e-Learning environment in which instructors and students take on higher responsibilities to enhance collaborative, experiential, multimedia, and active learning processes. Active teaching and learning in our innovation and entrepreneurship class require instructors and global manager students to take higher responsibilities towards an integrated e-Learning environment. Online instructors and active learners have to be active learning partners to keep the integrated learning environment moving forward. Active learners must acquire cognitive learning that enhances analytical and decision-making skills as well as affective learning, from which they gain diverse perspectives toward complex issues. We integrate innovative case exercises into interactive and collaborative lessons to deliver an integrated learning environment. Our students realize the actual roles they collectively play in global management affairs. We emphasize integrated learning from which active learners can gain perspective on tightly interwoven global issues, have empathy for others, and develop insights into others' challenges (Gutierrez et al., 2012). We encourage students' critical reflections about their own experiences and critical views about various aspects of entrepreneurship. Critical reflections are central to applied learning pedagogies based on reflective, experiential learning (Son, 2017).

As entrepreneurship encompasses a wide range of areas, students must acquire multidisciplinary learning and develop communication and creative and analytical skills to explore innovative ideas and understand complex interwoven issues. To facilitate these skills and learning outcomes, active teaching and learning in our class require everyone to commit high levels of learning activity preparation and participation. We then contribute our enthusiasm to a quality learning environment.

This has led to very high learning satisfaction. For example, when we surveyed 24 MBA students during 2011–2012, all of them responded that they achieved the learning goals they had when they started our entrepreneurship course. What they gained most from our integrated learning environment was how to use innovative entrepreneurial thinking to produce a real plan that includes the concept, development, funding, and reduction of risks and uncertainties (Son, 2017). As can be seen from students' learning experiences, our learning strategies help students understand the entrepreneurial environment in which entrepreneurial managers must operate and thrive to succeed. Students need to grasp the elements of essential entrepreneurial skills to deal with challenges of the entrepreneurial environment. Ultimately, they can succeed in building and developing entrepreneurship in practice.

4 Conclusion

Curriculum plays an integral part in the highly engaging and applied learning of the twenty-first century. From our close examination, we can see that the curricula of the twenty-first century digital age should foster collaborative learning, experiential learning, multimedia learning, and active learning. We explored the learner-centered integrated e-Learning paradigm, which consists of these four interwoven learning components. However, there exist several limitations to our proposed paradigm for modern management education using the example of our online MBA course. Firstly, we can gain more insight into the learning outcomes of our proposed pedagogical techniques with greater data scope. As teaching styles and learners' characteristics vary, sharing of pedagogical feedback and learner experiences add depth to our proposed paradigm. Secondly, there are potential challenges in fully implementing the proposed e-Learning paradigm, which requires strong support from administrators and faculty members. Thirdly, faculty and students have to undergo training for technology-integrated active learning. Lastly, the learning management system must be customized to foster innovative and effective managerial thinking, knowledge, and skills vital to success in the global business environment.

Bearing these limitations in mind, our proposed integrated e-Learning paradigm consisting of the four interwoven learning components raises a number of implications for modern management classrooms, where applications promote collaborative visual learning, and the learner's digital network experience becomes an increasingly important form of experiential learning (Campbell, 2016). Concomitantly, distance education interaction moves beyond activities in online classrooms and toward the e-Learning community through blogs, webcasts, and social media posts. Teachers are increasingly equipped with flexible multimedia learning tools thanks to the progress in live e-Learning and web collaboration technologies. These tools that are integrated into collaborative lessons help teachers promote an integrated e-Learning environment. Teachers as facilitators of communities of practice need to guide learners to find and apply knowledge (Spector,

Ifenthaler, Sampson, & Isaias, 2016; Veletsianos & Shepherdson, 2016). As demonstrated in Fig. 3.2, the presented paradigm facilitates the active process of co-constructing knowledge between teachers and active learners. The active learning cycle is designed to constantly draw forth active learning feedback to facilitate learner-centered management classrooms. To facilitate this process, instructors need to integrate various active learning modalities into customized activities to fit each student's learning style. Personalized and exploratory learning in twenty-first century can be deepened by the progress in learning analytics and adaptive learning technology in learning management systems (Brown et al., 2015; Ifenthaler et al., 2018). Active management learners need to be adaptive and explore creative and flexible solutions to rising complex management challenges (Balaji, 2013; Schlenker & Chantelot, 2016). To facilitate these learning outcomes, innovative pedagogical techniques must be incorporated into management curricula in twenty-first century.

Open educational resources with the support of an open participatory learning infrastructure support diverse ecosystems of people and learning environments (Wiley, Webb, Weston, & Tonks, 2017). Evolving mobile learning systems require flexible adaptation of students' learning behavior, which leads to higher learning effectiveness (Sampson & Zervas, 2013; Son & Simonian, 2014). Hence, the best online pedagogies are those that support evolving e-Learning environments that encompass a spectrum of course designs (Becker, Winn, & Erwin, 2015). Collaboration, innovation, and creativity are vital components in modern classrooms. Using the example of our MBA class, we looked at them in more detail. In today's fast-moving global environment, MBA curricula must continue to foster pedagogical flexibility and address interdisciplinary pedagogies so that students learn and build management skills from diverse perspectives through integrated e-Learning. As we examined, higher learning outcomes from this approach are reinforced by the creative, innovative, and flexible adaptation of interconnected pedagogical techniques.

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Barbara K. Son is a professor of business and sustainable management at Anaheim University. Her current research focuses on global health, the healthcare industry, and management education. She has authored scholarly publications in healthcare, business services, and online education. She was vice president and cofounder of the International Association Management Group. She served as a site reviewer of business-degree and online programs for the California Bureau for Private Post-Secondary and Vocational Education.