A Contextual Approach to E-Learning Delivery in Higher Educational Institution Learning Organizations

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The increasing complexity and changing dynamics of the Higher Educational Institution (HEI) learning organization has prompted a reexamination of e-learning delivery considerations. The unforeseen opportunity COVID-19 has presented HEI learning organizations to deliver e-learning on the broadest of scales. HEI learning organizations that desire to adapt and continue delivering learner-centered outcomes could benefit from clear and concise e-learning delivery considerations. A theory synthesis that integrates relevant HEI learning organization and e-learning literature streams serve as the theoretical methodology that resulted in the development of a concise, widely applicable set of e-learning delivery considerations.

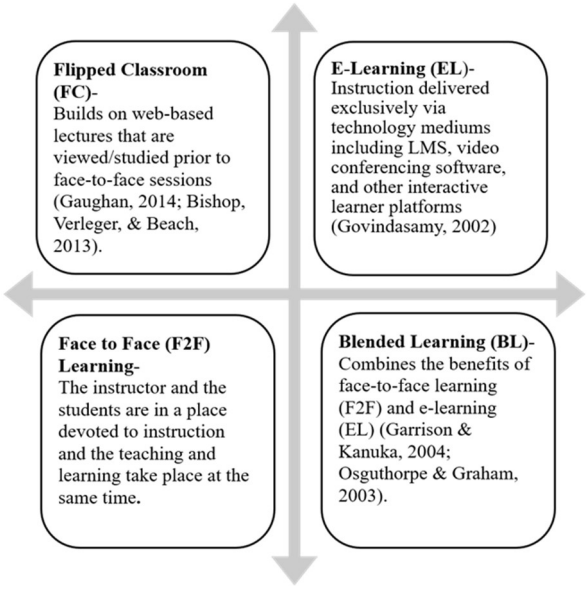
Keywords: learning organizations, Higher Educational Institutions (HEIs), e-learning, learner-centered outcomes

INTRODUCTION

Higher Educational Institution (HEI) learning organizations are "colleges and universities granting associates degrees, bachelor's degrees, and graduate degrees" (Brown, Brown, & Nandedkar, 2019, p. 14). HEI learning organizations involve professors, instructors, staff, and administrators using technology to create, acquire, and transfer knowledge (Garvin, Edmondson, & Gino, 2008, p. 2). In HEI learning organizations, e-learning can serve two purposes: (a) act as a supplemental learning tool in support of teaching environments (face-to-face, blended learning, or flipped classroom instruction), and (b) be a stand-alone means of facilitating individualized learning (Ho, 2009, p. 582). This inherent flexibility allows instructors and HEI learning organizations to adapt e-learning functionality to a wide range of learning environments. In this study, the term "contextual" refers to the inherent flexibility of e-learning as either a supplemental learning tool or a stand-alone delivery platform.

The COVID-19 pandemic has provided HEI learning organizations an unforeseen opportunity to implement contextual e-learning strategies on a global scale (Graul, 2020). This sudden shift and adaptation of contextual e-learning strategies caused HEI instructors and administrators to examine the existing scalability of current e-learning delivery processes (Graul, 2020). The recent shift to contextual e-learning strategies revealed a gap in the existing literature as it offers limited guidance on how to adapt current delivery considerations to students. As e-learning continues to evolve because of technological advances and the need to provide education to more diverse locations, additional distinctions in defining e-learning are necessary. As a result, HEI learning organizations could find it useful to broaden e-learning delivery considerations. The four commonly accepted delivery methods include face-to-face learning (F2F), blended learning (BL), e-learning (EL), and the flipped classroom (FC). Figure 1 provides a brief definition of each learning area that HEI learning organizations are currently utilizing.

FIGURE 1
COMMON HEI LEARNING ORGANIZATION INSTRUCTION DELIVERY METHODS



Note: The left (Low) to the right (High) arrow indicates the extent of learner mobility. The up (High) and down (Low) arrow indicates the technology resources and competency to facilitate the learning modality.

Figure 1 shows that along the vertical axis as learner mobility increases, so does the need for instructors to have higher levels of technology resources and competency. The horizontal axis suggests that increased learner mobility requires more robust technology to deliver high-quality instruction. The F2F classroom requires the lowest level of technology, while EL requires the highest level of investment in technology. As EL requires the highest degree of both technology robustness and instructor technical competency, learners can experience setbacks. In a recent survey, 63% of undergraduate students indicated that online instruction received is of lower quality when compared to F2F learning (Bastrikin, 2020).

Additionally, completion rates for online students can be as much as 22% lower than for students in face-to-face courses (Bastrikin, 2020). The choice of an e-learning delivery method will have a significant impact on the effectiveness of instruction. As HEIs respond to a postindustrial knowledge-economy in which student numbers are increasing, e-learning will serve as one of the critical response mechanisms (Andrade, Miller, Kunz, & Ratliff, 2019, p. 49). This paper focuses on e-learning delivery choices and how these choices integrate into the learning climate within HEI learning organizations.

BACKGROUND

The term contextual e-learning is "a reasonable standard for HEIs to live up to if they want to call themselves a learning organization, which varies from context to context" (Örtenblad, 2018, p. 155). The reasonable standard objectives that HEI learning organizations should pursue include the following: (1) climate for learning, and (2) the ability to adapt to the subject matter, instructor experience, and e-learning resources available. A thriving climate for learning creates a positive atmosphere that offers students space and time for experimentation and reflection (Örtenblad & Koris, 2013, p. 175). The contextual adaptation to different HEI learning organization environments occurs through four e-learning delivery dimensions:

- Instructor content creation freedom,
- E-learning technology,
- E-learning pedagogy, and
- Learning environment differences.

Each of these dimensions is characterized by a unique attribute and tracks back to one of the four e-learning delivery methods described in Figure 1. In asynchronous learning, the student and instructor interact at different times, whereas synchronous instruction requires instructors to coordinate meeting times and locations to facilitate instruction. Variations can occur with the right technologies to record class content for those students who cannot meet scheduled class meeting times. Technology makes it possible to deliver various instructional delivery mechanisms to any location. Table 1 defines each of the four e-learning dimensions and provides examples of each drawing from Wagner, Hassanein, and Head (2008).

TABLE 1
E-LEARNING DELIVERY CONSIDERATIONS

Dimension	Attribute	Meaning	Example
Instructor Content Creation Freedom	Asynchronous (EL)	Content delivery occurs at a different time than receipt by the student.	A learner-centered process that uses online learning resources to facilitate information sharing.
	Synchronous (F2F, FC, BL)	Content delivery occurs at the same time as receipt by the student.	Live, real-time (and usually scheduled) e-learning instruction.
E-Learning Technology	Same Location (F2F, FC)	Learners use the content delivery platform at the same instructor's physical location.	Learners use the LMS or interactive software to solve a problem in a classroom.
	Distributed (EL, BL)	Learners utilize the content delivery platform separate from the instructor's physical location.	Learners use the LMS or interactive software to solve a problem from distributed locations.
E-Learning Pedagogy	Individual (EL)	Learners work independently from each other to complete learning objectives.	Completion of e-learning modules autonomously.
	Collaborative (F2F, FC, BL)	Learners work in a collaborative environment to	Learners participate in active digital

		complete learning objectives.	communication during a group project.
Learning Environment Differences	100% Online (EL)	Learners receive and consume content 100% via e-learning with no face-to-face requirements.	Learners participate in a wholly digital distance learning experience.
	Blended (BL, FC)	E-learning supplemented by face-to-face interaction requirements.	In-person instruction supplemented by e-learning delivered coursework tied to learning objectives.

In response to the continually changing landscape, we examined the existing literature and propose a robust yet generally applicable set of e-learning delivery considerations for HEI learning organizations. A theory synthesis using meta-analysis helped develop our e-learning delivery considerations. The authors collected 135 papers relating to e-learning and HEI learning organizations using Google Scholar, EBSCO, and ProQuest. Based on the outlined criteria, 70 relevant articles were selected. They served as a theoretical foundation for the proposed e-learning delivery considerations. Through this analysis, we attempt to achieve two purposes: (a) provide generally applicable HEI learning organization e-learning delivery considerations, and (b) advance theory by addressing e-learning's contextual linkage to the climate for learning in HEI learning organizations. Since the proposed e-learning delivery considerations are contextual, HEI learning organizations should tailor them to their mission and learner population.

RESEARCH DESIGN

This paper undertakes a theory synthesis approach to allow the authors to structure the different research stream fragments into a single set of e-learning delivery considerations (Jaakkola, 2020, p. 22). In contrast to other forms of theoretical and conceptual papers, the selection of theory synthesis allowed the authors to summarize and integrate existing knowledge on e-learning and HEI learning organizations into a manageable and digestible format (Jaakkola, 2020, p. 21). Furthermore, the concepts of summarization and integration transformed previously piecemeal ideas into a set of e-learning delivery considerations. If enacted, these considerations would meet the reasonable standard of being an HEI learning organization. Since the research streams of e-learning and HEI learning organizations are mature, a systematic literature review would have only identified gaps. The identification of gaps, while useful, would have likely not enhanced theoretical or practical understanding.

As mentioned above, 70 articles met the inclusion criteria for this paper. The inclusion criteria included relevance to the delivery of e-learning, HEI learning organizations, and the climate for learning. The selected literature provides the base and reasoning for each e-learning delivery consideration. Additionally, instead of formulating a complex set of e-learning delivery considerations, each was chosen for simplicity and general applicability to nearly any HEI learning organization setting. Given the seismic shift COVID-19 caused on campuses around the globe, e-learning is no longer just a delivery method but an integral part of the HEI learning organization's success. This paper aims to examine the following: How can HEI learning organizations deliver e-learning that enhances a positive climate for learning in a rapidly evolving landscape?

CLIMATE FOR LEARNING AND HEI LEARNING ORGANIZATIONS

HEI virtual or physical campuses, which encourage experimentation, reflection, and a positive e-learning atmosphere, can strive to meet the reasonable standard of being a learning organization. This standard is fully embraced by numerous HEIs across the globe that have started the transformation to

become learning organizations. However, a significant portion of HEIs remain trapped in "teaching rather than learning." In a 2000 study, Senge reported the following:

> *The culture and practices of colleges and universities have, by and large, changed little. The focus is still on teaching rather than learning. The instructor still controls the classroom. Individualism and competition still reign, from individual students pitted against one another to a single instructor who likewise competes for status, power, and often money. (p. 275).*

Two decades later, HEIs continue to struggle to deliver learning activities that foster constructive and interactive engagement (van Alten, Phielix, Janssen, & Kester, 2019, p. 2). To effectively merge these concepts, we must redefine the purpose of e-learning. E-learning should have the ability to "train the right people [in] the appropriate skills at the right time" (Govindasamy, 2002, p. 288). To achieve this aim, a set of e-learning delivery considerations should address engagement, systematic problem-solving, and incorporation of lessons learned (Sarange, 2018). As HEI learning organizations continue to strive toward a global presence among learners, the climate for learning and e-learning delivery will intersect. How e-learning and HEI's climates for learning intersect will play a role in the ability to grow beyond the organization's physical campus. The delivery considerations presented can potentially accelerate the capacity to adapt and continually reinvent e-learning while avoiding strategic sluggishness and bureaucracy.

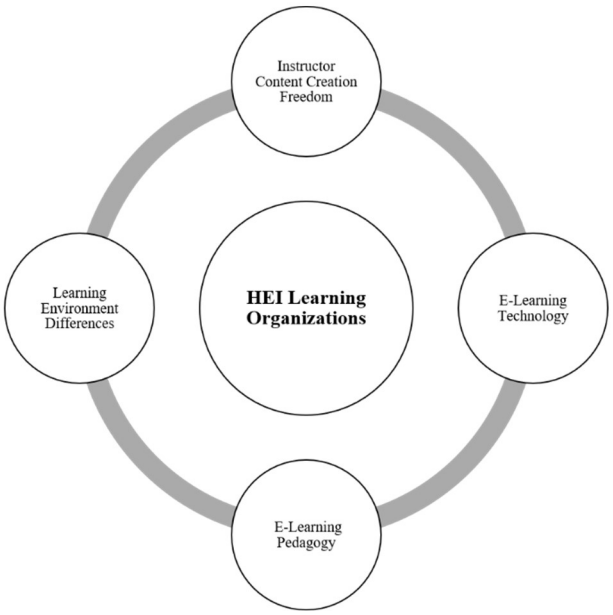
E-LEARNING AND HEI LEARNING ORGANIZATIONS

An underlying assumption is that change in structural variables can, by themselves, cause changes in human behavior when attempting to create a coherent strategy (Argyris & Schön, 1978, p. 225). As structural variables fluctuate within organizations, a contextual approach lends itself well to creating the infrastructure and processes necessary to become a learning organization. For example, if a positive climate for learning and appropriate learning structures are present, that reasonably meets the standards set forth to be called a learning organization (Örtenblad, 2018, p. 155). As e-learning continues to grow in popularity, so do the natural tensions of conservation and change within HEI learning organizations. From one perspective, conserving the integrity of an environment for learning while continuously improving to meet customer expectations has four interconnected components:

1. To maintain a positive climate for learning, instructors, and subject matter experts (SMEs) should have the ability to control content creation and customize the level of teacher-student engagement by desired learning outcome. (Liaw, 2004; Hogan & McKnight, 2007).
2. E-learning technology should foster a positive climate for learning but enhance the inherent flexibility required to adapt to an ever-changing global environment. (Purnomo & Lee, 2013).
3. E-learning pedagogical approaches should foster appropriate content packaging, learner communication, and assessment. (Govindasamy, 2002, p. 294).
4. The bridge to understanding learning environment differences should examine inherent pedagogical assumptions and their subsequent intrinsic value for the enhancement of the HEI learning organization. (Salmon, 2005).

As instructors and, subsequently, learning organizations adopt e-learning, the contextual approach to aligning content, pedagogy, technology, and learning environment differences could become useful. Figure 2 below visualizes the interplay between these four elements.

FIGURE 2
E-LEARNING DELIVERY CONSIDERATIONS DIAGRAM



The circular configuration demonstrates that each element works in a continuous cycle within HEI learning organizations. The learning cycle begins with an instructor providing learner baseline content. This content is delivered by or in support of a technological tool or application. A pedagogical context provides a framework for the delivery of the material to the learner. Finally, the context of the environment changes to maximize learner access. To hypothesize a "one size fits all" learner engagement solution is to ignore the contextual intricacies of each specific HEI learning organization environment. To assist in our understanding of the e-learning delivery considerations, an expanded explanation of each occurs below.

INSTRUCTOR CONTENT CREATION FREEDOM

The components of curricula should inform the learner of performance expectations, learning objectives, and progress toward achieving the intended e-learning course outcomes. The four fundamental questions that require clarity when developing a plan of e-learning instruction are as follows:

1. What educational purposes should the organization seek to attain?
2. What educational experiences will achieve these purposes?
3. How can these educational experiences be effectively organized?
4. Will these educational experiences be attained?

At first glance, these questions might seem relatively straightforward when needed to develop a plan of instruction. These questions become complicated, however, when examining e-learning within the contextual concepts of the learning organization. First, the learning organization is defined differently by several different authors, which results in varying recommendations and strategies (Örtenblad & Koris, 2014, p. 174). Second, the stakeholder perspective is seldom explicitly discussed (Örtenblad & Koris, 2014, p. 174). From a contextual approach, e-learning, and the learning organization merge as digital education platforms as HEIs become more common (Jaschik & Lederman, 2019). One of the threads of this relationship is the instructor's ability to create content that addresses the nuanced differences between asynchronous and synchronous learning environments.

Synchronous e-learning environments deliver live content in digital settings that may include Microsoft Teams, Zoom, Blue Jeans, and Google Hangouts (Shahabadi & Uplane, 2015). Synchronous e-learning can provide the instructor with a platform to have students interact, deliver content, and assess learner outcomes

if leveraged appropriately. Learning tools such as threaded discussions, instant messages, and ask-an-instructor resources assist in humanizing the e-learning experience. Like the synchronous e-learning environment, asynchronous content delivery leverages digital resources regardless of learner time and location restraints (Shahabadi & Uplane, 2015). The instructor delivers digital resources through the HEI's Learning Management System (LMS) to facilitate interaction that can occur "anytime and anywhere" (Shahabadi & Uplane, 2015). The foundation of asynchronous e-learning is the constructivist theory, which focuses on the importance of peer-to-peer interactions (Shahabadi & Uplane, 2015).

The catalyst to synchronous and asynchronous e-learning is encouraging instructors to have technology awareness when designing their materials (Graul, 2020, p. 14). Outlining the importance of instructor technology awareness facilitates the design of assignments that provide students a certain degree of empowerment, choice, and a sense of freedom (Graul, 2020, p. 16). As instructor technology awareness improves, e-learning content creation freedom is enhanced. The ability for instructors to leverage e-learning technology, especially in asynchronous environments, can improve pedagogical outcomes utilizing the content-practice-assessment model (Nikolopoulos, Solomou, Pierrakeas, & Kameas, 2012). E-learning, when leveraged to its full potential in asynchronous and synchronous learning environments, provides flexible learning structures in HEI learning organizations (Örtenblad & Koris, 2013).

Instructor content creation is at the top of the delivery considerations diagram because material created should be relevant to the organization's learning goals. Once the development of the curriculum occurs, the selection of an appropriate LMS occurs.

E-LEARNING TECHNOLOGY

The freedom of instructors to create content can either be enhanced or hindered by e-learning technology. LMS selection often creates friction between leaders and instructors in the HEI learning organization. This friction results from the different goals that leaders and instructors are generally looking for in LMSs. HEI leaders often opt for affordability and the premise that one LMS fits all colleges and departments within the organization. Instructors, on the other hand, seek LMSs that can effectively deliver content and measure learning outcomes in each of the four learning environments: F2F, BL, EL, and FC. In most HEI learning organizations, a sizable portion of instructors simultaneously teach in multiple learning environments in the same semester or quarter.

LMS features should integrate dynamic content creation capability, robust communication tools, and the ability to measure learner outcomes easily. While each previously mentioned LMS feature is common, the ability to maximize their inherent value can be a challenge. To simplify LMS selection, HEI learning organizations should focus on two technological features:

1. Can the system facilitate effective content delivery in each of the four learning environments?
2. Does the system possess robust instructor and learner-friendly collaboration features? (Thai, De Wever, & Valcke, 2019)?

The technological features of the LMS should foster a high degree of instructor and student flexibility. Specific to the e-learning environment, does the LMS foster an instructor's ability to balance student engagement and increase collaboration throughout the course? LMS vendors (Brightspace, Blackboard, and others) have partially answered this call by adding dynamic instructor content creation resources and learner-friendly collaboration tools. While the advancement of LMS has enhanced the potential for improving learner outcomes, some HEI stakeholders remain hesitant. Gallup recently surveyed 20,819 faculty and found that 80% of leaders believe e-learning can deliver similar results as face-to-face courses (Jaschik & Lederman, 2019). In comparison, only 32% of faculty believe that e-learning can deliver similar results as face-to-face courses (Jaschik & Lederman, 2019). To reduce this gap, leaders should encourage a collaborative vision that integrates instructor and learner needs into the LMS development process.

Closing the trust gap between how digital leaders and instructors perceive e-learning will be an ongoing theme in HEI learning organizations (Elbasri, Haddi, & Allali, 2017). HEI e-learning platforms will continue to invoke simultaneous instructor collaboration and resistance to the adoption of LMSs. Instructors' desire to have full control of rigor and academic dishonesty will compete with HEI learning

organization leaders' aspirations to expand e-learning boundaries. The approach to these issues should focus on improving communication and collaboration among e-learning stakeholders, not problem-solving. LMSs are a resource for e-learning that is effective only when the instructor, leader, and learner requirements integrate within the delivery process.

LMSs are platforms that can incorporate learner preferences, instructor feedback, and sound e-learning pedagogy to improve learning outcomes. LMS implementation that includes learner-, instructor-, and leader-centered elements creates an environment where asynchronous and synchronous e-learning delivery methods can function. To understand how a properly configured LMS enhances development and interoperability, the statement below sums it up best:

> *The Universal Series Bus (USB) port serves as a standard specification for hardware makers to create connection ports. If the USB port did not exist, each hardware manufacturer would likely have proprietary connection plugs that offered limited to no interoperability. The LMS is the organization's USB port of e-learning. It affords leaders, instructors, and learners an interconnected and standardized communication and content delivery platform.*

E-LEARNING PEDAGOGY

Asynchronous and synchronous e-learning course offerings at academic institutions have grown in volume and quality since the late 1990s (Park, 2009). As asynchronous and synchronous e-learning course offerings grew, so did the number of pedagogical approaches. LMSs now utilize a wide range of tools and strategies to communicate, deliver content, and assess student comprehension. These tools have enabled instructors to reinforce rigor and evaluate learner content mastery. As e-learning technology has advanced, it is now possible for instructors to implement the "content-practice-assessment" concept (Nikolopoulos et al., 2012). The content-practice-assessment concept affords e-learning stakeholder's distinct pedagogical advantages. For instructors, it allows content creators to be dually applicable to theory and professional practice. Content delivered to a learner enables the individual to practice in a realistic computer coding environment. The learner eventually works on more extensive modules, which are assessed by experts for completeness and mastery (Nikolopoulos et al., 2012).

The content-practice-assessment concept also benefits learners. Learners who not only consume content but apply it have improved learning outcomes (Maxwell, 2012). The learner benefits from having access to a dynamic yet self-paced e-learning environment while instructors can reasonably measure content mastery. Learners also benefit from having greater schedule flexibility when participating in online learning. This flexibility affords learners to remain employed full-time and engage in other endeavors outside of the classroom. While some aspects of the face-to-face learning environment are nonreplicable, e-learning has made quantum leaps in benefiting both learners and instructors.

Digital leaders benefit from the content-practice-assessment concept in three ways. First, leaders can increase instructor engagement and participation rates in e-learning. Instructors are now less hesitant to immerse themselves in e-learning as LMS resources to assess academic integrity and student outcomes have increased. The number of assessment tools for e-learning instructors can now simulate a face-to-face testing environment. Leaders benefit from these services as company or university e-learning outcomes are verifiable throughout the learner assessment cycle. The ability for leaders to verify the learner assessment cycle is a platform to address instructor content rigor and integrity concerns. As instructor confidence increases in digital leader commitment to e-learning content rigor and integrity, adoption hesitancy will decrease. While instructor adoption hesitancy will continue, increasing confidence starts with digital leaders supporting LMSs that include built-in features that address content rigor and academic integrity. In summary, the content-practice assessment model affords HEI learning organizations pedagogical stability and the opportunity to succeed in a dynamic environment.

LEARNING ENVIRONMENT DIFFERENCES

The differences between the F2F, BL, and FC learning environments are nuanced yet critical when building e-learning delivery considerations. For example, undergraduate e-learning strives to produce a well-rounded individual who can engage in entry-level professions. In contrast, graduate or executive e-learning programs often target advanced, subject-specific competencies. The concept of content-practice-assessment also varies by academic discipline. The variation of learner knowledge, experience, and desired outcomes are interconnected, yet unsolvable components of HEI learning organizations remain (Visser, 2007). Problem-solving e-learning's inherent complexity could hinder learning organization growth, innovation, and achievement of content mastery by the learner. As e-learning technology continues to advance, so will learner complexity and demands. In an environment where e-learning is on-demand, there is a potential unintended disincentive that could stifle innovation and learner movement. HEI learning organizations no longer can operate in isolation to improve learner outcomes and increase instructor engagement in e-learning. To establish partnerships that further the learning organization's mission is essential for innovation and reaching larger audiences.

Successful navigation of e-learning delivery should center on relevant content, appropriate pedagogy, and a tailored, institution-specific LMS (Vovides, Sanchez-Alonso, Mitropoulou, & Nickmans, 2007, p. 64). As e-learning technology continues to increase in complexity and the number of learners, environmental differences will continue to present themselves. Once learner assessment occurs, learning organizations can then move toward the selection of an LMS that delivers upon instructor and leader needs. Sifting through the number of LMS providers should be a collaborative effort between leaders and instructors across the organization. If LMS selection happens within an information technology group silo, learner- and instructor-focused features could not deliver the desired functionality or outcomes needed. The tenets of learner assessment, instructor involvement in pedagogy, and leaders minimizing e-learning delivery roadblocks remain relatively unchanged.

IMPLICATIONS FOR PRACTITIONERS

The learning organization and e-learning have no singular constrained definition or pathway. Becoming a learning organization requires a learning structure and a positive climate for learning. Each proposed e-learning delivery consideration suggests that a multiple stakeholder approach is necessary (Wagner et al., 2008). To shape the learning organization as e-learning continues to increase within HEIs, clarity on content delivery methods will become critical. Multiple stakeholders are responsible for the learning organization's successful delivery of e-learning. Learners, instructors, leaders, and e-learning LMS suppliers must come together to cohesively deliver the content and practice-based assessment model (Wagner et al., 2008). While the e-learning delivery considerations presented put forth valid ideas, they are sure to meet simultaneous resistance and acceptance from stakeholders within HEI learning organizations.

CONCLUSION

No standardized definition of the HEI learning organization exists in the literature. HEIs have rushed to implement e-learning without a clear understanding of the environment or methods of delivery (Halawi, 2009). Existing typologies focus on either traditional learning or learning pedagogies (Shrivastava, 1983; Örtenblad, 2018). Missing is a suitable framework and pedagogical methodology as e-learning transforms traditionally sluggish HEI learning strategies (Salmon, 2005; Nikolopoulos, 2010). The e-learning delivery considerations put forth integrate both asynchronous and synchronous learning perspectives. The delivery considerations put forth also demonstrate how organizations might further capitalize on the growth of e-learning to maximize resources and learner success. Higher rates of learner success rates potentially become a reality when instructor freedom content creation, e-learning technology, and pedagogy integrate. Insights from the interplay between these components can result in learning organizations approaching e-learning technology and pedagogy delivery from a holistic, stakeholder-centered approach.

The e-learning environment will continue to expand as broadband access spreads across the developing world for institutions as well as individuals. HEI learning organizations should embrace rather than avoid contextual e-learning delivery. The avoidance of contextual delivery in theory and method often leads organizations to select a technologically expedient e-learning strategy rather than a functional one. Amid this selection process, organizational leaders often lower the priorities of instructor buy-in and how learners will engage with content. E-learning delivery considerations that avoid the assessment of emotional, technical, and relational complexities of learners and instructors will limit learning organization growth and innovation. Effective e-learning delivery requires an innovative HEI learning organization that is determined to be successful as well as opportunistic to thrive in an environment of uncertainty.

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