Reconceptualizing Kolb's Learning Cycle as Episodic & Lifelong

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Abstract

Kolb's experiential learning cycle is typically applied in short-term, episodic snapshots of time, while understating the implications of continual, longer-term learning. This fixed-frame, episodic usage may diminish the knowledge that learners bring into an educational experience and the continued shaping of knowledge through future experiences. Thus, the purpose of this conceptual article is to explore how Kolb's experiential learning cycle is currently utilized and to propose a reconceptualized model that emphasizes learning as a continuous process rather than a finite episode of learning. A model that merges episodic and lifelong learning experiences could aid practitioners and researchers in recognizing prior and future learning cycles outside of time-bound, structured learning. This research has implications for practice as the model can be used to address prior learning students are bringing with them, learning during the experience, and further transforming this learning beyond that of a short-term experience. Future research is recommended to explore prior and future learning based on this model as a metacognitive tool to prepare learners before engaging in an experience. Describing the learning process through the lens of experiential learning prior to an experience has the potential to develop a growth mindset in learners, in turn increasing self-efficacy.

Reconceptualizing Kolb's Learning Cycle as Episodic and Lifelong

Experiential Learning Theory (ELT) continues to be a prevalent framework employed by researchers and practitioners. A recent study identified 60 peer-reviewed journal articles published from 2016 to 2018 that featured experiential learning across multiple settings including middle school, higher education, adult education, sports education, employment and outdoor activities (Morris, 2019). Kolb's (1984) learning cycle continues to be among the most prominent and frequently cited experiential learning theories (Seaman et al., 2017). The cycle posits that learners move through four modes, including concrete experience (open involvement in experience), reflective observation (bringing multiple perspectives to bear on experience), abstract conceptualization (developing actionable theories rooted in reflections), and active experimentation (applying theories in practice).

Kolb also noted that learning was a continual process rooted in varied experiences. Emphasizing this continual nature, Kolb (1984) stated, "Ideas are not fixed and immutable elements of thought but are formed and reformed through experience" (p. 26). Yet, many current practitioners and researchers use Kolb's experiential learning cycle in short-term, episodic snapshots of time, while understating or ignoring the implications of continual, longer-term learning (Amod & Brysiewicz, 2019; Bower, 2013; Burns & Danyluk, 2017; Groves et al., 2013; Konak et al., 2014; Russell-Bowie, 2013; Sato & Laughlin, 2018;

Witt et al., 2018). This fixed-frame, episodic usage could miss the knowledge or ideas learners bring into an educational experience and the continued shaping of knowledge through future experiences. Thus, the purpose of this conceptual article is to explore how Kolb's experiential learning cycle is currently being used and to propose a reconceptualized model that emphasizes learning as a continuous process.

Literature Review

This review of the literature will examine multiple theorists' influence on Kolb, describe Kolb's experiential learning cycle, and explore the usage of this cycle from the lens of episodic learning and longer-term learning.

Kolb's Influences

Some scholars have posited that experiential learning can be linked to both the Socratic method and Aristotle's concept of phronesis—practical wisdom accrued through reflective experience (Stonehouse et al., 2011). Seaman et al. (2017), however, rejected this notion while showing the phrase experiential learning began to take root in the 1970s with just over 1,000 references in scholarship during that decade with an expansion to over 7,000 references in the 1990s, and over 16,000 from 2000 to 2009 (Seaman et al., 2017). The researchers further noted that Kolb's model has emerged as perhaps "the clearest expression of experiential learning" (Seaman et al., 2017, p. 3), and continues to be a prominent framework. Kolb's learning cycle was primarily influenced by the foundational works of William James, John Dewey, Kurt Lewin, and Jean Piaget (Kolb, 1984; Kolb & Kolb, 2009).

While Kolb (1984) referred to Dewy, Lewin, and Piaget as "the foremost intellectual ancestors" (p. 15) of ELT, James provided a philosophical foundation for ELT through the concept of radical empiricism which suggested the thoughts in one's mind—as well as the physical world—are both experienced but in different ways (James, 1912/2012; Kolb & Kolb, 2009). This concept brings both experiencing the physical world and reflection into a conscious continuity which helped underpin some of the philosophical basis for experiential learning. The connection to ELT can be seen through a description of learning as a "continuous process grounded in experience" (Kolb, 1984, p. 37).

Lewin's influence is more tangible as seen through the development of a small group training in 1946 that was intended to address racial tension and eventually lead to the formation of T-groups (Seaman et al., 2017). These sessions involved open dialogue between staff and participants, while staff collected real-time data in the form of recordings and observations. Typically, staff would debrief the data at the end of each day, but staff later began experimenting with including participants in these conversations. These post-sessions with participants became significant learning experiences and "the discovery was made that learning is best facilitated in an environment where there is dialectic tension and conflict between immediate, concrete experience, and analytic detachment" (Kolb, 1984, p. 9). This group training structure provided perhaps the most concrete influence on Kolb's learning cycle.

John Dewey, the educational reformer and theorist, had a career-long focus of placing experience within traditional education (Jarvis et al. 2003; Seaman et al., 2017). Dewey (1916/2009) critiqued the traditional teaching methods stating:

> In schools, those under instruction are too customarily looked upon as acquiring knowledge as theoretical spectators, minds which appropriate knowledge by direct energy of intellect. The very word pupil has almost come to mean one who is engaged not in having fruitful experiences but in absorbing knowledge directly. Something which is called mind or consciousness is severed from the physical organ of activity. (p. 242)

Beyond Dewey's general push for experience in education, Kolb (1984) specifically explicated the influence brought by Dewey's model of learning which entailed the impulse from experience moving toward observation, knowledge, and judgement to subsequent impulse.

Finally, Jean Piaget's work centered on the cognitive development of children and identified four age-related categories of reasoning (Kolb, 1984). Children develop from concrete to more abstract ways of knowing, and the process involves cycles of stimulus and response. Kolb (1984) described Piaget's cycle by stating: "... the key to learning lies in the mutual interaction of the process of accommodation of concepts or schemas to experience in the world and

the process of assimilation of events and experiences from the world into existing concepts and schemas" (p. 23). A review of Kolb's learning cycle reveals clear connections to these foundational works.

Kolb's Experiential Learning Cycle

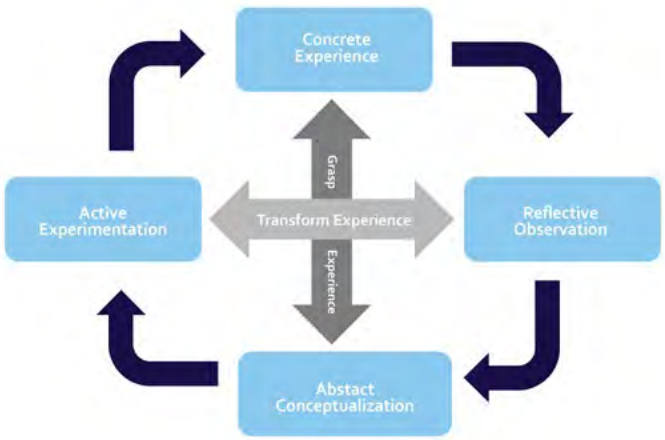
Kolb's (1984) learning cycle includes four learning modes of concrete experience (CE), reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE). "Experiential learning is a process of constructing knowledge that involves a creative tension among the four learning modes" (Kolb & Kolb, 2009, p. 298), and idealistically learners navigate through each mode starting with open involvement in an experience (CE), considering multiple perspectives while reflecting on the experience (RO), integrating ideas into a working theory (AC), and experimenting in the use of those theories while problem solving or making decisions (AE).

Kolb (1984) described learning as a process that involves the resolving of conflict and tension between opposing modes found along two dimensions. This confrontation leads to the learning of new skills, beliefs, and knowledge. As seen in Figure 1, the modes of concrete experience and abstract conceptualization can be viewed as on opposite ends of a y-axis. These modes are opposed as concrete experiences are grasped via apprehension through the tangibles found in an immediate experience while abstract conceptualization is grasped via comprehension through reflective interpretation. The second dimension along the x-axis includes the modes of reflective observation and active experimentation. This dimension involves transforming intentional reflection into action that is extended into the world. In summary, "learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it" (Kolb, 1984, p. 41).

Kolb's learning cycle has received various critiques (Bergsteiner & Avery, 2014; Jarvis et al., 2003; Miettinen, 2000; Schenck & Cruickshank, 2015); however, exploring these is outside the scope of this conceptual paper. Of particular interest is Jarvis et al.'s (2003) discussion on the nature of experience: "It is important, however, to draw the distinction between experience as

Figure 1

Experiential Learning Cycle



Note. Adapted from Kolb & Kolb, 2009

lifelong and experience as episodic, and we can see that this was not explicitly drawn out in the learning cycle- now known as Kolb's learning cycle…" (p. 57). In recent literature, an emphasis is placed on the episodic experience, and a reconceptualized model integrating both episodic and lifelong learning experiences may benefit practitioners and scholars alike.

Episodic Learning Using ELT

Research using Kolb's experiential learning cycle frequently features episodic learning across a short period of time while often not addressing the implications of learning as a long-term process that includes prior and future learning experiences (Amod & Brysiewicz, 2019; Bower, 2013; Burns & Danyluk, 2017; Groves et al., 2013; Konak et al., 2014; Russell-Bowie, 2013; Sato & Laughlin, 2018; Witt et al., 2018). Intuitively, this is expected as practitioners often do not have access to learners over extended periods of time and longitudinal research is not possible in many cases. However, the continued focus on episodic learning is often at odds with Kolb's (1984) statements that "concepts are derived from and continuously modified by

experience" (p. 26) and "that all learning is relearning" (p. 28). This section will review several studies where this lifelong description of ELT was lost due to an exclusive focus on episodic learning.

In one example, 43 student midwives participated in and observed role-plays with computerized mannequins, and follow-up focus groups indicated the patient simulators were appropriate for complex cases while promoting experiential learning (Amod & Brysiewicz, 2019). The study used Kolb's four learning modes to drive the qualitative data analysis and results were reported out using these modes. This episodic learning example consisted of a single learning experience in the classroom and did not directly recognize prior or future cycles of learning beyond the role-play activity. Similarly, though used across an entire academic semester, the four modes were used to analyze the data from semi-structured interviews with students who participated in a non-traditional teaching practicum placed at a construction site for high school learners (Burns & Danyluk, 2017). The data analysis incorporated Fuller's (1969) work on teacher competency development and explored how teachers developed from concern for self to concern for others within Kolb's four learning cycle modes. In another study, instructors explored if study skills support embedded into a Sport and Deviance course could facilitate learning in Kolb's four modes, and this was examined by using ELT in coding qualitative data from focus groups (Groves et al., 2013). In each of these episodic or short-term learning examples, ELT was used mostly as a data analysis tool rather than integrating the four learning modes into sequenced learning.

Episodic, semester-long integration of ELT into a course is frequently seen in the literature. For instance, ELT was used to elevate student learning in a sport psychology course through connecting activities to the four modes of learning (Sato & Laughlin, 2018). The course design included reflection, discussion, and application of new concepts alongside golf-putting tournaments hosted periodically throughout the semester. An even clearer integration of ELT was demonstrated through a sport management course that planned and implemented a golf scramble (Bower, 2013). During a 16-week course, students were tasked with planning a golf scramble as they moved through Kolb's four modes of learning, and the syllabus connected phases of the course to the learning cycle. As a final semester-long example in an information security course, students had increased interest and competency development through sequencing learning that captured the full learning cycle within virtual computer laboratory activities (Konak et al., 2014).

There are also instances in the literature when episodic ELT usage is integrated into modules or assignments (Russell-Bowie, 2013; Witt et al., 2018). Students in a graduate-level operations management course were tasked with implementing the 5S (Sort, Straighten, Shine, Standardize, Sustain) methodology in a personally-relevant concrete experience to expand on their knowledge of lean philosophy (Witt et al., 2018). Throughout the course of the semester-long assignment, students communicated with one another in online discussion boards to share critiques, suggestions, and tips to improve other students' projects by sharing their own experiences. At the end of the semester, 100% of students agreed or strongly agreed that the project improved their understanding of lean philosophy and process improvement. In a teacher education course, 197 primary students participated in a primary creative arts teacher education unit to improve their confidence and competence in music education (Russell-Bowie, 2013). Over the course of one week, students engaged in practical tutorials, music lectures, reflective journaling, watching videos, and other activities to get hands-on experience and meaningful takeaways from the music material. By experiencing varied modes of curriculum delivery and drawing meaning from the unit, 84% of the students felt well prepared to teach music as compared to only 64% before engaging in the ELT-driven module.

A systematic review of 60 journal articles explored what constitutes a concrete experience in ELT and the conclusions clearly show the continued focus on episodic learning in the literature (Morris, 2019). This robust review contributed an important clarification of concrete experience as active and task-oriented as opposed to the experience of reading a textbook. However, the review concluded that experiential learning occurs in a specific place and time, which situated learning in context. Morris (2019) further noted this time and place dynamic was at odds with Kolb's (1984) view of experiential

learning as holistically occurring across all of life's situations. From this conclusion, locking ELT into a specific time-bound location, it is clear the 60 articles reviewed focused on episodic learning. Perhaps a more nuanced conclusion of the review might have been that each episodic learning experience occurs in a contextually rich, time-bound moment. This view compliments ELT occurring across life's situations by permitting both the episodic learning important to a time-bound study and the recognition of ELT as life-long learning. To be clear, these studies appropriately apply ELT as a framework, but a revised model will clarify Jarvis et al.'s (2003) concern that distinctions between episodic and lifelong experiences "...was not explicitly drawn out in the learning cycle- now known as Kolb's learning cycle…" (p. 57). Finally, a model that pulls together the episodic and lifelong could drive practitioners as well as researchers to recognize the importance of prior and future learning cycles outside of the time-bound, structured learning moment.

Longer-term Learning Using ELT

There are indeed some examples of ELT being utilized to enhance learning that takes place across a year or more timespan (Hunuk, 2017; Sternquist et al., 2018). Sternquist et al. (2018) highlighted the connection between incorporating Kolb's (1984) experiential learning cycle into undergraduate research projects and described a particular project involving three undergraduate students over a two-year period. The students explored the grocery shopping and eating behaviors of college students. The authors found the students engaged in each of the learning modes through the following: examining their personal shopping habits and interviewing other college students (CE), reflecting on and discussing the relevant literature (RO), using reflections to create interview protocol (AC), and analyzing data to identify themes (AE). The study did not describe multiple learning cycles occurring but made connections to the four modes on a project occurring over two years.

A great example of a study exhibiting multiple learning cycles followed one physical education (PE) teacher's journey in developing facilitation skills over the course of two-and-a-half years (Hunuk, 2017). Each month, the teacher practiced facilitating professional development with other PE teachers in a community of practice that was observed by the researcher (CE). After each session both the PE teacher and researcher journaled jointly online about the experience (RO), and then later discussed the session while connecting to adult learning principles (AC). Finally, the PE teacher and researcher planned the next session (AE). Hunuk (2017) summarized the process stating, "ELC [Experiential Learning Cycle] was utilized monthly in a cyclical way to move the teacher-facilitator through the process of becoming a facilitator. In a spiraling fashion, the ELC was repeated several times as the study progressed" (p. 306). A revised experiential learning cycle model could capture multiple cycles while showing continued development of skills, knowledge, or abilities over time.

Other Models of Lifelong Learning

The application and evolution of Kolb's model of experiential learning is rooted in other seminal theories that look at development as a lifelong learning process. Rather than limiting the theoretical approach to a fixed point in time, or a cross-section of that individual's development, the lifelong learning approach takes into consideration the developmental ebb and flow of personal and professional growth through one's lifetime. These theoretical approaches to lifelong learning can be bifurcated into sequential/linear models versus those that are dynamic and acknowledge that individuals can vacillate between their stages of development.

Two seminal theories with social and psychological theoretical underpinnings that are exemplars of these sequential/linear models are Kohlberg's Theory of Moral Development (1981) and Perry's Theory of Intellectual and Ethical Development (1968). These theoretical models acknowledge that growth and development occur over a substantial period of time and throughout one's life. They illustrate the sequential nature of personal and professional growth, which is marked by the beginning of the cycle/stage and ending in the desired finality of successful development at its fullest. For Kolhberg, it was asserted that individuals develop through three stages (Preconventional, Conventional, and Postconventional or Principled) that are sequential and hierarchical in nature. Similarly, Perry's Theory of Intellectual and

Ethical Development asserts that individuals develop through four stages (Duality, Multiplicity, Relativism, and Commitment), which illustrated their development from a dualistic mindset (a simple dichotomy of right versus wrong and good versus bad) to a well-developed mindset where the individual finds and firmly establishes their identity.

While the work of Kolhberg and Perry examines development and growth through lifelong learning, a limitation is the static and sequential nature of these approaches. Their stages of development are rigidly characterized and only provide for forward momentum of growth. However, human development is not always so neatly linear and should acknowledge that growth is often in flux, and life events can cause individuals to regress as they continue to develop. Providing an insightful approach addressing this dynamic and messy human development referred to as personal growth, the work of Chickering provides a more dynamic approach to examining human development. In what is arguably the most seminal contribution to the collection of student development theories, Chickering and Reisser's (1993) Theory of Identity Development provides an approach that actively acknowledges this growth can be spiral in nature rather than a singular direction toward progress.

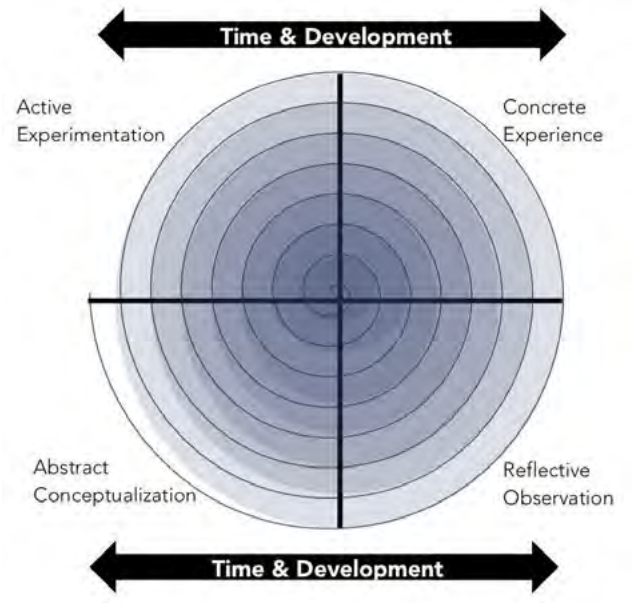
This seminal work of Kohlberg (1981), Perry (1968), and Chickering and Reisser (1993) provides the inspiration and influence to reimagine Kolb's model of experiential learning. This evolution of Kolb's model provides the opportunity to look at personal and professional development over a lifetime (rather than being time-bound) like the work of Kolhberg and Perry, while acknowledging the dynamic and spiraling nature of human development through the lens of Chickering and Reisser's work. This natural evolution of experiential learning is proposed through our model.

Description of Model

Our proposed reconceptualized model of Kolb's work, The Episodic and Lifelong Experiential Learning Cycle (Figure 2), illustrates the process of experiential learning over a longitudinal period while simultaneously capturing episodic learning cycles. The model begins at the center of the spiral within the circle. As individuals go through personal/professional moments and learn through experiential learning, they become further developed and expand their theoretical and practical knowledge base. As they continue through time and experience more life/career events through experiential learning, their previous experience builds upon and enhances the episodic learning event they are going through via experiential learning. To this end, what an individual learns through experiential learning does not take place in a vacuum, rather, it is enhanced and informed by their previous experiences and successes learned through experiential learning. As individuals continue to grow over time, their development will be reminiscent of the growth rings inside a tree. The larger the tree becomes, the more rings there are, and thus, an observable growth will have occurred.

Figure 2

Reconceptualized Kolb Model: The Episodic and Lifelong Experiential Learning Cycle



Discussion

Kolb's experiential learning cycle is frequently used in ways that only recognize episodic learning across a short period of time while often not addressing the implications of learning as a long-term process that includes prior and future learning experiences

(Amod & Brysiewicz, 2019; Bower, 2013; Burns & Danyluk, 2017; Groves et al., 2013; Konak et al., 2014; Russell-Bowie, 2013; Sato & Laughlin, 2018; Witt et al., 2018). Thus, our model is intended to refocus experiential learning as lifelong within higher education courses, programs, and research. Additionally, because practitioners often use Kolb's experiential learning cycle in short-term snapshots of time, they fail to address the implications of continual, longer-term learning (Amod & Brysiewicz, 2019), and thus, the goal of our proposed model is to simultaneously present a longer-term perspective that recognizes what learners are already bringing with them into the learning environment as well as the continual learning cycles that occur in lifelong learning.

Also, it is important to note our model is intended to address the work of Chickering and Reisser's (1993) Theory of Identity Development, which provides an approach that actively acknowledges this growth can be a spiral in nature rather than only one directional. The intention is to examine ELT from the lens of lifelong learning rather than a continued focus on episodic learning by integrating multiple cycles of the four learning modes into sequenced learning. In practice, Hunuk (2017) displayed these multiple cycles monthly during the development of a teacher-facilitator and the description of this process mirrors our proposed model: "In a spiraling fashion, the ELC [Experiential Learning Cycle] was repeated several times…" (p. 306). Finally, our proposed model addresses Jarvis et al.'s (2003) concern by drawing a distinction between experience as lifelong and experience as episodic to provide a more robust and broader usage of ELT.

Using this reconceptualized model has potential to refocus both practitioners and researchers on the continual nature of experiential learning. Researchers using ELT may better understand the effectiveness of their experiential learning interventions by capturing data that recognizes prior learning cycles. Additionally, researchers may be inclined to conduct follow-up studies months after a learning experience to explore continued cycles that have extended learning into the future. Practitioners, prior to implementing a planned learning experience, might connect the model to students' previous learning experiences to indicate their current development outward among the rings in the model. Students could then continue interacting with the four modes of learning during the planned learning experience and be encouraged to continue the learning cycles as they extend their learning well into the future. Some concrete examples in the following section bring further clarity to this approach.

Implications for Practice

This adapted model is applicable to any discipline engaged in experiential learning; we see immediate application within our own work with doctoral students in education. Because doctoral work is typically spread across multiple years, this model could be used to build research efficacy in students who can frame their potential fears of the research process into a longer-term growth opportunity. Doctoral mentors or advisors can discuss their mentees' concrete experiences with research and help them reflect while moving through the experiential learning cycle. In these conversations, failures are easily reframed as concrete experiences to be brought back through the reflective process into a new phase of active experimentation. During their doctoral program, students could be periodically assessed for their research efficacy and competence with the hopeful result of seeing increased development over time as seen in the shading found in the model. Although discussed here within the context of our discipline, the model may be used as an overarching learning framework for a variety of learning experiences.

For example, an educator leading a study abroad trip might introduce the model before departure through an open discussion on students' prior travel experiences and their associated learning on cultural competencies. In this discussion students would be asked to describe their previous concrete travel experiences, reflective observations, abstract conceptualizations and how they have experimented with this learning. This primer incorporating the model would help students recognize their prior learning, understand the importance of reflection in experiential learning, and be equipped to interact with the four modes of learning during as well as beyond their study abroad. In this way the model becomes a metacognitive tool for continued learning through experience.

Recommendations for Future Research

This reconceptualized model can be applied in any research that seeks to consider prior and future learning while employing ELT. This might include longer-term studies that follow up on continual learning beyond a classroom experience or studies focused on episodic, time-bound learning while recognizing that participants are relearning after prior learning cycles. Future research could examine this model or ELT in general as a metacognitive tool to prime learners before engaging in an experience. Describing the learning process through an ELT lens prior to an experience has the potential to develop a growth mindset in learners and may take some pressure off of learners who lack self-efficacy in a specific area. This could occur in either a classroom, co-curricular or mentor setting and the possibility of this metacognitive tool to benefit learners deserves further exploration.

Finally, the experiential learning cycle as a lifelong experience should be further tested for its validity. Do learners in fact experience learning this way? Do we see these cycles really occurring over an extended period of time? Well-designed phenomenological or narrative inquiry studies could explore such questions by gathering significant data on the essence of learning from the experiences of learners on a specific content topic or competency. It is important that we explore if these lived experiences as learners consistently include Kolb's (1984) four modes of learning.

Conclusion

Practitioners may use this reconceptualized experiential learning model as a tool for bringing long-term metacognitive awareness to learners within various disciplines. The model clearly frames learning as a continual process, which has the potential to take pressure off of learners who are distressed by their current competency or knowledge level. As a course or program begins, the model can be used to discuss prior learning students are bringing with them, learning during the experience, and further transforming this learning beyond the short-term experience. Students will hopefully gain a growth mindset in which they see their learning going through continuous long-term cycles and the course or program is just one structured, focused, and dynamic episode in their learning journey. ■

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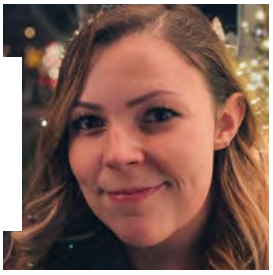

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