

Experiential Learning & Teaching in Higher Education

Volume 4 | Number 1

Article 6

Summer 2021

The Experiencing Scale: An Experiential Learning Gauge of Engagement in Learning

Karen L. Stock Walsh University, kstock@walsh.edu

David Kolb Experience Based Learning Systems, LLC, dak5@msn.com

Follow this and additional works at: https://nsuworks.nova.edu/elthe

Part of the Educational Methods Commons, and the Scholarship of Teaching and Learning Commons

Recommended Citation

Stock, Karen L. and Kolb, David (2021) "The Experiencing Scale: An Experiential Learning Gauge of Engagement in Learning," *Experiential Learning & Teaching in Higher Education*: Vol. 4 : No. 1, Article 6. Available at: https://nsuworks.nova.edu/elthe/vol4/iss1/6

This Research Article is brought to you for free and open access by the Journals at NSUWorks. It has been accepted for inclusion in Experiential Learning & Teaching in Higher Education by an authorized editor of NSUWorks. For more information, please contact nsuworks@nova.edu.

The Experiencing Scale: An Experiential Learning Gauge of Engagement in Learning

KAREN L. STOCK DAVID A. KOLB

The idea that experience is necessary for learning is widely accepted. The term "learning" is often defined as "the acquisition of knowledge or skills through experience, study, or by being taught," or "modification of a behavioral tendency by experience" ("Learning," n.d.). Yet our understanding of the concept of experience and its role in learning remains unclear. For those of us who are involved in the theory and practice of experiential learning, this lack of clarity is particularly problematic. Teachers in higher education who wish to make experiential learning a part of their practice are given little guidance. They need to know: What kind of experiences lead to what kind of learning? What is the process that turns experience into learning?

Experiential Learning Theory

In this study we examine these questions from the perspective of Experiential Learning Theory (ELT—Kolb, 2015, Kolb & Kolb, 2017a&b). We focus on the views of ELT's foundational scholars, especially William James and John Dewey. Their works highlight key differences between two kinds of experience: James' concept of pure experience—in the moment perceptual experiencing Walsh University Experience Based Learning Systems, LLC.

of the world "just as it is" without conceptual interpretation (1912), and Dewey's concept of empirical experience—the on-going, often unexamined, daily flow of experience that is laden with cultural interpretation and is conservative, tradition bound and prone to conformity and dogmatism (1933).

James and Dewey created the philosophy of pragmatism together and initially Dewey endorsed and expanded upon James' radical empiricism and its concept of pure experience. Later in his career however he came to believe that social, cultural, and historical forces permeated everyone's experience in a way that anything resembling a pure experience would be rare. So much so, that in the 1951 revision of his master classic Experience and Nature he considered changing the title to Culture and Nature, "because of my growing realization that the historical obstacles which prevented understanding of my use of 'experience' are, for all practical purposes, insurmountable" (Dewey & Boydston, 2008, p 361).

Yet pure experience remained important to him, particularly with regard to learning. Dewey emphasized that the traditional flow of empirical experience must be interrupted to initiate reflection and learning. He observed that the reflective process seemed to be initiated only when the preconceptions that block experiencing are disrupted by being 'stuck' with a problem or difficulty or 'struck' by the strangeness of something outside of our usual experience (Dewey, 1933; Humphry, 2009). Here in his emphasis that stuck or struck moments of intense, direct experiencing are a key to unlocking learning, he is joining with James on the transformative power of pure experiencing.

The culture laden flow of empirical experience produces rote or surface learning, a preoccupation with unreflective strategies, such as memorizing without understanding and uncritically following teachers' instructions or an intention to learn facts in order to pass a course with a lack of interest and engagement. Experiencing on the other hand, stimulates a deep learning approach as obstacles and surprises promote intrinsic interest in understanding by gathering information, relating ideas to each other and drawing conclusions (Marton & Saljo, 1976; Ramsden, 1992; Biggs, 1987; Entwistle, 1981).

Other ELT foundational scholars have also made experiencing a central concept in their work on learning and development. Those who focused on experiencing and have elaborated on its qualities include Carl Rogers, Paulo Freire, Kurt Lewin and Mary Parker Follett, who in *Creative Experience* (1924) gave the following warning about blindly following empirical experience, emphasizing that past conceptions must be reviewed and integrated with ongoing immediate experiencing:

The people who 'learn by experience' often make great messes of their lives, that is, if they apply what they have learned from a past incident to the present, deciding from certain appearances that the circumstances are the same. forgetting that no two situations can ever be the same... All that I am, all that life has made me, every past experience that I have had woven into the tissue of my life - I must give to the new experience. That past experience has indeed not been useless, but its use is not in guiding present conduct by past situations. We must put everything we can into each fresh experience, but we shall not get the same things out which we put in if it is a fruitful experience, if it is part of our progressing life... We integrate our experience, and then the richer human being that we are goes into the new experience; again we give our self and always by giving rise above the old self (pp. 136-137).

Experiencing and Learning

The experiential learning cycle (Kolb, 2015) describes a learning process where experiencing (formally known in ELT as Concrete Experience) is a gateway to learning in a recurring cycle of experiencing, reflecting, thinking, and acting:

• Experiencing in a particular situation, such as a class lecture, a work problem, or a family conversation, arouses perplexity, curiosity and interest.

- Reflecting begins learning from the experience by working to notice and understand key aspects of it.
- Thinking analyzes these aspects

to create conclusions and evaluate decision choices.

• Acting to implement a chosen decision leads to a new situation with emergent consequences to deal with.

The learning cycle is driven by two opposing dialectic dimensions, the transforming dimension of acting/reflecting and grasping dimension of experiencing/thinking (See Figure 1). In the cycle of learning learners receive information through experiencing and transform it by reflecting and thinking and then transform it again by acting to change the world. They are both receivers and creators of knowledge.



Figure 1. The Experiential Learning Cycle (Kolb, 2015)

Because of the dialectic competition between experiencing and thinking, how deeply one is engaged in experiencing depends on both the thinking and experiencing modes. In the experiencing mode of grasping or understanding the world, we understand the world immediately and directly through an exquisite system of perceptual senses that include the big five senses of vision, hearing,

touch, taste and smell, plus a host of lesser known senses of direction and balance, kinesthetic proprioception, pain, and internal body functions including feelings and emotions. This is in contrast to the thinking mode where understanding of the world is grasped through remembered ideas and concepts. The idea that experiencing and thinking are dual modes of understanding the world is consistent with a number of contemporary dual processing theories in cognitive psychology (Evans, 2008); most notably Daniel Kahneman's Thinking, Fast and Slow (2011). He says we have two selves, an experiencing self that lives briefly in each moment of perception and a remembering/thinking self that is constructed through remembered memories of concrete experiences that have been given meaning through cognitive interpretation. Unlike the experiencing self, the remembering/thinking self is relatively stable and permanent. "It is a basic fact of the human condition that memories are what we get to keep from our experience, and the only perspective we can adopt as we think about our lives is that of the remembering/thinking self" (Kahneman & Riis, 2005, p. 286).

We make our choices with the thinking self though this is not always the best basis for decision making. The way that we remember and think about our experiences is very different than the process of experiencing--our minds create illusions that impact how we remember experiences. For example, we often give more weight to our most recent experience. This can cause us to remember an event that ended well as a positive event, even if it was filled with painful experiences. The learning cycle integrates the experiencing self and thinking self through the transformation dimension of reflection and action. This can be thought of as an internal conversation between the perspectives of the experiencing and thinking selves.

In sum, ELT describes the role of experiencing in the learning process as a gateway to engagement in learning cycle. Opening oneself to experiencing the present moment fully through all of one's senses and internal feelings sparks reflection about all of the perspectives and paradoxes inherent in one's situation. This reflection leads to conceptualization and ultimately in action on one's experience.

The Experiencing Scale

Notwithstanding the above, we are left with many questions about the experiencing process. What are the qualities that define the experiencing process? How can we know if our students are experiencing what we teach? Can we teach them how to engage in experiencing? The purpose of this study is to seek answers to these questions by formulating a conceptual foundation for the experiencing concept that integrates insights from four different contemporary traditions of experiencing research, Focusing, Flow, Mindfulness, and Absorption. We attempt to validate our conceptual integration through the construction of The Experiencing Scale, a self-reported gauge of one's level of experiencing in a given context.

In an earlier study (Stock, 2014) examined the role of experiencing in a study of participants who participated in an equine-assisted management development program. In that study she used a modified version of Tellegen & Atkinson's (1974) Absorption Scale to measure how deeply participants were experiencing the program. Her findings indicated that experiencing significantly mediated the relationships between program characteristics--learner centered facilitation, psychological safety and the natural setting—and post-program outcomes of increased critical reflection and creativity.

Encouraged by these findings, we set out in this study to build a more rigorous Experiencing Scale derived from the broader literature on experiencing. We identified four distinct traditions of experiencing research—Focusing, Flow, Mindfulness and Absorption. Each of these traditions has generated a large body of scholarly research and Focusing, Flow and Mindfulness, in particular, have seen many programs of practical application aimed at developing a state of experiencing.

Focusing is an embodied way of experiencing that which is beneath thought, language and emotion. "In focusing one pays attention to the 'felt sense.'...A felt sense is body and mind before they are split apart" (Gendlin, 1978, p. 165). Eugene Gendlin developed a 6-step approach to Focusing that became an international network supporting individuals and groups in the practice and teaching of Focusing and its underlying philosophy (www.focusing.org). Gendlin's work began with the investigation of Carl Rogers' concept of experiencing (Rogers, 1961) and its role in the process of psychotherapy. He found that patients' capacity for experiencing predicted therapeutic outcomes better than what the therapist does; a capacity that was measurable in how the patient talked in the first two sessions. Therapists assist clients in being able to

recognize bodily sensations, learn from and respond to the felt sense to elicit more effective outcomes from therapy (Hendricks, 2007). When integrated with academic learning, there have been mixed results. On one hand, this embodied way of recognizing bodily shifts when acquiring new knowledge was found to be a way of deepening creativity and becoming more mindful (Netzer & Mangano, 2010). On the other, when utilized to develop intuitive awareness in management education, the technique was found to be less effective since participants felt it was difficult to master on their own and required expert training to be effective (Sadler-Smith & Shefy, 2007).

Flow "is a state of total engagement in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it" (Csikszentmihalyi, 1991, p. 4). Derived from psychological research on the "optimal experience," the flow state elicits a positive state of mind and happiness which increases overall well-being. While experiencing flow, one feels totally absorbed in an experience, loses all feelings of self-consciousness and is in control. Experiencing flow in relation to learning has been widely applied in online learning, design of game-based computer programs and virtual immersive environments (Pearce, et. al, 2005; Perttula e. al, 2017; Van Schaik, et. al, 2012). Connections between flow and interest in lifelong learning have also been found to be significant in that being in a state of flow and experiencing optimal engagement, which is more likely to occur during experiential learning activities, serves as motivation to continue learning (Sibthorp et al, 2011).

Mindfulness has been studied and practiced for centuries. and is currently widely used in education and personal development programs. In Mindful Learning Ellen Langer defines it as "a flexible state of mind in which we are actively engaged in the present, noticing new things and sensitive to context" (Langer, 2000, p. 220). It is measured by the Langer Mindfulness Scale (Bodner, 2000). Another leading mindfulness scholar Jon Kabat-Zinn (1994, 2003) describes being mindful as living in the present moment, aware of ourselves and others as we take in the here and now in a non-judgmental way. Mindfulness is often measured by Brown &Ryan's Mindful Attention Awareness Scale (Brown & Ryan, 2003) which measures experiencing by negative endorsement of states which interfere with it, e.g. "I find myself doing things without paying attention". In relation to experiential learning, mindfulness has been shown to help individuals learn from experience by encouraging a focus on the experience at hand without any bias, as well as guiding participants through the stages of the learning cycle by paying attention and noticing shifts (Yeganeh & Kolb, 2009). Mindfulness may also facilitate learning and the transfer of knowledge (Salomon & Globerson, 1987), and studies involving adventure education often cite mindfulness as a learning outcome from the experience (Passarelli, et. al, 2010; Raiola, 2003).

Absorption "is interpreted as a disposition for having episodes of "total" attention that fully engage one's representational (i.e., perceptual, enactive, imaginative, and ideational) resources" (Tellegen & Atkinson, 1974, p. 268). The authors developed the Absorption Scale to identify a person's hypnotic susceptibility by measuring the ability of a person to become immersed in the experience. This kind of attentional functioning is believed to result in a heightened sense of the reality of the attentional object, imperviousness to distracting events, and an altered sense of reality in general, including an empathically altered sense of self. Individuals rating high in absorption possess effortless experiencing while engaged in creative tasks (Bowers, 1978; Manmiller et. al, 2005). Absorption also facilitates and reflects a motivational readiness towards experiential involvement (Wild et. al, 1995).

Research Method and Design

Using a deductive approach, the major concepts in each of the four theories were identified and a pool of self-descriptive items that represented them was created. Each of the original 20 items include two opposing statements in a sematic differential format (Osgood et al., 1957) describing the experiencing state and a state which interferes with experiencing. These items are shown in Table 1 along with a primary source to where the items can be mapped. (Clarke, 2003).

Semantic Differential Items Theory Source It was fresh & new. < > It was pretty much as I Mindfulness (Langer) expected. I was deeply involved. < > I was uninvolved. Absorption (Tellegen & Atkinson) I didn't notice the <> I was aware of time Flow (Csikszentmihalyi) passage of time. passing. Absorption (Tellegen & I recall the experience Details of the experience < > are difficult to recall. vividly. Atkinson) I was alert and aware. I was easily distracted. Flow (Csikszentmihalyi) < > I actively participated. I did not participate. Flow (Csikszentmihalyi) < > My senses were < > My senses were not Focusing (Gendlin) engaged. engaged. I was fully present. I was somewhere else. Mindfulness (Kabat-Zinn) < > I was "in the flow". < > I felt resistant. Flow (Csikszentmihalyi) I was not self-conscious. I was self-absorbed. Absorption (Tellegen & < > Atkinson) I understood it intui-< > I understood it Focusing (Gendlin) tivelv. intellectually. My attention was My attention Mindfulness (Kabat-Zinn) < > focused. wandered. I felt scattered. I felt connected and < > Focusing (Gendlin) whole. I was in the here-and-< > I was there-and-then. Mindfulness (Kabat-Zinn) now.

Table 1. A Mapping of Experiencing Scale Items and Experiencing Theory Source

The experience was emotional.	< >	I had no emotional reactions.	Focusing (Gendlin)
I saw things in new ways.	<>	My views did not change.	Mindfulness (Langer)
I responded to what was happening	<>	I was on "automatic pilot."	Mindfulness (Kabat-Zinn)
I learned something new.	<>	I didn't learn anything new.	Mindfulness (Langer)
I felt a sense of oneness with the natural world.	<>	I did not feel a connection with the natural world.	Absorption (Tellegen & Atkinson)
I felt the experience in my body.	< >	I had no bodily sensations.	Focusing (Gendlin)

Prior to testing the scale, the items were shared with colleagues in various contexts in order to pre-test the items using a "think aloud" approach to address any cognitive difficulties in answering questions (Bolton, 1993). Minor wording changes and instructions as to how to complete the questionnaire were added. A quantitative multivariate research study was conducted with data from undergraduate students enrolled in an upper-level Management and Organizational Behavior course at Walsh University, with the approval of the University's Institutional Review Board from the fall of 2017 through 2019. A convenience sampling method resulted in obtaining 270 completed questionnaires. These subjects consisted of undergraduate students ranging in age from 19-22, who completed a questionnaire following an experiential classroom activity which was expected to be beneficial in future work environments. The experiential activities took place during a 90-minute class session and included role plays, blind-folded exercises, and games specifically designed to teach concepts of Organizational Behavior with an experiential approach (Osland et al., 2007).

Statistical Analysis

In the development of a new scale, Hinkin (1998) suggests to first determine the internal consistency of the scale as a whole, followed by exploratory factor analysis to allow for a reduction of a set of variables and confirmatory factor analysis to determine if prior analysis has been thoroughly conducted. Using SPSS 25 we calculated the internal consistency of the twenty-item experiencing scale. Cronbach's alpha for the scale was .932, indicating a high degree of internal consistency among the items in the scale. The means (M) of the individual items ranged from 3.50-5.60, with a mean on the total scale of 99.07 and a standard deviation (SD) of 20.43. Overall, the participants' responses on the scale indicated that they possess a fairly high degree of experiencing. The mean and standard deviation of the items of the experiencing scale are provided in the Table 2 below.

Additional analysis was conducted in order to establish reliability and validity. According to Hair, et al. (2010), reliability is defined as "the extent to which the variables are consistent in what they are intended to measure (p. 93)" and validity is defined as "the extent to which the set of measures correctly represent the concept of study (p. 94)." First, Exploratory Factor Analysis (EFA) was conducted to identify factors and initial factor reliability and validity, then Confirmatory Factor

Item	М	SD
It was fresh & new	5.14	1.688
I was deeply involved	5.17	1.514
I didn't notice the passage of time	4.91	1.764
I recall the experience vividly	5.49	1.313
I was alert and aware	5.43	1.419
I actively participated	5.60	1.451
My senses were engaged	5.19	1.416
I was fully present	5.48	1.424
I was in the flow	5.30	1.345
I was not self-conscious	4.96	1.396
I understood it intuitively	4.97	1.454
My attention was focused	5.36	1.494
I felt connected and whole	4.95	1.474
I was in the here and now	5.27	1.413
The experience was emotional	3.61	1.821
I saw things in new ways	4.59	1.689
I responded to what was happening	5.26	1.406
I learned something new	5.07	1.601
I felt a sense of oneness with the natural world	3.82	1.685
I felt the experience in my body	3.50	1.937

Table 2. Mean and Standard Deviation of the Experiencing Scale Items

Analysis (CFA) was conducted to further test how well the theorized constructs fit the data. Hair et. al. (2010) also suggests that an EFA and CFA are necessary when items in a scale are adapted from previous use and utilized in a new context.

Exploratory Factor Analysis

An EFA was conducted using Maximum Likelihood Analysis, Promax rotation in SPSS 25. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .936, suggesting excellent adequacy in the EFA. The Bartlett's Test of Sphericity result was significant (p < .001), confirming that there were correlations in the

data set that were appropriate for factor analysis (Raykov & Marcoulides, 2011). When examining the output, we deleted 2 items (I recall the experience vividly and I understood it intuitively) that did not load significantly onto one factor. As shown in Table 3, reliability, as measured by Cronbach's Alpha (α), was higher than .70 for each subscale, or factor and the total variance explained in the scale is adequate at 58.31% (Churchill, 1979). Intercorrelations among factors are presented in Table 4 and indicate discriminant validity is achieved as the correlations between factors do not exceed .70.

Factor	# of Items	Eigenvalue	Variance Explained	Reliability α
Presence	12	8.38	46.56%	.94
Embodiment	3	1.57	8.74%	.77
Novelty	3	.54	3.00%	.75
Total Scale			58.31%	

Table 3. Summary of 3 Factors Resulting from EFA

Table 4. Correlation Matrix among the Experiencing Scale Factors

Factor	1	2	3
1	1.00		
2	.412	1.00	
3	.656	.618	1.00

We suppressed the factor loadings to display only factors above .350 with an eigenvalue of greater than 1, which is significant for a sample size of 250 (Hair et al., 2010, p. 117) and three distinct sub-concepts or factors emerged from the data, as shown in Table 5. Based on the description of the item within each group, we labeled the factors to be called Presence, Embodiment and Novelty.

Confirmatory Factor Analysis

The 18 items remaining in the scale (see Appendix A) were then analyzed using confirmatory factor analysis (CFA) in IBM SPSS AMOS 26 to revalidate the Experiencing Scale's structure. We added a common latent factor to test for method bias and performed the Common Methods Bias Test where we compared the unconstrained common method factor to the constrained model and ran a X2 Difference Test. Results indicate significant shared variance which led us to retain the common latent factor (CLF) for computing factor scores. We expected method bias since the data was gathered using a single common method. Therefore, in accounting for method bias by the Podsokoff et al., (2003) method, the model fits the data (with CFI = .97, GFI= .93, and RMSEA = .05).

Reliability and validity of the scale were examined. As shown in Table 6, we computed composite reliability (CR) for each factor and found it to be above the minimum threshold of 0.70 (Fornell & Larcker, 1981). We calculated the average variance extracted (AVE). For all factors, the AVE was above .50, which indicates adequate convergent validity, i.e. measures of the same concepts are correlated (Hair, et. al., 2010). In order to test for discriminant validity, i.e. the degree to which conceptually similar concepts are distinct, we then calculated the maximum shared variance (MSV) and compared this to the average variance extracted (AVE), (Hair, et.al, 2010). While the Embodiment factor possesses discriminant validity since AVE is less than MSV, there are minor discriminate validity concerns as the MSV is slightly greater than the AVE for Novelty and the values for MSV and AVE are

Item	Factor (F) loadings							
	F1	F2	F3					
Presence								
I was deeply involved	.736							
I was alert and aware	.832							
I actively participated	.931							
My senses were engaged	.708							
I was fully present	.910							
I was in the flow	.817							
My attention was focused	.807							
I felt connected and whole	.610							
I was in the here and now	.671							
I responded to what was happening	.588							
I was not self-conscious	.565							
I didn't notice the passage of time	.456							
Embodiment								
I felt a sense of oneness with the natural world		.857						
I felt the experience in my body		.866						
The experience was emotional		.388						
Novelty								
I saw things in new ways			.977					
It was fresh & new			.461					
I learned something new			.552					

Table 5. Experiencing Factor Loadings for the Final Item Pool Exploratory Factor Analysis

Note. Factor loading below .350 are not displayed. Extraction Method: Maximum Likelihood. Rotation Method: Promax with Kaiser Normalization.

nearly equivalent for Presence. Thus, some of the items under Novelty and Presence may be better explained by another variable. These statistics indicate that all three factors represent the experiencing concept as defined by the Experiencing Scale items and that the Embodiment factor is distinct from the Presence and Novelty factors. Table 6. Construct Psychometrics fromConfirmatory Factor Analysis

	CR	AVE	MSV				
Novelty	0.767	0.531	0.564				
Presence	0.940	0.568	0.564				
Embodiment	0.782	0.549	0.396				

Discussion

The above factor analysis results shed some light on the nature of experienc-

ing as viewed from the perspectives of Focusing, Flow, Adsorption, and Mindfulness. They give construct validity for a three-factor model of experiencing. Presence accounted for 47% of the variance while Embodiment accounted for 9% and Novelty accounted for 3%. Average variance extracted (AVE) suggests adequate convergent validity for items in each of the three factors. Discriminant validity between the factors is lacking for Novelty and Presence but seems to distinguish Embodiment. This along with lower average item scores for the three embodiment items (3+) versus 5+ for Presence and Novelty items suggest that embodiment may be a deeper level of experiencing that is slower to engage.

Presence is a significant concept in all four of the experiencing research traditions. The characteristics of the items in the Presence factor well describe the elements of the experiencing process. The concept of Presence refers to the extent to which the learner is actively engaged during the experience. More specifically in relation to education and teaching, Rodgers & Raider-Roth (2006), define presence as "a state of alert awareness, receptivity, and connectedness to the mental, emotional, and physical workings of both the individual and the group in the context of their learning environments" (p. 265). In their view, there is a relational dimension of presence, existing in both the teacher and the learner. When both are fully present, the level of experiencing is deeper.

The second factor, **Embodiment**, refers to a somewhat deeper level of experiencing that is beneath thought and language. The concept of Embodiment refers to the felt-sense one is attuned to during the experience and when present, demonstrates the highest level of experiencing. Embodiment is kinesthetic in the way that the experience is felt and brings the body into participating in the experience. Embodied cognition theorists suggest that such learning experiences where students participate in an immersive, embodied way, results in greater retention of information in the long term (Gelsomini et al, 2020).

The third factor, Novelty, is most prominent in Langer's mindfulness theory (Langer, 2000). She argues that one technique of mindful learning is to notice in a situation, things that are new and different from expectations. Novel situations can also serve as a trigger for experiencing, that enables progression to other stages of the experiential learning cycle. Novelty can serve to first get the attention of the learner. While there may be comfort in routine or repetition, novel approaches to ideas or ways to illustrate a concept serves peak interest and curiosity. Learners may vary in terms of the importance they ascribe to newness. The term neophilia is used to describe the love of or enthusiasm for what is new ("Neophilia," n.d.), and the degree to which one thinks of oneself as a neophile can vary (Gallagher, 2012). Novelty has the ability to pique our curiosity and inspire us to learn. So, it is logical to assume that to fully engage in an experience, you must first get the attention of the user and doing something novel is one way to do that.

Educational Applications

There is a crisis in student engagement around the world. For example, "A recent Grattan Institute report suggested that as many as 40% of Australian students are consistently disengaged in class, and that these students are one to two years behind their peers in academic performance. The report also identified that the majority of disengaged students do not actively disrupt the class, but rather tend to be unmotivated and off-task without attracting the teacher's attention" (Mann, 2018, p. 169). Gross measures of student disengagement such as non-attendance, disruptive behavior and poor performance can be traced in part to a failure to productively engage in the learning process itself. When students feel they are not learning anything from their classes, it is understandable that they would disengage, particularly when other life circumstances bring additional obstacles. In the US, the National Survev on Student Engagement (NSSE) has shown increases in student engagement over its twenty-year history in large part due to the introduction of effective teaching practices that improve student learning such as collaborative learning, reflective learning, quality advising and teacher/student interaction (National Survey of Student Engagement, 2020).

The Experiencing Scale in its entirety (Appendix A) can be a useful tool to gauge student's levels of engagement. Reviewing the scale may be of use to those planning an experiential learning session as a form of a checklist, or of use as a post experience feedback form. By viewing participant's responses to the statements provided, one could interpret dots that favor the statements towards the left side to be in line with the experiencing self. Dots leaning towards the right side may indicate that the participant may be considered less experiencing, or less engaged in learning. Further insight may be gained by looking at the scores of each of the sub-constructs, or factors we identified: Novelty, Presence and Embodiment.

Educators may find it useful to use a shortened form of the scale when immediate feedback is desired. An abbreviated version of the complete scale includes 4 items taken from the Presence factor. (Appendix B) The selected items possess high internal consistency (Cronbach's Alpha .90) and can be used to poll a class immediately following an activity as a quick "temperature check" to determine the way in which participants are engaging and experiencing the learning opportunity. It can also be used as pre-work to set experiencing goals for a learning experience.

Engaging students in learning is proving even more difficult in the transition to online learning. Yet, a number of recent studies are showing that social, cognitive and teacher presence, experiential learning and active participation can increase online engagement in learning (Martin et al., 2018; Dunlap et al., 2016; Krassmann et al., 2019). The 4 item short experiencing scale can be a useful guide and monitoring device to gauge the ongoing level of experiencing in an online session reminding learners to be fully present with focused attention in the here-and now and to participate in the class.

Personal Development Applications

The experiencing scale can also be used as a tool for developing one's own experiencing skills to increase learning and creativity. A person can use the scale to gauge their level of experiencing in different situations in their life. This information can help the person to deliberately prepare for learning by seeking novelty, being present and attending to embodied feelings and it can also serve as a gauge for on-going monitoring of one's experience in a class or program.

Summary and Conclusion

The Experiencing Scale is a useful measure of the relationship participants have with the material and context of experiential learning and serves as a relevant instrument to gauge a learner's engagement in learning. We have theoretically explained the origin of the Experiencing Scale and the results of its use in a classroom setting. The scale as a whole demonstrated high internal consistency (Cronbach's Alpha .932). Upon analysis of this sample, overall, it was found to be reliable and met convergent validity but did not meet criteria for discriminate validity.

Directions for Future Research

As we noted earlier the Experiencing Scale gauges the transaction between the person and their situation. Both the personal characteristics and situational characteristics should influence a given level of experiencing to some extent. We would hypothesize, for example that people with an Experiencing Learning Style would engage more deeply in experiencing that those with a Thinking Learning Style (Kolb, 2015). When considering the context for learning, one might predict that deeper levels of experiencing would occur in an active, experiential exercise than in a lecture.

Further research is needed to test the scale in different environments. For example, results could be compared when the scale is taken in a classroom versus in a natural, outdoor setting. The method of instruction could also be compared to determine how experiencing may differ when students partake in a lecture versus an experiential simulation or to compare experiencing in an in-person versus online course format. In our sample, data was gathered following various in-person experiential activities. Within this context, we found that activities that were more immersive and highly experiential in nature further support a higher level of experiencing. Future studies could further explore high versus low involvement in experiential learning activities in a more systematic manner.

References

- Biggs, J. B. (1987). Student approaches to learning and studying. Australian Council for Educational Research.
- Bolton, R. N. (1993). Pretesting questionnaires: Content analyses of respondents' concurrent verbal protocols. *Marketing Science*, 12(3), 280-303. <u>http://dx.doi.org/10.1287/</u> <u>mksc.12.3.280</u>
- Bodner, T. E. (2000). On the assessment of individual differences in mindful information processing. Unpublished doctoral dissertation, Harvard University
- Bowers, P. (1978). Hypnotizability, creativity and the role of effortless experiencing. *International Journal* of Clinical and Experimental Hypnosis, 26(3), 184-202. <u>http://dx.doi.</u> org/10.1080/00207147808409320
- Brown, K.W., & Ryan, R.M. (2003). The benefits of being present: mindfulness and its role in psychological

well-being. Journal of Personality and Social Psychology, 84, 822-848. http://dx.doi.org/10.1037/0022-3514.84.4.822

- Churchill Jr, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal* of Marketing Research, 16(1), 64-73. <u>https://doi.org/10.1177%</u> <u>2F002224377901600110</u>
- Clarke, A. E. (2003). Situational analyses: Grounded theory mapping after the postmodern turn. *Symbolic Interaction*, 26(4), 553-576. <u>http://dx-.doi.org/10.1525/si.2003.26.4.553</u>
- Csikszentmíhalyi, M. (1991). *Flow: The psychology of optimal experience*. Harper Perennial.
- Dewey, J. (2008). The later works of John Dewey, 1925-1953: 1925, Experience and Nature (Vol. 1). (J.A. Boydston, Ed.) SIU Press.

Dewey, J. (1933), How we think. Heath.

- Dunlap, J. C., Verma, G., & Johnson, H. L. (2016). Presence + experience: A framework for the purposeful design of presence in online courses. *Tech Trends*, 60, 145-151. <u>https://</u> doi.org/10.1007/s11528-016-0029-4
- Entwistle, N., (1981). Styles of learning and teaching: An integrated outline of educational psychology for students, teachers, and lecturers. Wiley.
- Evans, J.S. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annu. Rev. Psychol. 59*, 255-278. https://

doi.org/10.1146/annurev. psych.59.103006.093629

- Follett, M. P. (1924). *Creative experience*. Longmans, Green and Company.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. <u>https://doi.org/10.1177%</u> 2F002224378101800104
- Gallagher, W. (2012). New: Understanding our need for novelty and change. Penguin Press.
- Gelsomini, M., Leonardi, G., & Garzotto, F. (2020, April). Embodied learning in immersive smart spaces. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (pp. 1-14). <u>https://doi. org/10.1145/3313831.3376667</u>

Gendlin, E. T. (1978). Focusing. Bantam.

- Hair, J., Black, W., Babin, B., and Anderson, R. (2010). *Multivariate data analysis* (7th ed.). Prentice-Hall, Inc.
- Hendricks, M. N. (2007). The role of experiencing in psychotherapy: Attending to the "bodily felt sense" of a problem makes any orientation more effective. *Journal of Contemporary Psychotherapy*, 37(1), 41-46. http://dx.doi.org/10.1007/s10879-006-9033-x
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Re*-

search Methods, 1(1), <u>https://doi.</u> org/10.1177/109442819800100106

Humphrey, C. (2009). By the light of the Tao. *European Journal of Social Work, 12*(3), 377-390. <u>http://dx.doi.</u> <u>org/10.1080/13691450902930779</u>

International Focusing Institute. (n.d.). https://focusing.org/.

- James, W. (1912). *Essays in radical empiricism*. Longmans, Green and Co.
- Kabat-Zinn, J. (1994). Wherever you go, there you are: Mindfulness meditation in everyday life. Hachette Books.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: past, present, and future. *Clinical Psychology: Science and Practice*, 10, 144-156 <u>http://dx.doi.org/10.1093/clipsy.bpg016</u>
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Kahneman, D., & Riis, J. (2005) Living and thinking about it: Two perspectives on life, in F.A. Huppert, B. Kaverne, and N. Baylis, eds. *The science of well-being*. Oxford University Press. http:// dx.doi.org/10.1093/acprof:oso/9780198567523.003.0011
- Kolb, A.Y., & Kolb, D.A. (2017a). Experiential learning theory as a guide for experiential educators in higher education. Experiential Learning & Teaching in Higher Education, 1(1), 7.
- Kolb, A.Y., & Kolb, D.A. (2017b). The experiential educator: Principles and

practices of experiential learning. EBLS Press.

- Kolb, D. A. (2015). Experiential learning: Experience as the source of learning and development. Second Edition. Pearson Education, Inc.
- Krassmann, A. L., Nunes, F. B., Bessa, M., Tarouco, L. M. R., & Bercht, M. (2019, July). Virtual Companions and 3D Virtual Worlds: Investigating the Sense of Presence in Distance Education. In International Conference on Human-Computer Interaction (pp. 175-192). Springer, Cham. https://doi.org/10.1007/978-3-030-21817-1_14
- Langer, E. J. (2000). Mindful learning. Current directions in psychological science, 9(6), 220-223. <u>https://doi. org/10.1111%2F1467-8721.00099</u>
- Learning (n.d.) In Merriam Webster Online. Retrieved August 8, 2020 from https://www.merriam-webster. com/dictionary/learning_
- Manmiller, J. L., Kumar, V. K., & Pekala, R. J. (2005). Hypnotizability, creative capacity, creativity styles, absorption, and phenomenological experience during hypnosis. *Creativity Research Journal*, 17(1), 9-24. <u>http://dx.doi.org/10.1207/ s15326934crj1701_2</u>
- Mann, J. (2018). Is school working for teenage boys? Outdoor learning and real-life skills could be the keys to re-engagement. *Curriculum Perspectives*, 38(2), 169-174. <u>https://doi. org/10.1007/s41297-018-0051-0</u>

- Marton, F. & Saljo, R. 1976. On qualitative differences in learning. Outcome and process. British Journal of Educational Psychology, 46, 4-11.
- Martin, F., Want, C. & Sadaf, A. (2018). Student perception of helpfulness of facilitation strategies that enhance instructor presence, connectedness, engagement and learning in online courses. *The Internet and Higher Education*, 37, 52–65. <u>https://doi. org/10.1016/j.iheduc.2018.01.003</u>
- National Survey of Student Engagement. (2020). Engagement insights: Survey findings on the quality of undergraduate education– Annual results 2019. Bloomington, IN: Indiana University Center for Postsecondary Research. Retrieved from http://nsse.indiana.edu/html/annual_results.cfm
- Neophilia. (n.d.) In *Merriam Webster* Online. Retrieved May 21, 2020 from <u>http://www.merriam-webster.com/</u> <u>dictionary/neophilia</u>
- Netzer, D., & Mangano Rowe, N. (2010). Inquiry into creative and innovative processes: An experiential, whole-person approach to teaching creativity. *Journal of Transformative Education*, 8(2), 124-145. <u>http://dx.doi. org/10.1177/1541344611406905</u>
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). *The measurement* of meaning. University of Illinois Press.
- Osland, J. S., Kolb, D. A., Rubin, I. M., & Turner, M. E. (2007). Organi-

zational behavior: An experiential approach (Eighth). Pearson Education, Inc.

- Passarelli, A., Hall, E., & Anderson, M. (2010). A Strengths-based approach to outdoor and adventure education: Possibilities for personal growth. *Journal of Experiential Education*, 33(2), 120-135. <u>http://dx.doi. org/10.5193/JEE33.2.120</u>
- Pearce, J. M., Ainley, M., & Howard, S. (2005). The ebb and flow of online learning. *Computers in Human Bebavior*, 21(5), 745-771. http://dx.doi.org/10.1016/S0747-5632(04)00036-6
- Perttula, A., Kiili, K., Lindstedt, A., & Tuomi, P. (2017). Flow experience in game based learning–a systematic literature review. *International Journal* of Serious Games, 4(1), 57-72. <u>http://</u> dx.doi.org/10.17083/ijsg.v4i1.151
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., and Podsakoff, N.P. (2003) Common method biases in behavioral research: a critical review of the literature and recommended remedies, *Journal of Applied Psychology*, 88(5), 879. <u>https://doi.org/10.1037/0021-9010.88.5.879</u>
- Raiola, E. (2003). Communication and problem-solving in extended fieldbased outdoor adventure education courses. *Journal of Experiential Education*, 26(1), 50-54. <u>http://dx.doi.</u> org/10.1177/105382590302600108
- Ramsden, P (1992). Learning to teach in higher education. Routledge.

- Raykov, T., & Marcoulides, G. A. (2011). Classical item analysis using latent variable modeling: a note on a direct evaluation procedure. *Structural Equation Modeling*, 18(2), 315-324. https://doi.org/10.1080/10705511. 2011.557347
- Rogers, C. R. (1961) On becoming a person. Houghton Mifflin
- Rodgers, C. R., & Raider-Roth, M. B. (2006). Presence in teaching. *Teachers and Teaching: theory and practice*, 12(3), 265-287. <u>https://doi.org/10.1080/13450600500467548</u>
- Sadler-Smith, E., & Shefy, E. (2007). Developing intuitive awareness in management education. Academy of Management Learning & Education, 6(2), 186-205.
- Salomon, G., & Globerson, T. (1987). Skill may not be enough: The role of mindfulness in learning and transfer. *International Journal of Educational Research*, 11(6), 623-637. <u>http://dx.doi.org/10.1016/0883-0355(87)90006-1</u>
- Sibthorp, J., Schumann, S., Gookin, J., Baynes, S., Paisley, K., & Rathunde, K. (2011). Experiential education and lifelong learning: Examining optimal engagement in college students. *Journal of Experiential Education*, 33(4), 388-392. http://dx.doi. org/10.1177/105382591003300413
- Stock, K. L. (2014) Equine-assisted Experiential Learning: Implications for Management Development and Education. Doctoral Dissertation, Case Western Reserve University.

- Tellegen, A., & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology*, 83(3), 268. <u>https://psycnet.apa.org/ doi/10.1037/h0036681</u>
- Van Schaik, P., Martin, S., & Vallance, M. (2012). Measuring flow experience in an immersive virtual environment for collaborative learning. *Journal of Computer Assisted Learning*, 28(4), 350-365. <u>http:// dx.doi.org/10.1111/j.1365-2729.2011.00455.x</u>
- Wild, T. C., Kuiken, D., & Schopflocher, D. (1995). The role of absorption in experiential involvement. *Journal of Personality and Social Psychology*, 69(3), 569. <u>http://dx.doi.</u> org/10.1037/0022-3514.69.3.569
- Yeganeh, B., & Kolb, D. (2009). Mindfulness and experiential learning. OD Practitioner, 41(3) 8-14.

Appendix A Experiencing Scale Long Form

🗘 The Experiencing Scale

Read each of the item pairs on the left and right side. Then, mark the button that best describes your experience.

1	I saw things in new ways	0	0	0	0	0	0	0	My views did not change.
2	It was fresh & new.	0	0	0	0	0	0	0	It was pretty much as I expected.
3	I learned something new.	0	0	0	0	0	0	0	I didn't learn anything new.
4	I was deeply involved.	0	0	0	0	0	0	0	I was uninvolved.
5	I was alert and aware.	0	0	0	0	0	0	0	I was easily distracted.
6	I actively participated.	0	0	0	0	0	0	0	I did not participate.
7	My senses were engaged.	0	0	0	0	0	0	0	My senses were not engaged.
8	I was fully present.	0	0	0	0	0	0	0	I was somewhere else.
9	I was "in the flow."	0	0	0	0	0	0	0	I felt resistant.
10	My attention was focused.	0	0	0	0	0	0	0	My attention wandered.
11	I felt connected and whole.	0	0	0	0	0	0	0	I felt scattered.
12	I was in the here-and-now.	0	0	0	0	0	0	0	I was there-and-then.
13	I responded to what was happening.	0	0	0	0	0	0	0	I was on "automatic pilot."
14	I was not self-conscious.	0	0	0	0	0	0	0	I was self-absorbed.
15	I didn't notice the passage of time.	0	0	0	0	0	0	0	I was aware of time passing.
16	I felt a sense of oneness with the natural world.	0	0	0	0	0	0	0	l did not feel a connection with the natural world.
17	I felt the experience in my body.	0	0	0	0	0	0	0	I had no bodily sensations.
18	The experience was emotional.	0	0	0	0	0	0	0	I had no emotional reactions.

Note to Educator: Items 1 - 3 represent Novelty, 4 - 15 represent Presence, and 16 - 18 represent Embodiment.

Appendix B Experiencing Scale Short Form

Read each of the item pairs on the left and right side. Then, mark the button that best describes your experience.

I was fully present.	0	0	0	0	0	0	0	I was somewhere else.
My attention was focused.	0	0	0	0	0	0	0	My attention wandered.
I was in the here-and-now.	0	0	0	0	0	0	0	I was there-and-then.
I responded to what was happening.	0	0	0	0	0	0	0	I was on "automatic pilot."