



Connecting the Dots of Learning & Teaching

JIM HOPLA

Effective learning and teaching involves doing and not just hearing (2 Nephi 2 13-14). Typical pedagogical instruction, aimed historically at children, teaches to subject matter and not to the student. Students are a blank slate and the teacher is the only one in the classroom who can write on that slate. In contrast, adult learning or andragogy is more than acquisition of knowledge; it “emphasizes the person in whom the change occurs or is expected to occur. Learning is the act or process by which behavioral change, knowledge, skills, and attitudes are acquired” (Knowles, Holton, & Swanson, 1998, p. 11). Learning involves change not only with the student (i.e., the adult learner) but also with the ability “to do.” It enables the learner to change behavior “as a result of experience” (Haggard & Crow, 1963, p. 20).

In 1938, Dewey argued that all genuine education comes from experience and the best classroom teaching utilized hands on experience (Dewey, 1938). Forty years later, Kolb (1984) stated experiential learning is the process whereby

knowledge is created through the transformation of experience. Experience is the central role in the learning process (Kolb, Boyatzis, & Mainemelis, 1999, p. 2) and as Morrison and Branter’s (1992) research found, experiential learning accounts for over 70% of individual development. Experiential learning has steadily gained popularity and acceptance in higher education and “serves as a valuable resource for learning and teaching” (Kolb & Kolb, 2006).

In 1999, while attending the University of Idaho, I had what L. Dee Fink called “a significant learning experience.” It wasn’t a new acquisition of hidden doctrine or profound wisdom attained through reading a book. It was an “a-ha” moment where I was able to connect the dots myself instead of the teacher doing it for me. I discovered agency through experience. O’Connell (2005) argues that after learning a concept, student application of knowledge in their environment provides an opportunity to practice a new insight. Once students have used this new knowledge in a social setting, they can improve confidence and are more motivated to repeat the new skill. That discovery of agency gave me confidence “to do” and not to be acted upon (2 Nephi 2 13-14).

Once students have used this new knowledge in a social setting, they can improve confidence and are more motivated to repeat the new skill.

Confidence “to do” is directly related to agency—the power to choose (D&C 29:35) as well as significant learning experiences. According to Elder James E. Faust, “Agency, given us through the plan of our Father, is the great alternative to Satan’s plan of force. With this sublime gift, we can grow, improve, progress, and seek perfection” (Faust, 1987, p. 35).

Ewert and Garvey (2007) state the outcomes of experiential learning include personal growth, moral, group, and leadership development. Personal growth is characterized by changes in self-concept, self-esteem, personal motivation, and confidence. As Bandura (1986) so aptly noted in his ground breaking work in Social Cognitive Theory (SCT), confidence is a key component in one's belief and ability to perform a learned task, which is also known as self-efficacy. Self-efficacy simply refers to a judgment a student makes about his or her ability to accomplish a specific future task (Bandura, 1982).

This judgment of being able to accomplish a task appears to affect many activities. Beauchamp, Rhodes, Kreutzer, and Rupert (2011) described a study conducted with students who ran a race. They illustrated through their results that students who were "experientially-primed" with more running experience reported significantly higher levels of self-efficacy and desire to participate in physical activity compared to the students who were more "genetically-primed" in good physical condition (Beauchamp et al. 2011, p. 12).

When I started teaching at BYU-Idaho, I found myself as one who needed to teach the content my way and if they did not get it my way they were going to "dwindle in unbelief." I had taken agency and "learning by faith" (Bednar, 2007) out of the classroom. It was at the end of my first semester when my Father in Heaven decided to provide me an opportunity. An upset student came to my office and said the following words I will never forget: "What is it you are looking for and how can I do this assignment so I can get the best grade?" According to this student's perspective, agency and learning was what I dictated.

President David A. Bednar in his first all-employee meeting as president of Ricks College, invited his colleagues to "think about how we think" and "set goals so high that we cannot imagine achieving the results through our existing processes" (Worrell, n.d., pp. 14, 46). This was a challenge to rethink higher education, teaching and learning. This aim is found in the unique BYU-Idaho mission statement and student learning outcomes. Following that challenge, President Henry B. Eyring stated the result of this rethinking as the graduates of BYU-Idaho will become

natural leaders who know how to teach and how to learn.
They will have the power to innovate and improve without

requiring more of what money can buy. Those graduates of BYU-Idaho will become... legendary for their capacity to build the people around them and to add value wherever they serve (Eyring, 2001).

Significant learning experiences are tied to student performance and confidence. Research shows individuals with high levels of self-efficacy are more confident in their ability to perform a certain task, or accomplish a difficult challenge (Bandura, 1994; Caulkins, White, & Russell, 2006; Cervone & Peake, 1986; Hechavarria, Renko, & Matthews, 2011). In 2013, in conjunction with Julie Buck, Cheryl Empey, and Tom Anderson, we conducted an assessment of BYU-Idaho students from three experientially based programs; Family & Consumer Sciences Education (FCS Ed), Health Sciences, and Recreation Management. We wanted to first examine student self-efficacy and their confidence "to do" using a general self-efficacy scale (GSE) developed by Schwarzer and Jerusalem (1995), as well as examine the relationship between student perceptions and student reported experiential learning opportunities among freshman, sophomores, juniors, and seniors.

Significant learning experiences are tied to student performance and confidence.

As a result of this assessment, generally, we found self-efficacy is quite high when students enroll in their major program courses of FCS Ed, Recreation, and Health Science. The scale we used has a high point of 40. The students scored a 34.16. In a seminal study examining the psychometric properties of the GSE Scale, 25 samples were taken, each from a different country with a total of 19,120 participants (Scholz, Gutierrez-Dona, Sud, & Schwarzer, 2002). The mean score for general self-efficacy was 29.55 ± 5.32 . The highest values were found for the Costa Ricans and Danes, 33.19 and 32.87 respectively. A mean score of 34.16 ± 3.66 is 4.61 points higher than the mean score of all samples combined and 0.97

points higher than Costa Rica's general self-efficacy score of 33.19 (Scholz et al., 2002).

The student GSE scores maintain approximately the same level throughout their four year program of study. The correlation informs us that the programs and the way they are taught are not eroding student's confidence "to do" their academic experiences, rather the programs keep student self-efficacy at a high level where they apply as well as be able to perform competencies.

BYU-Idaho has been identified as an innovative university (Christensen & Eyring, 2011) with a unique DNA. We as instructors need to continue to empower students through agency by giving them significant learning experiences. These experiences not only build perceived self-efficacy but individuals to be lifelong learners. According to Lawrence W. Green, we need to ask graduates not

what do you want to do, but what do you want to accomplish. Embrace the longevity and continuity of your career as an opportunity to make a cumulative contribution, building on each accomplishment, as a foundation for the next, not as an end in itself. Each leg of your journey presents you with a new fork in the road, with two or more options of where you proceed next. Anticipate those forks as you near the completion of each endeavor and consider which branch will enable you to serve... more effectively. And remember—remind yourself as your boss or your colleagues press you to take up the next challenge of that organization—your loyalty or your commitment is not to an institution, but to a cause, a value; a value that led you to a career commitment... (Green, 2012, p. 641).

I have seen firsthand what President Eyring talked about when referencing the graduates of BYU-Idaho as being "legendary." Those students are not successful because of me but because of them. Teaching and learning are not just acquisition of knowledge but transformation of the individual behaviorally and spiritually. This transformation comes from within and those students become "legendary" as well as leaders who are loyal and committed "not to an institution, but to a cause, a value." It is humbling to watch this transformation and witness President Eyring's prophesy come to pass every semester. ☀️

I have seen firsthand what President Eyring talked about when referencing the graduates of BYU-Idaho as being "legendary." Those students are not successful because of me but because of them.

References:

- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1991). Self-efficacy mechanism in physiological activation and health promoting behavior. In J. Madden, *Neurobiology of learning, emotion and affect* (IV ed., pp. 229-270). New York, NY: Raven.
- Bandura, A. (1994). Self-efficacy. In V. Ramachandran, *Encyclopedia of human behavior* (pp. 71-81). San Diego: Academic Press.
- Beauchamp, M., Rhodes, R., Kreutzer, C., & Rupert, J. (2011). Experiential versus genetic accounts of inactivity: Implications for inactive individuals' self-efficacy beliefs and intentions to exercise. *Behavioral Medicine*, 8-14.
- Bednar, D. A. (2007). The church of Jesus Christ of latter-day saints. Retrieved October 2012, from Ensign: <https://www.lds.org/ensign/2007/09/seek-learning-by-faith?lang=eng>
- Christensen, C. M., & Eyring, H. J. (2011). *The innovative university: Changing the DNA of higher education from the inside out*. San Francisco, CA: Jossey Bass.
- Dewey, J. (1938). *Experience and education*. New York, New York: The MacMillan Company.
- Ewert, A., & Garvey, D. (2007). Philosophy and theory of adventure education. In D. Prouty, J. Panicucci, & R. Collinson, *Adventure education: Theory and applications* (pp. 19-32). Champaign: Human Kinetics.
- Eyring, H. B. (2001, September 18). Brigham Young University-Idaho. Retrieved September 13, 2013, from Devotionals: http://www2.byui.edu/Presentations/Transcripts/Devotionals/2001_09_18_Eyring.htm
- Faust, J. E. (1987, November). The great imitator. 1987, p. 35.
- Green, L. W. (2012). Connecting the dots of a public health career. *Health Education & Behavior*(39(6)), 641-642. doi:10.1177/1090198112455174

Haggard, E. A., & Crow, A. (1963). Learning a process of change. *Readings in Human Learning*, 19-27.

Kerr, C. (2001). *The uses of the university* (5th ed.). Cambridge, MA, United States: Harvard University Press.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (1998). *The adult learner* (5th ed.). Houston, TX: Gulf Publishing Company.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Upper Saddle River, NJ: Prentice Hall.

Kolb, D. A., & Kolb, A. Y. (2006). Learning styles and learning spaces. In R. R. Sims, & S. J. Sims, *Learning styles and learning: A key to meeting the accountability demands in education* (pp. 45-92). New York, NY: Nova Science.

Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (1999). *Experiential learning theory: Previous research and new directions. Perspectives on Cognitive, Learning, and Thinking Styles*, 1-38.

Mission of Institution. (2008 йил 25-September). Brigham young university-idaho who are we? From Brigham Young University Idaho: www.byui.edu

Morrison, R. B. (1992). What enhances or inhibits learning a new job? A basic career issue. *Journal Applied Psychology*, 926-940.

National Commission for Health Education Credentialing (NCHEC). (2010, February 8). Health educator job analysis 2010. (M. Rehrig, Ed.) Retrieved May 29, 2013, from National comission for health education credentialing inc.: http://www.nchec.org/_files/_items/nch-mr-tab3-193/docs/heja%20press%20release%2020020810_final-2-19-10.pdf

O'Connell, W. (2005). Finding the shoe that fits: Experiential approaches for first practicum. *Guidance & Counseling*, 158.

Scholz, U., Gutierrez-Dona, B., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct?: Psychometric findings from 25 countries. *European Journal of Psychological Assessment*, 18(3), 242-251.

Schwarzer, R., & Jerusalem, M. (1995). General self-efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, England: NFER-NELSON.

Smith, M. (2011 йил 12-November). Learning from outdoor experience. From Infed: <http://www.infed.org/b-explrn.htm>

Worrell, R. (n.d.). History of ricks college and brigham young university-idaho: The bednar years (1997-2004). unpublished manuscript.

