The cross sector curriculum of the Myers-Lawson School of Construction
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An overview of learning theory reveals that customizing an effective, transformative learning experience for a specific learner profile results from thoughtfully consulting a variety of learning theories (Baruque & Melo, 2004; Bishop & Verleger, 2013a; Marzano, Pickering, & Pollock, 2001; Ozdamli & Asiksoy, 2016; Ritzhaupt, 2010; Tennyson & Rasch, 1988). Derivative of this idea, scholarship in Construction Management (CM) education suggests that one effective combination of learning models blends elements of Cognitive Learning Theory (CLT), constructivism, and Experiential Learning Theory (ELT) (Daramola, 2018; Kolb & Kolb, 2013) to provide a holistic and transformative learning experience.

In 2016, Holt, Chasek, Shaurette and Cox studied the learning styles of over one thousand undergraduate CM learners across the United States by using the Felder-Silverman Index of Learning Styles (ILS) model (Holt et al., 2018). This model is one of three common and reliable learning-style models used in engineering education, and one that was developed specifically for engineering education (Bishop & Verleger, 2013b). By the ILS, learners are classified into one of two opposing categories, in four learning style dimensions (LSD) (Felder & Spurlin, 2005). These are: visual vs. verbal, active vs. reflective, sensing vs. intuitive, and sequential vs. global. When CM learners were surveyed, the ILS identified them as visual, active, sensing, and sequential learners (Holt, Shaurette, & Chasek, 2016). To elaborate on what this means, the LSD-visual indicates that CM learners prefer learning by diagrams, drawings, field trips, videos, or photos than by lecture; the LSD-active indicates that CM learners prefer learning in teams working on projects; the LSD-sensing indicates that CM learners prefer course content to be cumulative and traceable; and the LSD-sequential indicates that CM learners prefer learning from organized and precise steps (Holt et al., 2018).

For CM educators, these ILS results should steer instructional design away from outsized emphasis on theory-laden, lecture-based instruction and in search of more efficient delivery alternatives that better match CM learner needs. Teachers should create a learning environment that favors visual learning and working collaboratively with facts and data on real-world coursework, rather than pondering theory and reflecting on ideas (Holt et al., 2018). For CM students, learning style awareness could provide ideas about how to perform better academically and can offer insight into why they may be struggling in a course where the instructor might be using a teaching style that does not align with their learning styles (Holt, Chasek, & Shaurette, 2016).

Interestingly, this study found that CM learners and engineering learners were classified with the same LSDs with the only difference being that CM learners "were [statistically] significantly higher on the four" (Holt et al., 2016, p. 12-13). This reinforces the idea that CM education and engineering education research can and should inform one another (Puddicombe and Johnson, 2011), but not to the exclusion of dedicated research on each group individually (Holt et al., 2018). "