To highlight the role of higher education in transitioning students from Pedagogical-based instruction toward Andragogy (adult/lifelong learning), we have previously introduced the concept of Chuoagogy (Cordie & Wooten, 2016). A central tenet of the Chuoagogy model is development of the skills necessary for self-directed learning – the ability to initiate and intentionally learn (Knowles, 1990).

In this poster, we present reflections showing how higher education courses under the Chuoagological model, develop problem-solving skills in a technology-rich environment, and advance students’ abilities to learn and adapt to changing needs in the workplace. Utilizing emerging technologies and problem-based assignments, post-secondary students are developing critical thinking skills and the resources necessary to be leaders in the 21st century global environment. In doing so they are being trained to become life-long, self-directed learners (Acemoglu & Autor, 2011; Gabrielle, 2003; Hiltz & Turoff, 2005).

Increasing diversity is a hallmark of today’s postsecondary environment. With other elements, a broader spectrum of ages and life experiences among students is contributing to this diversification. While the majority of students in higher education institutions can still be classified as traditional age learners, there is a growing population of somewhat older (adult learners) that differ from each other in terms of background and experiences. This group is commonly labeled as non-traditional learners. This cohort of adult learners can be characterized by several common traits (Knowles, 1990), all of which can affect their ability to learn. Today, educators and instructional designers need to consider this diversity in order to create appropriate course content and structure to guide these students toward successful learning outcomes.

The traits most important to self-directed, lifelong learning in the 21st century are readiness to learn, attitude toward technology, and digital and information literacy (Dabbagh & Kitsantas, 2012; Straub, 2009, Whitton, 2009). Digital and information literacy are complex terms that involve several interrelating components. The model developed by Hague and Payton (2010) includes eight components and distinctly displays how many of the components overlap, and that learners’ interactions with digital technologies are multiple, rich and complex (see Figure 1). Although the Hague and Payton model focuses on the K-12 learning environment, this framework can be easily transferred to the postsecondary learning environment. We have adapted the Hague & Payton (2010) model to focus on the characteristics of the 21st century adult learner, thereby developing a practical application and framework for the higher education learner as displayed in Figure 2.

Today’s digital learning environment demands development of a variety of interrelated instructional strategies to support the creation and sharing of meaning for the learner in (Cheon, Crooks, & Song, 2012; Gikas & Grant, 2013; Hiltz & Turoff, 2005). There are numerous theories, models, and resources that can be used to effectively introduce the skills required for self-directed learning and the use of digital technologies in order to become lifelong learners. Each framework has its own advantages and disadvantages. Collectively, for the higher education learner, we group these methods under the instructional theory of Chuoagogy (Cordie & Wooten, 2016). A key tenet of Chuoagogy is that higher education students need to learn how to develop critical thinking and problem-solving skills (Schlueter, 2016). Higher education students need to transition from lower level remembering and recalling, to the upper level thinking skills of evaluating and creating (Ally & Prieto-Blázquez, 2014). Chuoagogy promotes the development of students who learn how to seek out relevant information and practice or apply critical thinking skills in the higher education environment. Incorporation of Chuoagogy into the learning environment can enhance self-directed development from pedagogical learning to andragogical, lifelong learning (see Figure 3 below).

Key tenets of the Chuoagogical curricula design include the following:

(a) Incorporation of Emerging Technologies,
(b) Ensuring Motivation, and
(c) Enhancement of Self-Management Skills


Diversity in learners’ backgrounds can be used as a powerful resource in the higher education classroom. Through collaboration in small groups, students can benefit from the variety of learner experiences and gain knowledge on how learning situations can apply in the future (Knowles, 1990). Each of these experiences can be developed into learning moments for the participants in the activities.

Dialogue and discussion with others is an ideal tool to guide learners to perceive more nuances of application, and possible problems with new concepts, in addition to the knowledge gained from problem reflection (Gabrielle, 2003). The following areas are suggested elements for successful instructional approaches in Chuoagogy:

(a) Blended Learning Environment;
(b) Skills – Communication, Collaboration, Critical Thinking, Creativity (the 4 Cs); and
(c) Assignments – Online Discussion, Peer Review, Facilitation, Presentation.

Lifelong learning is the pursuit of knowledge for either personal or professional reasons (Knowles, 1990). Continuously learning not only improves workforce skills, it can enhance social inclusion, active citizenship, and personal development (Toner, 2011). Based on research-based insights into how humans learn, the evidence indicates that this approach can optimize teaching, especially in curricula designed to facilitate transition to lifelong learning. In the future, Universal Design for Learning (UDL), engagement, and Lifelong and Personalized Learning should be encouraged as part of the higher education learning framework (Borrás & Esdquist, 2015). We recommend that these requirements be highlighted through the use of models such as Chuoagogy that focus on diverse higher education populations and the transitional aims of their associated institutions.