

Recommended Reading

Papers Describing Innovation and Entrepreneurship Skills, Attitudes and Behaviors

The recommended articles in this section relate to innovation and entrepreneurship skills, attitudes and behaviors of innovators and entrepreneurs, and can be the focus of learning objectives with your students. The games in this workshop have been selected to support awareness and learning about these types of learning objectives.

1. Dyer, J. H., Gregersen, H.B., Christensen, C.M. (2008). Entrepreneur Behaviors, Opportunity Recognition, and the Origins of Innovative Ventures. *Strategic Entrepreneurship Journal*. 2 (4), 317–338.
2. Kriewall, T.J., Mekemson, K. (2010). Instilling the Entrepreneurial Mindset into Engineering Undergraduates. *Journal of Engineering Entrepreneurship*. 1(1), 5-19.
3. Pistrui, D., Layer, J.K., Dietrich, S.L. (2012). Mapping the Behaviors, Motives and Professional Competencies of Entrepreneurially Minded Engineers in Theory and Practice: An Empirical Investigation. *ASEE 2012 Annual Conference*, June 10-13th, 2012. San Antonio, Texas.
4. Sarasvathy S. D. Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *The Academy of Management Review*. 26 (2), 243-263.
5. Walesh, S.G. (2012). A Half Brain is Good: A Whole Brain is Much Better. *ASEE 2012 Annual Conference*, June 10-13th, 2012. San Antonio, Texas.
6. Zappe, S., Hochstedt, K., Kisenwether, E., Shartrand, A. (2013). Teaching to Innovate: Beliefs and Perceptions of Instructors Who Teach Entrepreneurship to Engineering Students. *International Journal of Engineering Education*. 29(1), 45-62.

Papers Describing the David Kolb Experiential Learning Cycle

The recommended articles in this section discuss David Kolb's Experiential Learning Cycle and provide an example of how it has been related to learning processes within entrepreneurship. As we will discuss during the workshop, the debrief that takes place after implementing a game plays a key part in the "Reflection Observation" portion of the cycle.

1. Gemmell, R.M., Boland, R.J., Kolb, D.A. (2011). The Socio-Cognitive Dynamics of Entrepreneurial Ideation. *Entrepreneurship Theory and Practice*. Special Issue on Social Entrepreneurs' Behavior. 36(5), 1053-1073.
2. Kolb, A., Kolb D. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning and Education*. 4(2), 193-212.
3. Kolb, D. (1984). *Experiential Learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.

Books and Papers Describing the Advantages of Games-based Learning

There can be resistance from students, faculty and administrators when you share that you plan on using games within your classroom to teach concepts. Here are some books and papers that describe benefits associated with using this medium and how they result in positive impacts on students.

1. Jensen, Eric. "Teaching with the brain in mind." (1998).
2. Margarida Romero, Mireia Usart, and Michela Ott. *Can Serious Games Contribute to Developing and Sustaining 21st Century Skills?* Games and Culture 1555412014548919, first published on September 11, 2014 doi:10.1177/1555412014548919
3. New Media Consortium. Game-Based Learning. Horizon Report: 2012 Higher Education Edition. 18-21.
4. Marquis, Justin. (2011). *What Does Game-Based Learning Offer Higher Education?* Online Universities.com.
5. S. Crown, A. Fuentes and B. Freeman. (2008). *Learner Centered Games: A Pathway to Student Motivation and Engagement*. ASEE Annual Conference and Exposition. June 22-25, 2008. Pittsburgh, Pennsylvania.
6. Andreu-Andres, M.A., Garcia-Casas, M. (2011). *Perceptions of Gaming as Experiential Learning by Engineering Students*. International Journal of Engineering Education. 27(4), 795-804.

Papers Describing the Use of Games for Teaching Innovation and Entrepreneurship

Using games for teaching innovation and entrepreneurship is still a very new field and little to no research has been published on the subject. Still, many instructors are trying their hand at implementing these techniques. Here are some reference papers that do a nice job of linking game based activities to skill development in innovation and entrepreneurship amongst students.

1. Verzat, C., Byrne, J., Fayolle, A. (2009). Tangling With Spaghetti: Pedagogical Lessons from Games. *Academy of Management Learning and Education*. 8(3), 356-369.
2. Neck, H., Greene, P., & Brush, C. (2014). "The practice of play". In *Teaching Entrepreneurship: A Practice-Based Approach*. Cheltenham, UK: Edward Elgar Publishing. p38.
3. Collier, M. (2012) Fun Failure: How to Make Learning Irresistible. Mindshift: How we will learn. Excerpt retrieved from <http://blogs.kqed.org/mindshift/2012/03/fun-failure-how-to-make-learning-irresistible/>

Papers on the Assessment of Games

These papers are resources that will provide you insight on different strategies that can be used to assess game implementations related to innovation and entrepreneurship within your classroom. Whether doing qualitative or quantitative analysis they provide a structure that can help demonstrate the learning benefits of these activities.

1. Rajan, P., Raju, P.K., Sankar, C.S. (2013). Serious Games to Improve Student Learning in Engineering Classes. 120th ASEE Annual Conference and Exposition. Atlanta, Georgia, June 23rd-26th, 2013.
2. Verzat, C., Byrne, J., Fayolle, A. (2009). *Tangling With Spaghetti: Pedagogical Lessons from Games*. *Academy of Management Learning and Education*. 8(3), 356-369.
3. Bellotti, F., Berta, R., De Gloria, A., Lavagnino, E., Antonaci, A., Dagnino, F.M., Ott, M.(2013). *A gamified short course for promoting entrepreneurship among ICT engineering students*. Proceedings - 2013 IEEE 13th International Conference on Advanced Learning Technologies, ICAIT 2013.