Research Poster

Faculty Perceptions of Limitations on Student Creativity in College of Agriculture Courses

Larrah Welp
Graduate Assistant
806-834-6288
Larrah.Welp@ttu.edu

Dr. Courtney Gibson
Assistant Professor
806-834-8766
Courtney.D.Gibson@ttu.edu

Department of Agricultural Education and Communications
Texas Tech University
Box 42131
Lubbock, TX 79409

Introduction/Need for Research

Creativity is sought as a skill of the future to address upcoming issues and problems in the growing world (Powers, 2018). The need to develop creative thinkers is present in many industries and is becoming an area with more focus in higher education. Previous research shows most students have creative potential at some level, creativity positively impacts individuals and society, and creativity is encouraged by many universities' mission statements (Edwards et al., 2006). However, since 1990, the Torrance Tests of Creative Thinking have revealed a dramatic decline in creative thinking scores even though IQ scores have increased (K. H. Kim, 2011).

Incorporating creative thinking and learning opportunities has been critical in higher education (Jackson, 2006) especially for agricultural students who are faced with the challenges of feeding and clothing the world in the 21st century amid evolving consumer demands and requests (Intarachaimas, 2012), a major focus of Priority Area 3 of the AAAE National Research Agenda (Stripling & Ricketts, 2016). However, encouraging and assessing creativity at the post-secondary level has been difficult as the concept is defined and understood in many different ways (Hancock et al., 2016). This often complicated students' and instructors' understandings of creativity, which hinderd their ability to teach for and apply creative principles (Beghetto, 2005). The purpose of this study was to understand the limitations of creative growth in students from the perspectives of their educators. Specifically, this study sought to explore the factors restricting creative growth and expression in students throughout College of Agricultural Sciences and Natural Resources' courses at Texas Tech University.

Theoretical Framework

The social constructivist theory has been used to understand the use of creativity in the classroom in many contexts. According to Kim (2001), social activities and interactions encouraged learning and engagement. The Zone of Proximal Development (ZPD) connected cognitive processes and social contexts to promote a beneficial learning environment (Vygotsky, 1978) and has been used to establish the potential creative development of a student through different teaching practices (Shabani et al., 2010).

Methodology

Through a qualitative, phenomenological research approach, the researchers analyzed syllabi from courses offered within the College of Agricultural Sciences and Natural Resources' courses at Texas Tech University to identify and purposefully sample courses that incorporated a variety of creative components across academic disciplines to provide rich data. Seven courses were selected, and the instructors of each course were recruited via email to participate in a one-on-one, semi-structured interview. To ensure consistency, an interview guide was adapted from a previous study analyzing creativity within agricultural communications programs (Hancock et al., 2016). Interviews were audio recorded to ensure authenticity and transcribed verbatim using the transcription software Temi. NVivo was used to analyze the data via open and axial coding utilizing the constant comparative method as suggested by Creswell (2013). Trustworthiness was established through member checking to ensure credibility and persistent observation from experienced faculty (Guba & Lincoln, 1989). Each participant was assigned a pseudonym to ensure the confidentiality of their responses.

Results/Findings

Three major themes emerged related to factors limiting students' creative abilities: student fear and personal judgement, concern for desired grade, and life experiences. In terms of *student fear and personal judgment*, many participants agreed students' often get in their own way when it comes to creativity and successfully accessing their creative mind. When producing something creative, a fear of judgment can hinder the results. Dr. Kristen stated students often experience "a general fear of what other people will think, not wanting to take risks that would out me as, you know, a weirdo." Fear of personal judgement also becomes a factor as Professor Kent said, "Oftentimes we were such harsh critics of ourselves…we undervalue so much what we're actually capable of doing." Dr. Jack added anxiety as a factor to students' creative ability. He added, "People perform poorly and they're not going to be creative if they're anxious."

Participants noted the students are often too concerned with the best and easiest way to get a *desired grade*, which limits their creative process. Dr. Jack stated, "There's a lot of stress in our culture today…tests and academic performance provide a lot of anxiety for people in general." Dr. Kristen added the struggles she encounters with keeping students' creative minds open:

> It's really hard to get beyond that mindset of getting the grade, even at the graduate level. It's really hard to get people to see beyond that – the stated objectives – to get the creative piece of who you are…And so when you have that as particular student goals, it seems to block the creative flow in my thinking.

Participants also felt students' *life experiences* shape their creative abilities as more exposure to things will expand outside thinking. As Dr. Grant expressed, "Life experience causes people to be limited. So, people with more life experiences, we expect them to be more creative." Professor Kent alluded to the past judgment on creative expression causing student withdrawal from their creative potential. Additionally, Dr. Kristen noted, "You have people who come from all these different experiences…and so you just have all of these rich experiences that come out, and people began to be authentic and they share."

Conclusions/Implications/Recommendations

The factors limiting the creative potential of students were easy to identify by participants. A fear of judgment seems to exist in most students' minds and limits their creative growth potential even as social learning environments encourage creative thinking (Vygotsky, 1978). Moreover, the current education system has taught students to limit their creative effort and focus more on their intellectual growth (Sternberg, 2006), as many students are focused solely on achieving specific grades. Overcoming these fears and anxieties may be the first step toward promoting creative development in students through multiple teaching practices (Shabani et al., 2010).

Understanding the limitations to creative thought is just the first step in determining how to further develop the creative potential of students. There is a need to promote creative thinking in the world as the challenges we face evolve daily, especially in the agricultural industry (Intarachaimas, 2012). Future research is needed to better understand the limits on creativity caused by fear and to develop better approaches to promote creative thinking over academic performance. Courses in higher education should also address the evolving stresses placed on students and find ways to incorporate more creative thinking opportunities to promote ideas that address evolving industry challenges.

References

Beghetto, R. A. (2005). Does assessment kill student creativity? *The Educational Forum*, *69*(3), 254–263. https://doi.org/10.1080/00131720508984694

Creswell, J. W. (2013). *Qualitative inquiry & research design* (3rd ed.). Sage Publications.

Edwards, M., McGoldrick, C., & Oliver, M. (2006). Creativity and curricula in higher education: Academics' perspectives. In N. Jackson, M. Oliver, M. Shaw, & J. Wisdom (Eds.), *Developing creativity in higher education: An imaginative curriculum* (pp. 59–88). Routledge.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Sage Publications.

Hancock, H., Gibson, C. D., Meyers, C., & Irlbeck, E. (2016). *Conceptualizing creativity in agricultural communications*. Texas Tech University.

Intarachaimas, W. (2012). Teaching agricultural students to be creativity. *Naresuan University Journal*, *20*(1), 99–104. http://www.journal.nu.ac.th/NUJST/article/view/26

Jackson, N. (2006). 15 Making sense of creativity in higher education. In *Higher Education* (pp. 197–215). Springer. http://www.jstor.org/journal/highereducation

Kim, B. (2001). Social constructivism. *Emerging Perspectives on Learning, Teaching and Technology*, *1*(1), 16. http://www.coe.uga.edu/epltt/impaticas/social_constructivism_script.doc

Kim, K. H. (2011). The creativity crisis: The decrease in creative thinking scores on the Torrance Tests of Creative Thinking. *Creativity Research Journal*, *23*(4), 285–295. https://doi.org/10.1080/10400419.2011.627805

Powers, A. (2018, April). Creativity is the skill of the future. *Forbes Media*. https://www.forbes.com/sites/annapowers/2018/04/30/creativity-is-the-skill-of-the-future/#28d8813a4fd4

Shabani, K., Khatib, M., & Ebadi, S. (2010). Vygotsky's Zone of Proximal Development: Instructional implications and teachers' professional development. *English Language Teaching*, *3*(4), 237–248. https://doi.org/10.5539/elt.v3n4p237

Sternberg, R. J. (2006). The nature of creativity. *Creativity Research Journal*, *18*(1), 87–98. https://doi.org/10.1207/s15326934crj1801

Stripling, C. T., & Ricketts, J. C. (2016). *Research priority 3: Sufficient scientific and professional workforce that addresses the challenges of the 21st century* (T. G. Roberts, A. Harder, & M. T. Brashears (eds.)). http://aaaeonline.org/resources/Documents/AAAE_National_Research_Agenda_2016-2020.pdf

Vygotsky, L. (1978). *Mind in society*. Harvard University Press.