

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

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### **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 of 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, McGoldrick, & Oliver, 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 (Kim, 2011).

Incorporating creative thinking and learning opportunities is critical in higher education (Jackson, 2006) especially for agricultural students who are faced with the challenges of feeding and clothing the world in the 21<sup>st</sup> 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 can be difficult as the concept is defined and understood in many different ways (Hancock, Gibson, Meyers, & Irlbeck, 2016). This often complicates students' and instructors' understandings of creativity and can hinder 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 enrolled in courses throughout the College of Agricultural Sciences and Natural Resources 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 encourage learning and engagement. The Zone of Proximal Development (ZPD) connects 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, Khatib, & Ebadi, 2010).

### **Methodology**

Through a qualitative, phenomenological research approach, the researchers analyzed syllabi from courses offered within the College of Agricultural Sciences and Natural Resources 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 the anxiety playing a role in students' creative ability. He added, "People perform poorly and they're not going to be creative if they're anxious."

Participants also noted that students are often too concerned about 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 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 experienced by students to cause them to withdraw 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 identified by participants were associated with their previous educational experiences and the encouragement and judgment of creativity they received in the past. A fear of judgment seems to exist in most students' minds and limits their creative growth potential. 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.

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.

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