

Creativity in the Classroom: Exploring Creativity in College of Agriculture Courses

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Introduction

- ✦ Forbes lists creativity as the skill of the future (Powers, 2018).
- ✦ Creativity and innovation are crucial skills impacting individual and social components of success (O'Bryan, 2018; Sternberg & Lubart, 1999).
- ✦ The growing challenges on the agricultural industry to feed and clothe the world in the 21st century provide a necessity for creativity (Intarachaimas, 2012).
- ✦ Promoting creativity in students can stimulate future creative problem solving throughout the industry (Intarachaimas, 2012).
- ✦ This study sought to define creativity throughout agricultural fields of study in courses in the College of Agricultural Sciences and Natural Resources (CASNR) at Texas Tech University (TTU).

Theoretical Framework

- ✦ Social constructivist theory suggests engaged learning is better implemented through the shared social interactions within a classroom (Kim, 2001).
- ✦ The Zone of Proximal Development (ZPD) connects the social contexts with cognitive processes of students to allow for meaningful knowledge attainment (Vygotsky, 1978).

Methodology

- ✦ 7 courses were selected purposefully throughout CASNR at TTU
 - Creative components were evaluated from course descriptions and syllabi for applicable use in research
- ✦ One-on-one, semi-structured interviews were performed with professors representing each department of the college
 - Audio-recorded and transcribed verbatim using Temi
- ✦ Data analyzed using NVivo with open and axial coding (Creswell, 2013).

Findings

Defining Creativity

- ✦ Creativity in Doing: Actions and processes of creativity

That need, kind of visceral feeling you have to do something.

Professor Kent

- ✦ Creativity is all encompassing: The product of creativity

Creativity is all around us. It's in everything that we see, in everything that we do.

Professor Doug

Interventions and Teaching Styles Used to Enhance Creativity

- ✦ Individual Learning: Initial aspect of creative learning

A desire of the learner to actually learn...they're not going to be creative if they don't want to do anything.

Dr. Jack

- ✦ Group Learning: Shared inspiration of learning

They might think about it more creatively in a sense, [be]cause they're going to think about the problem.

Dr. Grant

- ✦ Discussion: Stimulating creativity during class

As an instructor, you will encourage creativity because that questioning and response is gonna keep people engaged and thinking and creating.

Dr. Frank

- ✦ Experiential Learning: Life events stimulating creativity

Creativity happens through trial and error. Creativity is iterative. Creativity is going to be based on you succeed by failing.

Professor Kent

Assessments and Measurements to Evaluate Creativity

- ✦ Formal vs. Self-Assessment of Creativity
 - Formal Assessment by Professor
 - Self-Assessment

Creativity is hard to assess on a grade value, you know there's an inherent difficulty there.

Dr. Frank

As long as you do the work, you don't get judged on the creativity. You judge yourself on the creativity."

Professor Doug

- ✦ Student Comfort Level: Comfortability to express themselves

The way I think about creativity is basically trying to pull together different things and being outside of your comfort zone.

Dr. Grant

Conclusions/Implications

- ✦ Creativity, while different in each area, is important for learning and success in the agricultural industry.
- ✦ As a cohesive definition of creativity continues to evolve, the development of creative thinking skills will remain an important topic of interest for educators and employers.
- ✦ The ability to encourage individual learners directly continues to become more challenging.
 - It is important to implement group learning and discussion as a means to develop the creative thinker in new ways.
- ✦ Real-world applications help promote the creative mind and open the door for applicable creative thinking.

Recommendations

- ✦ For Practice:
 - Continue to explore ways to influence and encourage students' creative growth through varying teaching styles within the classroom.
 - Encourage opportunities for creative growth to provide endless possibilities for stimulation and collaboration.
 - Use classroom opportunities to encourage students to access their creative potential through the process in order to deliver the creative product.
- ✦ For Research:
 - Develop assessments and measures to be used in creativity learning and expression.
 - Explore the implementation of creativity by analyzing creative competencies in entry-level professionals compared to expectations of employers.

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