Agricultural Teacher Creativity: An examination of agricultural teachers’ creative behaviors

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JUNE 20, 2019
This study was designed as an exploratory study to include the collection of data for a deeper understanding creative behavior. In this study quantitative data was used to measure the level of an individual's creativity and creative behavior. Qualitative data was collected to identify creative practices exhibited during instructional times.
1. What is the teacher’s level of creativity?
2. How do agricultural teachers display creativity in the classroom during instruction?
3. What is the relationship between an agricultural teacher’s creativity level and creative behaviors used during instruction?
Literature
Creativity and Creative Behaviors

- All people are problem solvers therefore all people are creative (Kirton, 2003).
- Creativity is defined as producing a product that is both novel and appropriate (Sternberg, 2004).
- Torrance (1993) identifies that creativity can be considered from the following viewpoints person, process, product, and the environment.
- The Torrance Tests of Creative Thinking (TTCT) identifies level of creativity and can be used to predict creative output.
- Creative Check-List measures creative behaviors.
- Behaviors selected for this study were: storytelling, movement, humor, fluency, originality, fantasy, emotion, and colorfulness
Population and Sample

Avery
- 24 years of teaching experience
- Bachelor's in Agricultural Sciences
- Both parents were Agricultural Educators
- Moderate level of creativity
- Submitted 0 videos

Dakota
- First year teacher
- Experience in agricultural education courses in high school and time as a State FFA officer led to their career path
- High level of creativity
- Submitted 3 videos

Cameron
- 31 years of teaching experience
- Experience in FFA during middle and high school led to their career path
- Low level of creativity
- Submitted 3 videos

Emery
- 18 years of teaching experience
- Experiences in 4-H, and agriculture courses led to their career path
- High level of creativity
- Submitted 3 videos
Data Collection and Analysis

**Creativity Workshop and TTCT**
Participants completed the Torrance Tests of Creativity Thinking Figural form A as part of a creativity workshop.

**Video Submission**
Participants were asked to follow a video protocol to showcase their creative teaching.

**Video Analysis**
Videos were uploaded into the Noldus Observer TX software to identify creative behaviors and measure the number of occurrences as well as duration of each behavior.
Results and Findings
### Participant Torrance Tests of Creative Thinking Scores: Figural Form A

<table>
<thead>
<tr>
<th></th>
<th>Avery</th>
<th>Cameron</th>
<th>Dakota</th>
<th>Emery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluency</td>
<td>92</td>
<td>97</td>
<td>97</td>
<td>99</td>
</tr>
<tr>
<td>Originality</td>
<td>88</td>
<td>54</td>
<td>92</td>
<td>93</td>
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<tr>
<td>Abstractness of Titles</td>
<td>61</td>
<td>20</td>
<td>35</td>
<td>75</td>
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<tr>
<td>Elaboration</td>
<td>15</td>
<td>4</td>
<td>55</td>
<td>55</td>
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<tr>
<td>Resistance to Premature closure</td>
<td>48</td>
<td>48</td>
<td>81</td>
<td>70</td>
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<tr>
<td>Checklist</td>
<td>14</td>
<td>11</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>National Percentile Sore</td>
<td>69</td>
<td>35</td>
<td>92</td>
<td>92</td>
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</tbody>
</table>
Cameron
Dakota
Creative Behavior Occurrences

- Movement, 96
- Emotion, 42
- Storytelling, 134
- Colorfulness, 74
- Fantasy, 72
- Humor, 24

Total: 424
Discussion and Conclusion
What is the teacher’s level of creativity?

- Dakota and Emery were identified as having a high level of creativity.
- Avery was identified as having a moderate level of creativity.
- Cameron was identified as having a low level of creativity.
- The creative strength for all participants was fluency.
- Skill development needed for elaboration, abstractness of titles, and resistance to closure.
How do teachers display creativity in the classroom during instruction?

- Creative behaviors most used by teachers include: storytelling, movement, fantasy, and colorfulness.
- Humor is used the least.
- There are differences between academic level of instruction (Middle vs High School).
- Originality should be removed as a construct to measure for creative behavior at this time.
What is the relationship between a teacher’s creativity level and the classroom instruction they utilize?

- There is not a significant relationship between creativity level and creative behaviors.
- Cameron was anticipated to utilize few creative behaviors, but had as many occurrences of creative behaviors as her peers that were identified as highly creative.
- Despite creativity level teachers can and do utilize creative behaviors during instruction.
Recommendations
Recommendations for Teacher Preparation Programs and Professional Development

Inclusion of creativity and creative behaviors as teaching methods.

- Storytelling
- Colorfulness
- Elaboration
- Fantasy
- Movement
- Emotion
- Humor
Recommendations for Future Research

- Examine the relationship between creative behaviors and student achievement.
- Use Kirton’s Adaption-Innovation (KAI) to examine the relationship between creative behavior and problem-solving style.
- Examine the role that gender has in creativity among agricultural teachers.


Thank You!

Questions?