5-15-2018

Utah Agriculture Teachers’ Perceptions of Teaching Urban and Non-Traditional Agriculture Content

Ashlee Cromer
Utah State University, ashley.cromer@usu.edu

Kelsey Hall
Utah State University, kelsey.hall@usu.edu

Tyson Sorensen
Utah State University, tyson.sorensen@usu.edu

David Francis
Utah State University, dave.francis@usu.edu

Joshua Dallin
Utah State University, josh.dallin@usu.edu

Follow this and additional works at: https://digitalcommons.usu.edu/aste_stures

Part of the Engineering Education Commons

Recommended Citation
Cromer, Ashlee; Hall, Kelsey; Sorensen, Tyson; Francis, David; and Dallin, Joshua, "Utah Agriculture Teachers' Perceptions of Teaching Urban and Non-Traditional Agriculture Content" (2018). Applied Sciences, Technology, and Education Student Research. Paper 12.
https://digitalcommons.usu.edu/aste_stures/12

This Poster is brought to you for free and open access by the Applied Sciences, Technology, and Education Student Works at DigitalCommons@USU. It has been accepted for inclusion in Applied Sciences, Technology, and Education Student Research by an authorized administrator of DigitalCommons@USU. For more information, please contact rebecca.nelson@usu.edu.
**Utah Agriculture Teachers’ Perceptions of Teaching Urban and Non-Traditional Agriculture Content**

**Ashlee Cromer, Dr. Kelsey Hall, Dr. Tyson J. Sorensen, Dave Francis, & Joshua Dallin**

**Introduction/Need for Research**

- Agriculture teachers expressed need to prepare existing & upcoming students with skills & knowledge for broader scope of agriculture careers in Utah, Agriculture, Natural Resources & Human Sciences (FANH) career gap in urban and suburban areas or with alternative production & marketing methods (Brown & Kelsey, 2013).
- Agriculture teachers often teach agricultural content in prescriptive manner, focusing on traditional careers in agriculture.
- Few agriculture teachers have experience/exposure to prepare students for less traditional agriculture careers in urban & suburban areas or with alternative production & marketing methods (Brown & Kelsey, 2013).
- **Purpose:** Evaluate participants’ knowledge, confidence, & level of importance regarding the integration of urban & non-traditional agriculture concepts into curriculum & Supervised Agricultural Experiences (SAEs).

**Theoretical Framework**

**Theory of Change (Taplin, Clark, Collins, & Colby, 2013)**

- Improve economic and social conditions by reducing Food, Agricultural, Natural Resources & Human Sciences (FANH) career gap in urban and suburban environments in Utah.
- Increase number of high school graduates who pursue FANH careers in Utah.
- Host Career Exploration Day.
- Offer 3 one-day workshops.
- Change agriculture teachers’ attitudes toward mentoring students in selecting FANH careers.
- Change agriculture teachers’ knowledge of skills needed for FANH careers.
- Improve confidence of agriculture teachers to teach FANH skills.

**Methodology**

- Developed lesson plans, worksheets, & PowerPoints about nutrition, genetics, & marketing of alternative/specialty animals in agriculture & adapted USU Extension’s curriculum about community supported agriculture in Utah for workshop.
- Agriculture teachers attended Urban Agriculture-Farm and Feed Workshop & tour offered during summer conference.
- Administered retrospective pretest-posttest evaluation at end of workshop.
- Ran paired-samples t-tests in SPSS version 23 & computed effect size using Cohen’s d (Thalheimer & Cook, 2002).

**Findings**

**Demographic Information (42 respondents)**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Pretest M</th>
<th>Pretest SD</th>
<th>Posttest M</th>
<th>Posttest SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge about urban/non-traditional agriculture &amp; SAE options</td>
<td>14.31</td>
<td>3.95</td>
<td>20.50</td>
<td>2.48</td>
<td>9.49</td>
<td>41</td>
<td>.000</td>
<td>1.46</td>
</tr>
<tr>
<td>Confidence to integrate urban/non-traditional agriculture concepts into teaching</td>
<td>5.55</td>
<td>1.89</td>
<td>7.86</td>
<td>1.57</td>
<td>9.18</td>
<td>41</td>
<td>.000</td>
<td>1.41</td>
</tr>
<tr>
<td>Importance of urban/non-traditional agriculture concepts &amp; SAE options for their students</td>
<td>6.86</td>
<td>1.92</td>
<td>8.90</td>
<td>1.21</td>
<td>8.59</td>
<td>41</td>
<td>.000</td>
<td>1.32</td>
</tr>
</tbody>
</table>

**Conclusions/Implications/Recommendations**

- Workshop demonstrated increase in participants' content knowledge & confidence associated with teaching these topics.
- Majority of participants lived in urban or urban cluster areas, so workshop’s curriculum & suggested SAEs will help agriculture teachers implement urban & non-traditional agriculture concepts.
- Teaching urban & non-traditional agriculture would prepare participants’ students for broader scope of FANH careers.
- Administer follow-up survey with participants to evaluate integration of urban & non-traditional agriculture concepts into curriculum & SAE projects with students.
- Survey agriculture education students’ knowledge of & interest in urban & non-traditional agriculture careers to measure effectiveness of workshop curriculum.