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

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INTRODUCTION/NEED FOR RESEARCH

- Agriculture teachers expressed need to prepare existing & upcoming students with skills & knowledge for broader scope of agriculture careers in Food, Agriculture, Natural Resources & Human Sciences (FANH) (ManPower, 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 alternative production & marketing methods.
- 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)

- Complete traditional teacher certification program (n = 29, 75%)
- Bachelor’s degree (n = 14, 37.8%)
- Some Graduate Work (n = 7, 18.9%)
- Master’s Degree (n = 15, 40.5%)
- Doctorate Degree (n = 1, 2.7%)

Type of Community Where Participants’ Schools Located

- Metro Urban Area (greater than 200,000 in population)
- Urban (greater than 50,000-199,999 in population)
- Urban Cluster (more than 2,500-49,999 in population)
- Rural (less than 2,500 in population)

Change in Knowledge, Confidence, and Importance of Integrating Urban-Non-traditional Concepts into Curriculum and SAEs

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<td>Confidence to integrate urban/non-traditional agriculture concepts into teaching</td>
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<td>Importance of urban/non-traditional agriculture concepts &amp; SAE options for their students</td>
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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.