

Exploring the Experiences and Perception of Local Food Running Through the Classroom

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Abstract

Studies suggest that with increased access to local food and agricultural education, students are more likely to practice healthier eating decisions. As the number of farms in the US continues to fall, the average individual becomes further removed from agricultural production. As a result, many students gain the majority of their knowledge of farming in a classroom setting. This presentation's objective is to offer a better understanding of how gender plays a role in differing experiences, perceptions, and knowledge of local produce and agricultural practices as well as produce consumption among students in Northwest Arkansas. Eleventh grade students (n=50) from three school districts were asked to answer a survey regarding their local produce and agricultural experiences, perceptions, and knowledge. The research found that young men were significantly ($p=.01$) more likely to have taken an agriculture class in high school and were significantly ($p=.02$) more likely to correctly identify the average farm-to-plate distance of produce. Furthermore, it was determined that young women were more likely to have positive perceptions of local foods, whereas young men were significantly ($p=.04$) more likely to believe there are disadvantages to local foods. However, neither young men nor young women met CDC's recommendations for fruit and vegetable consumption. This analysis can serve as a starting point for high school and college educators who are interested in 1) exploring their own students' perceptions of and experiences with local foods and/or 2) expanding their classrooms' curriculum to further encompass local foods.

Introduction

- Studies suggest that increased amounts of exposure, including agricultural production opportunities and local food education, can help improve student food choices (Cullen et al., 2009; Desmond, 2004; Evans et al., 2012; Graham et al., 2005; Heneman et al., 2008).
- Integrating agricultural production and local food education in the classroom is a prime environment to improve healthier food decisions, especially in public school systems because the majority of students attend public schools (Nolan, 2005).
- Food choices have been shown to differ by gender. Women, on average, purchase more local foods with a positive attitude, consume more fruit and vegetables, and are more cognizant of the social dimensions that surround local produce than men (Blanck et al., 2008; Emanuel et al., 2012; Gallons et al., 1997; Gracia et al., 2012; Jekanowski et al., 2000; Kezis et al., 1998).
- Adolescents and children, both male and female, are failing to consume the daily recommended amounts of fruit and vegetables as suggested by the Center for Disease Control and Prevention (Harris et al., 2012; Kim et al., 2011; Upton et al., 2012).

Purpose & Objectives

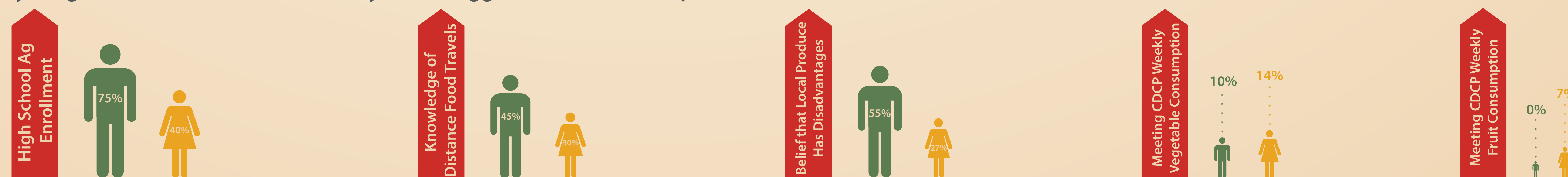
- The purpose of this study is to further explore students' perceptions and experiences with local foods, thus, aiding in the identification of the bodies of knowledge needing expansion in curriculum to further encompass local foods. The research was conducted by further exploring the following:
 - Enrollment in agriculturally based courses by students of differing genders.
 - Food travel knowledge by students of differing genders.
 - Local food perception by students of differing genders.
 - Fruit and vegetable consumption by students of differing genders.

Materials & Methods

- A survey instrument consisting of five sections and 26 questions was constructed to examine student enrollment, knowledge, perceptions, and consumption.
- Eleventh grade students were the target population for this study.
- Three high schools within two counties in Northwest Arkansas were chosen to capture a diverse student population in rural and urban communities.
- Data were analyzed using statistical methodologies that included chi-square tests and Fisher exact tests. Significance for tests were evaluated at the $p=.05$ level.

Results

- The participating student body consisted of 50 students (20 young men and 30 young women) from three high schools.
- Significantly ($p.01$) more men (75%) than women (40%) enrolled in agriculturally based high school courses.
- Significant ($p=.02$) differences were discovered between genders for the knowledge of the average distance food travels from farm-to-plate. However, only less than a third of the participating students (45% among the young men; 30% among the young women) were able to correctly identify the distance, 1500-2500 miles on average, in which food travels from farm-to-plate.
- Significant ($p=.04$) differences were found between genders for the belief that local produce has disadvantages. Young men (55%) were more apt to believe that local produce has disadvantages than young women (27%) did.
- No significant difference was found by gender in the consumption of fruit ($p=0.48$) and vegetables ($p=.14$). However, only 10% of young men and 14% of young women were meeting the Center for Disease Control and Prevention (CDCP) suggested weekly vegetable consumption. Additionally, 0% of young men and only 7% of young women consumed the weekly CDCP suggested fruit consumption.



Summary

- Our case study provides some insights on the experiences, perception, and knowledge of agriculture, local foods, and produce consumption of eleventh grade students in Northwest Arkansas. Our results not only show that few differences existed between the young men and women studied, but that many of these students lack experiences and knowledge of agriculture, in which the literature (Nolan, 2005) suggests can influence healthy food choices. While further study of larger groups of students is needed, our case study provides some justification for increased agricultural educational opportunities in the classroom if society's goal is to encourage healthy food choices for young men and women.