

**Washington Agriculture Teachers' Perceptions of Barriers for Implementing Curriculum
for Agricultural Science Education (CASE)**

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Introduction

Since its first pilot test in 2009, Curriculum for Agricultural Science Education (CASE) has been met with success in terms of student learning and engagement. Agricultural education teachers that use CASE have found students with varying academic needs are effectively being served by the curriculum in terms of content learning and comprehension. Teachers have found CASE is able to create routine, pattern, consistency, organization, and structure in the day-to-day environment. This in turn allows students to stay on track and creates predictability in the classroom (Velez, Lambert, & Elliot, 2012). Student engagement is important for controlling student behavior, increasing student achievement, as well as increasing student retention of material. One study found student engagement, both active and passive, were increased in the CASE classroom (Witt, Ulmer, Burris, Brashears, & Burley, 2014).

Agricultural education teachers across the United States have begun adopting CASE. In the summer of 2016 there were 40 states, along with the Virgin Islands, that have teachers implementing CASE in their own classrooms. Nationwide in the summer of 2016, there were 1,134 CASE certified teachers. In Washington alone there were a total of 262 agricultural education teachers, only 85 of which are actually CASE certified. This means that roughly one-third of Washington's agricultural education teachers are CASE certified (M. Chaplin, personal communication, April 20, 2016). In order for CASE to become more prevalent in agriculture programs it is important to discover why non-CASE certified teachers are choosing not to adopt the curriculum. Therefore, the purpose of this study was to identify barriers Washington agriculture teachers face in becoming CASE certified. This study relates to Priority 5: Efficient and Effective Agricultural Education Programs of the National Research Agenda of the American Association of Agricultural Education (Roberts, Harder, & Brashears, 2016).

Conceptual/Theoretical Framework

This study was framed around Roger's (2003) Decision-Innovation Process. This process of development is an information-gathering and information-processing activity through which an individual makes a decision about an innovation. The process consists of five steps: knowledge, persuasion, decision, implementation, and confirmation. In the scope of this study the participants are in the first three phases of the Decision-Innovation Process.

Methodology

This study utilized a survey design using a researcher-developed instrument. This study was a part of a larger study which also sought to describe the use of CASE in Washington. All 262 agricultural science teachers in Washington were sent an email containing a link to the survey. This survey was completed by 97 agricultural education teachers for a response rate of 37%. Of the 97 agricultural education teachers that participated in this larger study, 60 were non-CASE certified. These 60 non-CASE certified teachers are the sample for this study.

Results/Findings

The most common reasons for Washington teachers to not become CASE certified was many were happy with the curriculum currently being used in their classroom (37.93%) and the lack of time to get trained in the CASE curriculum (31.03%). The least common reasons preventing certification was the belief that CASE is too science focused and not agriculture focused (1.79%), along with the idea that CASE does not fit individual teaching styles (5.17%).

Participants were also asked to select one item that was their main barrier for becoming CASE certified. "I don't have time to get trained in the CASE curriculum." was the largest barrier with 12 (21.43%) participants selecting it as their main barrier. Of the 60 non-CASE certified agricultural education teachers that participated in this study, 33 (56.90%) were interested in becoming CASE certified in the future while 25 (43.1%) were not interested in becoming CASE certified.

Conclusions/Implications/Recommendations

For agricultural education teachers in Washington, there were several factors contributing to their decision to remain non-CASE certified. The data in this study revealed that there are two factors that tend to be more prevalent than others; the lack of time available to receive the CASE training and a feeling of contentment with the current curriculum being used. The most commonly selected barrier for teachers was the lack of time to receive the training required to become CASE certified. This is largely due to many factors in an agriculture teacher's life that divide their attention. Many teachers are not only responsible for preparing and implementing curriculum for multiple classes but are also responsible for the FFA and SAE aspects of the agriculture program along with facilities management. With so many agricultural education teachers busy managing the various aspects of their programs it becomes difficult to find time for CASE training amidst everything else. The CASE institutes are also only offered during the summer when agricultural education teachers are busy preparing for livestock events as well as preparing their classrooms for the upcoming school year. Some agricultural education teachers also work other jobs to supplement income during the summer months. The second most selected reason for remaining non-CASE certified was contentment with the current curriculum being used in the classroom. Often these teachers have worked hard to develop or find the curriculum they use or feel that CASE does not offer anything new or better for the agriculture program.

The issue of time is supported by research conducted on preservice teachers trained in CASE during a semester course (Carraway, Ulmer, Burris, & Irlbeck, 2015). One portion of this study identified barriers preservice teachers foresee in CASE certification. One of those barriers was lack of time for training (Carraway et al., 2015).

Continued research should explore the barriers identified in this study and resources should be provided to assist teachers in overcoming these barriers. This research should also be replicated in other states to determine if these barriers are consistent across the nation.

References

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