

**College and Career Advising by Secondary Agricultural Education Teachers:
Preparing High School Students for Success**

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Introduction

Students initiate the career matriculation process long before graduating from high school (Tai, Liu, Maltese, & Fan, 2006). While many factors influence a student's career choice (Dyer, Breja, & Andreasen, 1999; Eccles & Wigfield, 2002; Jones & Larke, 2003), significant adults, such as high school agriculture teachers, have a major impact on career choices (United States Department of Education, 2009). Compounding the need for agricultural educators to play a role in college and career advising, high school students often have misconceptions about how to effectively prepare for college. Venezia, Kirst, and Antonio (2003) cite examples of students' beliefs that their senior year did not count, community colleges had no academic standards, and easier classes should be taken in order to boost grades. Across five states, fewer than 12% of the high school students surveyed knew what courses were required by the selective institutions in their state, and even fewer knew which courses were required for less-selective programs (Venezia et. al, 2003). In contrast, the 2018 State of College Admission found the main factors in the admission decision were grades in college preparatory courses, overall high school GPA, admission test scores, and strength of curriculum (Clinedinst & Patel, 2018). Consequently, students need teachers who can provide accurate information to them, since teachers are the primary external influence following family members and personal interest (USDE, 2009). In addition, Jones and Larke found that teachers were almost twice as influential for ethnic minority agriculture students as other factors (2003). Agriculture instructors have the ability to serve as a great resource in advising for both the college selection process and careers decisions. Still, we do not know how agriculture teachers prepare students for college and careers. We know agriculture teachers are instrumental, but at this point, there are no research detailing how they prepare students for careers and college.

Theoretical Framework

Agriculture teachers advise students about careers and colleges from possibly middle school throughout students' senior year of high school (Talbert, Vaughn, Croom, & Lee, 2007). This role of teachers as an external influence on students' decisions aligns Social Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1994). SCCT locates teacher influence within students' contextual or environmental, influences. Agriculture teachers have the opportunity to provide a positive structure and support system through career and college advice and counseling; if they neglect to do so, there is a risk that students' educational backgrounds could be constrained and limit their career interests. By understanding how agriculture teachers' roles are embedded within students' proximal contextual influences, we hope to better identify how teachers' collegiate and career advice can operate as either opportunity structures or barriers to their students.

Purpose and Objectives

The purpose was to describe how agriculture teachers encourage or advise their students to prepare for college and career success. The objectives of this research were:

1. To determine North Carolina agriculture teachers' perceptions of four-year college preparatory experiences and,
2. To determine how agriculture teachers advise their students to prepare them for college experiences.

Methodology

The questionnaire included 4-point rating scale items with answer choices ranging from 1 (*Strongly Disagree*) to 4 (*Strongly Agree*) related to how agriculture teachers advise and prepare students for college and career success. A simple random sample was conducted of all North Carolina high school agriculture teachers ($N=267$, $n=158$, Dillman, 2000). Three teachers were first-year teachers in first-year agriculture programs. Removing them produced a sample frame of 155 high school agriculture teachers. Ninety agriculture teachers responded to the questionnaire, resulting in a usable response rate of 58.1%. Upon human subjects approval to participate, teachers completed the online survey at their leisure over two-weeks. Ten percent of non-respondents were called to solicit their responses and compare respondents to non-respondents. Between respondents and non-respondents, the only significant difference was found in conducting assignments about agricultural careers ($\alpha = .25$). Respondents were more likely to conduct assignments about agricultural careers than non-respondents were. All other correlations were non-significant, thus respondents can be considered the same as non-respondents.

Findings

Teachers were asked how often they counsel or advise students about colleges, admissions, and careers. Teachers were asked about their specific methods of engaging student knowledge about potential colleges. Teachers reported that they most frequently conducted a generic assignment about careers ($M = 3.78$, $SD = .60$) and instructed students to research a college and at least one agriculture career ($M = 3.31$, $SD = .92$). It is interesting that the three highest rankings of importance for teachers' perceptions of the importance of factors influencing college admission decisions were (1) extracurricular activities, (2) grade point average (GPA), (3) SAT/ACT test scores. Concerning engaging students on assignments and activities related to colleges, teachers reported that there was a low frequency of them visiting a college ($M = 2.47$, $SD = 1.08$), however, there was a higher frequency on assignments about college exploration ($M = 2.87$, $SD = .88$). Teachers also reported that they did not regularly visit North Carolina land-grant university ($M = 2.11$, $SD = 1.12$). Agriculture teachers' encouragement in general agricultural careers overall was 96.6%. Teachers' encouragement of students to pursue a career in agricultural education was only 73.0%.

Conclusions

Teachers encouraged and introduced career exploration and preparation to students about careers in agriculture. Teachers believe strongly that part of their job is to encourage students into agricultural careers, but they did not strongly encourage students to consider careers in agriculture education. Teachers frequently encouraged students to go to college through the exposure of classroom assignments, field trips to colleges, and through positive beliefs and perceptions of higher education.

Implications/Recommendations/Impact on Profession

State leaders of agricultural education and land-grant universities should consider professional development opportunities for teachers to prepare and expose their students to college. Additional research is needed to understand the discrepancy between teachers agreed that part of their job was to encourage careers in general agriculture and those who encouraged agricultural education. The research team suggests the study be continued by surveying teachers nationwide to better understand teachers' attitudes about four-year college experiences and how they advise their students in regard to college and career preparation.

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