What Fifteen Years of New Teacher Data Reveals About Agriculture Teacher Turnover in Kansas

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Introduction and Need for the Study

During a time when the country is experiencing critical workforce challenges, such as the skills gap, the need for a qualified and consistent career and technical education teaching force is as important as ever (USDOE, 2019). The increase in demand for school-based agricultural education programs (SBAE) has witnessed total program numbers, student enrollments, and FFA membership hit all-time highs across the country (National FFA Organization, 2020; Smith et al., 2019). Yet, for many local school districts, the challenge of finding, and more critically, keeping an agriculture teacher can be a daunting task. Despite the growth in SBAE, teacher turnover continues to be a factor in the loss of teaching positions and the closing of programs in many states (Smith et al., 2019).

Research has revealed that pre-retirement turnover accounts for the greatest percentage of teachers who leave the classroom (Ingersoll, 2003), with the lowest retention being associated with young and beginning teachers in their first five years in the classroom (Carver-Thomas & Darling-Hammond, 2017; Grissmer & Kirby, 1987; Ingersoll, 2003). Prior research indicates the average retention rate of all teachers after their first year of teaching was 80% in the early 1980s (Grissmer & Kirby, 1987) and 86% in the early 2000s (Ingersoll, 2003). However, this same research reveals that by the fifth year of teaching, only 30% of men and 50% of women remained in the classroom in the early 1980s (Grissmer & Kirby, 1987) and 54% of all teachers remained in the classroom after the fifth year of teaching in the early 2000s (Ingersoll, 2003). Most studies on teacher retention have been focused primarily on core subjects and special education teacher retention, and not specifically the retention of school-based agricultural education teachers.

Conceptual Framework

Ingersoll's (2003), "The Revolving Door" concept was used to conceptually frame this study.

> The data suggest that school staffing problems are not solely or even primarily due to teacher shortfalls resulting from either increases in student enrollment or increases in teacher retirement. In contrast, the data suggest that school staffing problems are to a large extent a result of a "revolving door"—where large numbers of teachers depart teaching for reasons other than retirement (p.17).

There exists a "revolving door" of teachers in school-based agricultural education and this study sought to add additional data to the body of research on potential reasons for this phenomenon (Ingersoll, 2003).

Methodology

The purpose of this study was to determine if the teacher turnover trends among beginning agriculture teachers in Kansas was consistent with prior research and national data and if any new revelations about teacher turnover could be discovered. The study sought to answer the following research questions:

1. At what point in their career are beginning agriculture teachers in Kansas most likely to leave the profession?

2. Is there a difference between male and female Kansas agriculture teachers in teacher retention rates?

Document analysis research methods were used to answer the research questions for this study (Bowen, 2009; Hodder, 2000). Documents that can be analyzed for research studies take on many forms, including survey data, with the main objective of gaining understanding (Bowen, 2009; Hodder, 2000). A collection of Kansas agriculture teacher attrition data kept for 15 years (2004-2018) on 258 teachers was analyzed in this study (Disberger, 2020). Data were kept on each cohort of new teachers who entered the profession and included name of teacher, name of initial school, involvement in novice teacher programming, years taught, and whether they are still teaching. This list was compared to the yearly agriculture teacher directory and vacancy bulletins.

Formulas within Excel were used to determine retention and attrition rates within each year of experience. To answer the second research question, an additional column of data was added to differentiate male and female teachers and then the retention rate of each group was calculated by dividing the number who stayed in the teaching profession by the total number who entered the classroom.

Findings/Results

The first research question sought to discover at what year of experience is teacher attrition the highest in Kansas. The data indicated that the year most agriculture teachers in Kansas leave the classroom is after their third year (14.24%). The data were consistent with the prior research (Ingersoll, 2003) in that the retention rate after the first year was 86.62% and the retention rate after year five was 54.22%.

The second research question looked at the difference between male and female teachers and retention rates. In Kansas, the data indicated there is a slightly higher teacher retention rate among females (59%) than males (57%). These findings are consistent with prior research comparing gender retention rates (Grissmer & Kirby, 1987; Ingersoll, 2003).

Conclusions, Implications, and Recommendations

The major conclusion for this study was the patterns of beginning agriculture teacher turnover in Kansas are consistent with the turnover statistics of all teachers across the country (Carver-Thomas & Darling-Hammond, 2017; Grissmer & Kirby, 1987; Ingersoll, 2003). A high percentage of agriculture teachers are retained after the first year of teaching, but by year five, almost half the beginning teachers have left the classroom, with year three being the most critical. Implications of this research point to the need for improved practice in new teacher induction. Teacher induction and mentoring programs should expand beyond first year teachers. These findings are consistent with prior research that conclude that the longer a teacher stays in the classroom, the more invested they become (Grissmer & Kirby, 1987; Tippens et al., 2013).

Additional research should be conducted to investigate the characteristics of each individual agriculture program and school. It was observed, while reviewing the data, some programs had a much higher attrition rate than others. This study just focused on those leaving the profession in Kansas. It is recommended that further research also include those teachers moving to schools out-of-state.

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