Research Poster

Agricultural Education Teacher Turnover in Wisconsin from 2010 to 2015

Alexandra Klapoetke and Tim Buttles

University of Wisconsin – River Falls

410 S. Third St.

River Falls, WI 54022

715-425-4085

alexandra.klapoetke@my.uwrf.edu

timothy.j.buttles@uwrf.edu

Agricultural Education Teacher Turnover in Wisconsin from 2010 to 2015

Introduction and Conceptual Framework

A shortage of agricultural education teachers for middle and high school programs has been identified at the national level and impacts most states (Foster, Lawver, & Smith, 2015; National Association of Agricultural Educators, 2013). This mirrors a teacher shortage across all content areas in the United States (Ingesoll, 2001) and internationally (Lindqvist, Nordänger, & Carlsson, 2014). Teacher turnover has been linked to a decrease in student academic performance (Ronfeldt, Loeb, & Wyckoff, 2013). A better understanding of the causes for agricultural education teacher turnover is therefore tied to National Research Agenda Priority 5: Efficient and Effective Agricultural Education Programs (Doerfert, 2011). Analyzing teacher turnover has been identified as a key component of the agricultural education teacher shortage (Boone & Boone, 2009; Clark, Kelsey, & Brown, 2014; Lemons, Brashears, Buris, Meyers, & Price, 2015). Ingersoll (2011) described the importance of examining both teacher migration, moving to a different school, and teacher attrition, leaving the teaching profession, in research on teacher turnover. The purpose of this study was to analyze the contribution of growth, migration, and attrition to the number of middle and high school level agricultural education teacher openings in one state over the course of five school years.

Methodology

A list of middle and high schools with new agricultural education hires was assembled from records maintained by agricultural education teacher preparation programs, the state FFA Executive Director, and agricultural education staff at the state education department. The reason behind each opening was determined using information included in position postings and obtained from leaders in the agricultural education profession. This process resulted in identifying a total of 210 positions being filled during the 2010 - 2011 through 2014 - 2015 school years. These positions represented turnover rates of 8%, 11%, 16%, 18%, and 15%. The reasons for all but 7 of the position opening were identified. The cause for each posting was first classified as growth - a new position that did not exist in the previous year, migration - a position opening due to the previous teacher moving to a different position in the state, or attrition - a position opening due to the teacher no longer teaching agriculture in the state. Positions due to attrition were then classified into specific categories. The “other” category was used for unique attrition cases including attending graduate school, leaving teaching due to health conditions, and a death.

Findings

New positions from the previous year (new programs, additional positions in existing programs, and restored programs/positions) accounted for 15.2% of the demand for new teachers. In-state teacher migration accounted for 32.9% of the open positions. Attrition accounted for the remaining 51.9% of demand. The distribution by year is shown in Table 1.

Table 1

Agricultural Education Position Vacancies by Cause

	Added Position		Migration		Attrition		Total Openings
School Year	*f*	%	*f*	%	*f*	%	
2010-2011	4	16.0	7	28.0	14	56.0	25
2011-2012	4	11.4	8	22.9	23	65.7	35
2012-2013	10	20.0	18	36.0	22	44.0	50
2013-2014	8	14.5	22	40.0	25	45.5	55
2014-2015	6	13.3	14	31.1	25	55.6	45
Total	32	15.2	69	32.9	109	51.9	210

Retirement accounted for over one third of the positions due to teacher attrition (35.8%). Individuals leaving teaching for positions not related to agriculture or education accounted for the second largest group (22.0%). The third largest group included those positions classified in the other category (10.1%) and represented causes not falling into one of the established categories. The list of reasons for attrition contributing less than 10% included teachers who shifted to teaching other subjects (7.3%), cases where the reason could not be determined (6.4%), teachers who took jobs in an agriculture related industry (6.4%), those moving into a school administration role (4.6%), teachers moving to agricultural education positions in a different state (4.6%), and those taking extension positions (2.8%).

Conclusions, Implications, and Recommendations

The state results mirror those found at the national level. Retirement plays a significant role in teacher attrition. The fluid situation of teacher attrition in the state matches that identified by others (Foster, Lawver, & Smith, 2015; National Association of Agricultural Educators, 2013). The teacher employment climate in the state changed in 2011, allowing easier movement of teachers between districts. This accounts for the increased migration starting in 2012. The changes also resulted in many early retirements and helps explain higher retirement numbers than those found by Foster et al. (2015) during those years. One unexpected finding was that the number of teachers leaving the profession for non-ag related employment was higher than those taking positions in agriculture related industries. These results will be used by state agricultural education leaders to refine the teacher mentoring program and help support teachers who move districts in addition to providing induction for new teachers.

This study only examined teacher turnover in one state and could serve as a model for other states. Further research should be conducted in the state to identify the factors contributing to non-retirement teacher attrition. This would add to the existing research in this area and help state leaders identify strategies for increasing the number of teachers staying in the profession.

References

Boone, H.N. & Boone, D.A. (2009). An assessment of problems faced by high school agricultural education teachers. *Journal of Agricultural Education*, 50 (1), 21 – 32. DOI: 10.5032/jae.2009.01021

Clark, M.S., Kelsey, K.D., & Brown, N.R. (2014). The thornless rose: A phenomenological look at decisions career teachers make to remain in the profession. *Journal of Agricultural Education*, 55(3), 43-56. DOI: 10.5032/jae.2014.03043

Doerfert, D. L. (Ed.) (2011). *National research agenda: American Association for Agricultural Education's research priority areas for 2011-2015*. Lubbock, TX: Texas Tech University, Department of Agricultural Education and Communications.

Foster, D. D., Lawver, R. G., & Smith, A. R. (2015, January 22). *National Agricultural Education Supply & Demand Study*. Retrieved from http://www.aaaeonline.org/Resources/Documents/NSDSummary_1_22_2015_Final.pdf

Ingesoll, R. (2001). Teacher Turnover and Teacher Shortages: An Organizational Analysis. *American Educational Research Journal*, *38*(3). DOI: 10.3102/00028312038003499

Lemons, L., Brashears, M.T., Burris, S., Meyers, C., & Price, M.A. (2015). Factors contributing to attrition as reported by leavers of secondary agriculture programs. *Journal of Agricultural Education*, 56(4), 17-30. DOI: 10.5032/jae.2015.04017

Lindqvist, P., Nordänger, U.K., & Carlsson, R. (2014). Teacher attrition the first five years: A multifaceted image. *Teaching and Teacher Education*, 40, 94 -103.

National Association of Agricultural Educators. (2014). *Nationwide Supply and Demand Profile*. Retrieved from http://www.naae.org/teachag/13nationalsdprofile.pdf

Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. *American Educational Research Journal*, 50 (1), 4–36. DOI: 10.3102/0002831212463813