

Leading Factors Impacting a Novice Agriculture Teachers Decision to Stay in the Profession

Dr. Jay K. Solomonson
Illinois State University
140 Ropp Agriculture Building
Normal, IL 61790
309-438-8084
jksolom@ilstu.edu

Dr. Steven M. Still
Southern Illinois University
1205 Lincoln Drive, Mail Code 4415
Carbondale, IL 62901
618-453-2467
steven.still@siu.edu

Dr. Lucas D. Maxwell
Illinois State University
147 Ropp Agriculture Building
Normal, IL 61790
309-438-3563
ldmaxwe@ilstu.edu

Ms. Jenna K. Offerman
Illinois State University
125 Ropp Agriculture Building
Normal, IL 61790
309-438-5654
jkoffer@ilstu.edu

Leading Factors Impacting a Novice Agriculture Teachers Decision to Stay in the Profession

Introduction/Need for Research

Teacher attrition is an issue in all states and grade levels, and not new to school-based agricultural education (SBAE) (Foster et al., 2020; Kantrovich, 2010). SBAE teachers are leaving the profession at alarming rates and according to the most recent *Executive Summary of the National Agricultural Education Supply and Demand Study*, the problem continues. Based on 2019 data provided from 95 university agricultural education programs, Foster et al. (2020) reported 904 license eligible program completers, yet vacancies still existed for full-time, certified SBAE teachers at the start of the academic year. This was largely due to the 605 SBAE teachers leaving the profession altogether (Foster et al., 2020).

Sutcher et al. (2016) informed us the best approach to balance teacher supply and demand would be to reduce the attrition rate. Several research efforts have been made to determine leading causes of teacher attrition within SBAE; however, few studies have examined reasons SBAE teachers remain in the profession, with none focused on novice teachers. The purpose of our study was to fill this gap in the literature and examine why SBAE teachers, with five years or less experience, stay in the profession. The study was guided by the AAEE National Research Agenda, Research Priority 3, specifically addressing the question, “What methods, models, and practices are effective in recruiting agricultural leadership, education, and communication practitioners and supporting their success at all stages of their careers?” (Stripling & Ricketts, 2016, p. 31).

Conceptual Framework

The conceptual framework used for this study was from research conducted by Solomonson et al. (2018). The *Conceptual Model of Variables Influencing an Agriculture Teacher's Decision to Leave or Remain in the Profession* proposed that SBAE teacher retention and attrition is affected by one or more factors within the identified four constructs of influence: (1) teacher development, (2) working conditions, (3) compensation, and (4) personal factors. This conceptual model was derived from research on teacher attrition (Ingersoll, 2003; Tippens et al., 2013) and Human Capital Theory, which indicate individuals will remain in or leave their profession due to a combination of monetary and nonmonetary benefits while considering costs associated with additional training or loss of benefits when they leave for another career (Grissmer and Kirby, 1987).

Methodology

This descriptive study was designed to identify variables influential in a novice SBAE teachers' decision to stay in the profession. Using Qualtrics, our instrument consisted of two parts. Part one consisted of 37 items, derived from the four constructs of influence outlined in the conceptual model, where participants used a Likert-type scale to rate the impact of each item on their decision to remain in the profession. Part two consisted of 14 demographic questions. Prior to distributing our instrument, a panel of experts reviewed the instrument for face, content, and construct validity and approval was granted by our Institutional Review Board. Further, a pilot study was conducted in a neighboring state to determine the internal consistency of the items within the four constructs of influence. Reliability estimates on the items were deemed “acceptable” per Nunnally (1978).

Using a census study approach, our electronic questionnaire was then sent to all 170 full-time, novice SBAE teachers in Illinois using contact information from the most recent online SBAE directory. We scheduled five points of contact during a four-week data collection period following recommendations from Dillman et al.'s (2014) tailored-design method. We received usable responses from 70 questionnaires, resulting in a 41.2% response rate from our selected demographic. Non-response error was calculated by comparing responses from early and late respondents, which found no significant differences between groups. All data were analyzed using SPSS[®], program version 24.0. The descriptive data were reported using frequencies, percentages, means, medians, modes, and standard deviations.

Results

Data was collected to identify specific factors within the four constructs of the conceptual model that influenced a novice SBAE teacher's decision to stay in the profession. All factors whereas 50% or more of participants selected *strongly impacted* are listed in Table 1.

Table 1

Top 10 Factors Impacting a Novice SBAE Teachers' Decision to Stay in the Profession (n = 70)

Variable	SI %	Mdn	Md	M	SD
Teacher's Ability to Engage Students	77.1	5	5	4.69	0.649
Supportive School Building Administration & School Board	71.4	5	5	4.60	0.710
Teacher's Attitude Towards Students	71.4	5	5	4.60	0.750
Having a Supportive Family	71.0	5	5	4.46	0.994
Meeting Personal Expectations as a Teacher	67.1	5	5	4.54	0.793
Positive School Environment	67.1	5	5	4.57	0.734
Employment Location	65.7	5	5	4.43	0.941
Level of Personal Accomplishment as a Teacher	62.9	5	5	4.43	0.878
3 Circles Grant/Extended Contract	60.3	5	5	4.27	1.167
Highly Motivated Students	59.4	5	5	4.41	0.863

Note. Five-point Likert-type scale with 1= Did not Impact and 5= Strongly Impacted. SI %= percentage of those indicating the factor *strongly impacted* their decision to stay; *Mdn* = Median; *Md* = Mode; *M* = Mean; *SD* = Standard deviation.

Conclusions/Implications/Recommendations

Of the ten leading factors that contribute to novice SBAE teachers' decision to remain in the profession, eight factors fell within the working conditions and personal factors constructs of influence. Interestingly, the top factor overall, *the ability to engage students*, is within the teacher development construct. It is evident novice SBAE teachers value a positive working environment, supportive family, and additional compensation for time spent outside of contract hours; however, these factors are typically not able to be influenced by SBAE stakeholders. It is recommended university teacher preparation programs and SBAE state staff provide purposeful professional development and revise existing coursework to increase self-efficacy in these areas deemed important by our novice teachers. Specifically, offering professional development opportunities on increasing student engagement and developing realistic expectations for a beginning teacher is highly recommended within existing state mentoring programs.

References

- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). John Wiley & Sons, Inc.
- Foster, D.D., Lawver, R. G., & Smith, A. R. (2020). *National agricultural education supply and demand study, 2019 Executive Summary*.
<https://aaaeonline.org/Resources/Documents/NSD2019Summary.pdf>
- Grissmer, D. W., & Kirby, S. N. (1987). *Teacher attrition: The uphill climb to staff the nation's schools*. Santa Monica, CA: The RAND Corporation.
<http://www.rand.org/content/dam/rand/pubs/reports/2007/R3512.pdf>
- Ingersoll, R. & Smith, T. (2003). The wrong solution to the teacher shortage. *Educational Leadership* 60(8), 30-33.
- Kantrovich, A. J. (2010). *A national study of the supply and demand for teachers of agricultural education from 2007-2009*. American Association for Agricultural Education. <http://www.naae.org/teachag/2010%20AAAE%20Supply%20Demand%20Study.pdf>
- Nunnally, J. (1978). *Psychometric theory*. McGraw-Hill.
- Solomonson, J. K., Korte, D. S., Thieman, E. B., Retallick, M. S., & Keating, K. H. (2018). Factors contributing to Illinois school-based agriculture teachers' final decision to leave the classroom. *Journal of Agricultural Education*, 59(2), 321-342.
<https://doi.org/10.5032/jae.2018.02321>
- Stripling, C. T., & Ricketts, J. C. (2016). Research priority 3: Sufficient scientific and professional workforce that addresses the challenges of the 21st century. American Association for Agricultural Education national research agenda: 2016-2020. Gainesville, FL: Department of Agricultural Education and Communication.
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Learning Policy Institute.
- Tippens, A., Ricketts, J. C., Morgan, A. C., Navarro, M., & Flanders, F. B. (2013). Factors related to teachers' intention to leave the classroom early. *Journal of Agricultural Education*, 54(4), 58-72. <https://doi.org/10.5032/jae.2013.04058>