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Agriculture Teachers Of Texas: Who will stay and who will go? Bridget McIntosh, M. Ed., Dr. D. Morrish, & Dr. D. Wakefield

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Problem

- Identifying issues agriculture teachers were facing in the profession
- Inadequate supply of agriculture teachers compared to the demand
 - 27 of 49 states reported loss of programs or positions in 2016
 - 98.5 positions and 73 programs per year
 - Smith, A.R., Lawver, R.G., and Foster, D.D. (2016). National Agricultural Education Supply and Demand Study.

Purpose & research questions

Purpose

The main purpose of this study was to identify reasons current agriculture teachers are considering leaving or remaining in the profession. This is important because there is an inadequate supply of agriculture teachers compared to the demand for them.

Research questions

Five research questions guided the study:

- What were the personal and professional characteristics of agriculture teachers in Texas?
- What aspects did current agriculture teachers feel first-year teachers were lacking knowledge in to be effective?
- What other employment opportunities had current agriculture teachers considered leaving the agriculture teaching profession for?
- What were the specific aspects of teaching agriculture that affected the consideration to leave the profession?
- What were the specific aspects of teaching agriculture that affected the decision to remain in the profession?

Theoretical Concepts

- History of Agriculture Education
 - Experimental learning; Land grant colleges; High school agriculture courses; FFA (Knobloch, 2003; Hillison, 1996)
- Supply and Demand Issues of Agriculture Teachers
 - Not enough qualified teachers to fill positions (Smith, Lawver, & Foster, 2016)
- Role Higher Education Plays on Preparing Agriculture Teachers
 - More teacher education courses needed (Myers & Dyer, 2004)

Theoretical Concepts Continued

- Characteristics of an Effective Agriculture Teachers
 - Instruction, FFA, SAE, building community partnerships, marketing, professional growth/professionalism, program planning, and personal qualities (Roberts and Dyer, 2004)
- Job Satisfaction of Agriculture Teachers
 - Generally satisfied (Walsh & Battitori, 2011; Blackburn & Robinson, 2008)
- The Needs of Agriculture Educators
 - In-service related to support committees and integrating technology in the classroom (Layfield and Dobbins, 2002 & Joerger, 2002)

Theoretical Concepts Continued

- Problems Faced by Agriculture Teachers
 - Organizing an alumni chapter or advisory committee, planning an FFA chapter's events and activities, managing student discipline, recruiting and retaining alumni members, and lack of administrative support (Myers, Dyer, & Washburn, 2005)
- Retention in the Agriculture Education Profession
 - Falls after the first five years of teaching (Allen, 2005)

Research design & participants

Research design

- Quantitative study
- Survey method
- Proportional stratified random sampling
 - 10 areas in Texas
 - Area 2-109; Area 4-112
 - Area 3-440; Area 7-285

Participants

- 330 current agriculture teachers in Texas
- Listed with the VATAT directory for 2016-2017 school year
- Total of 114 respondents for a response rate of 34.5%

Methods

Data collection

- Pilot test distributed to 25 current agriculture teachers
- Survey distributed to 330 participants
- Demographic and Likert 5point scale questions
 - Strongly disagree to Strongly agree

Data analysis

- Descriptive statistics used
 - Number of respondents, percentages, and rankings
- Inferential statistics used
 - Means and standard deviations

Major Findings & Implications Continued

Ranking of Knowledge Believed to be Lacking in First Year Teachers

Aspect of Knowledge	Rank	М	SD
Time/stress management	1	4.12	0.90
Managing student discipline	2	4.05	0.79
Managing paperwork and finances	3	3.88	0.98
Dealing with the reputation (positive or negative) of the previous agriculture teacher	4	3.77	0.95
Being able to organize a support group for FFA (i.e. alumni chapter, advisory committee, booster club, etc.)	5	3.68	0.96
Adjusting to individual students (i.e. learning styles, special education needs, etc.)	6	3.65	0.88
Working with parents, teachers, and administrators	7	3.60	0.99
Planning FFA chapter events and activities (i.e. banquet, meetings, etc.)	8	3.56	0.96
Being technically competent in all areas of agriculture	9	3.54	1.18
Preparation of FFA CDE/LDE teams	10	3.54	0.99
Curriculum development and lesson planning	11	3.45	1.07
Supervising students in laboratory activities (i.e. greenhouse, shop, etc.)	12	3.39	1.01
Recruiting students	13	3.27	0.89
Lack of resources/management of resources	14	3.22	1.11
Safety in the classroom and laboratory	15	3.02	1.04
*Scale: 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree			

Major Findings & Implications

Percentage of Agriculture Teachers Who Have and Have Not Considered Leaving the Profession

	n	(%)
Yes	89	78.1
No	25	21.9
Total	114	100.0

Employment Opportunities for those Considering Leaving the *Profession*

Reasons	n	(%)	Other:
Employment in the agriculture business/industry	44	38.6	administration,
Other	29	25.4	self-employment,
Retirement	13	11.4	or another
Employment in another educational content area (outside of agricultural	12	10.5	direction
education)			
Employment in production agriculture/farming	10	8.8	
Employment in post-secondary education	9	7.9	
Continuing education/graduate school	8	7.0	
Stay at home parent/caregiver	7	6.1	
Considered moving out of state	4	3.5	
Health	2	1.8	
Not offered a contract/terminated	1	0.9	

Major Findings & Implications Continued

Perceptions Affecting the Consideration to Stay

Aspect	Ν	М	SD		
Support from					
Parent support	111	3.70	0.94		
Community support	111	3.67	0.99		
Other teachers support	111	3.55	1.02		
Administration support	111	3.20	1.14		
Recognition					
Of your role in advising of students	111	3.95	0.98		
Of your success advising the FFA chapter	111	3.93	0.96		
From parents/community	111	3.32	1.03		
From administration	111	2.96	1.13		
Personal reasons related to					
Level of enthusiasm about teaching	111	3.52	1.08		
Work schedule/extra hours	111	3.16	1.20		
Professional growth opportunities	111	3.10	1.00		
Salary	111	3.04	1.19		
Proper funding	111	3.02	1.15		
*Scale: 1= strongly disagree, 2= disagree, 3= neither agree nor					

disagree, 4= agree, 5= strongly agree

Ν SD Aspect М **Related to FFA and SAE** Too much stress 85 3.88 1.12 Lack of recognition from administration 85 3.59 1.33 Time management 85 3.55 1.23 Lack of proper funding for trips/contests/etc. 85 3.29 1.29 Lack of advancement in the profession 86 3.10 1.18 Parent conflict 86 3.05 1.25 Lack of recognition from community 84 2.90 1.25 **Related to school/classroom** Excessive paperwork 86 3.67 1.17 Low salary 3.65 1.21 86 Lack of administration support 84 3.54 1.26 Multiple class preps 3.34 1.20 86 Lack of classroom management 85 2.46 1.14 Lack of extended contract 84 2.30 1.07 **Related to personal issues** Work conflicting with family 3.12 83 1.45 Family conflicting with work 1.38 84 2.65 84 Low career commitment 1.04 2.08 *Scale: 1= strongly disagree, 2= disagree, 3= neither agree nor

disagree, 4= agree, 5= strongly agree

Perceptions Affecting the Consideration to Leave

Conclusion

- Research Question One
 - White, male, age 30-39, traditional certification, 0-10 years teaching experience, FFA or 4H experience
 - 5A school, 2 teacher department, 101-200 students
 - Principles of AFNR most common course
- Research Question Two
 - Most important: time and stress management and managing student discipline
 - Least important: Recruiting students, lack of resources/managing of resources, and safety in the classroom and laboratory

Conclusion Continued

- Research Question Three
 - 78.1% considered leaving
 - Employment in the agriculture business/industry
- Research Question Four
 - Most important: Stress related to FFA and SAE and excessive paperwork
 - Least important: Lack of extended contract and low career commitment

Conclusion Continued

- Research Question Five
 - Most important: Recognition of their role in advising students and of their success advising the FFA chapter
 - Least important: proper funding and recognition from administration

Recommendations

- Identifying ways of dealing with time management and stress within the profession.
- Develop student discipline strategies to be used throughout the school.
- Assistance to agriculture teacher's workload with balancing multiple course preps and handling all FFA finances and paperwork should be provided.
- Teachers and administration should work together to develop a stronger understanding for one another and the benefits of the program as a whole.

Future research

- Other states should be examined
 - Geographical context may have a major input on what agricultural teachers place more importance on.
- Focus on agriculture teachers who have left the profession
 - Provide insight into why the demand is higher than the supply.

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