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A DESCRIPTION OF THE NATURE AND IMPACT OF TEACHING EVENTS AND FORMS OF BEGINNING TEACHER ASSISTANCE AS EXPERIENCED BY MINNESOTA AGRICULTURAL EDUCATION TEACHERS

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Abstract

This study examined the nature and impact of teaching events and selected forms of assistance provided by local school district personnel to beginning agricultural education teachers. The initial five forms of assistance that had a major impact on the beginning teachers included: parental support of students for their program; adequate supply of materials, textbooks, and workbooks are provided; planning time was available before school started; curriculum guides are available for the program area; and principals provide helpful evaluation and feedback. Initial events or experiences that had a major or critical impact, and occurred often or always were: feeling in control of their program, students are respectful toward the beginning teacher, beginning teacher has self-confidence in their teaching, satisfaction is experienced after successful activities, and they see their students succeeding in their classes. The beginning teachers were experiencing elevated levels of stress and moderate amounts of job satisfaction during the early weeks of the school year. Less than 40% of the teachers were participating in district-sponsored teacher induction programs. It was concluded the initial teaching experiences of beginning teachers were, indeed, impacted by selected forms of assistance and events. Additional research was recommended to determine how the nature and impact of the measures change with teaching experience.

Introduction

The retention of quality teachers with and without the use of effective forms of beginning teacher assistance in the public school systems has been a topic of continuing investigation and concern (Darling-Hammond, 2000; Huling-Austin, 1990; Ingersoll, 1999). The attrition rates of teachers appear to be higher than in many other occupations (Ingersoll, 1999). Data from the Bureau of National Affairs (1998) reveals that the average national employee turnover in the United States is 11% per year. The attrition rates for teaching for 1988-89, 199 1-92, and 1994-95 were 15%, 13.25%, ad 14.3%, respectively (Ingersoll, 1990). Mercer (1999) concluded demand for new teachers is directly related to high levels of pre-retirement turnover. Unfortunately, up to 50% of our beginning teachers leave the profession before the end of their sixth year of teaching (Marso and Pigge, 1997; Jensen, 1986; Curtis, 1985). What makes teaching so unique that it drives many teachers out of the profession (Ingersoll, 1999)? Teaching may be one of the most difficult (Schulman, 1987) and challenging (Huling-Austin, Odell, Ishler, Hay, & Edelfelt, 1989; Veenman, 1984) of all professions to master. Few other professions expect the first-year practitioner to immediately perform at the same level as their experienced colleagues. This pressure results in a transition from student to first-year teacher that may be traumatic and has been referred to in the literature as "reality shock" (Marso and Pigge, 1987).

Are the experiences unique, or is there some reason to believe that all individuals entering a new profession after a college education experience similar issues and challenges as they transition from one role to another in their journey

of life?

Super, Crites, Hummel, Moser, Overstreet and Warnath (1957) proposed a comprehensive theory of vocational development that features life stages and sub-stages with corresponding years of age. The growth stage ranges from birth to 14 years of age; exploration stage, 14-24; establishment stage, 25-44, maintenance stage, 45-64; and the decline stage that ranges from 65 through death. The exploratory-trial sub-stage typically occurs at the beginning of adulthood for individuals going to college directly from high school. Individuals initiating their first job may experience a lack of confidence, anxiety, uncertainty, instability, volatility, and false starts. Individuals in the establishment-trial sub-stage are engaged in making adjustments to new and sometimes unique occupational challenges. Their choices of action lead to stability within the chosen occupation or a series of job, occupation, or career changes.

Heath-Camp, Camp, Adams-Casmus, Talbert, and Barber (1992) suggested that the typical beginning teacher that completes a, teacher preparation immediately after high school begin their teaching career at the exploration-trial sub-stage. Therefore, it is reasonable to expect they will lack confidence, experience unrealistic expectations of teaching, have feelings of insecurity, need assurance from others, and have heightened concern about themselves and how they are performing. Based upon this theory, and others, what has research revealed about the experiences of beginning teachers?

Related Literature

Research conducted in the 1980's found that beginning teachers are less confident, qualified, or competent than teachers who graduated from teacher education programs in earlier years (Gardner, 1983). New teachers often experienced difficulty with classroom management, student motivation, room and lesson organization, locating adequate teaching materials, understanding complex school systems and policies, and meeting the needs of individual students (Veenman, 1984; Odell, 1986; Griffen, 1985). Findings from research conducted in the 1990's indicated that lack of spare time, burden of clerical work, and heavy teaching loads were additional critical concerns (Ganser, 1999).

Mundt (1991) found many of the same problems and concerns in a study of beginning Idaho agricultural education teachers. The most notable teacher problems and concerns were the conditions of the physical facilities; classroom management; organizational issues; managing the FFA component; a need for more supervision and help from the principal; and determining curriculum scope, sequence, and pace. Additionally, Mundt found that the beginning teachers were quiet, frustrated, isolated, afraid, angry, confused, and generally lacked confidence.

Heath-Camp, Camp, Adams-Casmus, Talbert, and Barber (1992) conducted a national study and reported that many schools provided support activities for beginning career and technical education teachers. However, nearly 25% of the beginning teachers were not given a curriculum guide and 25% were never observed or visited by the principal during their first year of teaching. They found that the top forms of assistance that had a major impact on the beginning teachers were: (a) having an adequate supply of materials, textbooks and workbooks; (b) availability of planning time before the start of school; (c) helpful feedback and evaluation from the principal; (d) orientation to school policies; (e) information on how to secure supplies and equipment; (f) extra planning period; and (g) parental support. They also concluded that the nature and impact of many of the events experienced by beginning teachers reflect common experiences of individuals progressing through the exploration-trial and establishment-trial stage of vocational development (Super, et al., 1957). In case studies of three beginning agricultural

education teachers, Talbert, Camp, and Heath-Camp (1994) found the primary teacher concerns included classroom maagement, advising the FFA chapter, preparing for multiple classes, managing the laboratory, ordering supplies, time management, and lesson planning.

Nichols and Mundt (1996) completed a nationwide study that was designed to determine which of 70 competencies within eleven broad areas of teaching were considered most critical for the survival of beginning agricultural education and family and consumer science teachers. The beginning teachers, principals of the beginning teachers, and agricultural education state supervisors ranked classroom management and instruction competencies first and second in importance, respectively.

In a study of state winners of the NVATA Outstanding Young Member Award, Mundt and Connors (1999) found the young members experienced many of the same concerns as reported for many beginning teachers. The primary concerns of the young members were: managing the overall activities of the local FFA chapter; building support within the school system; balancing professional and personal responsibilities; recruiting and motivating students in agricultural education; using proper classroom management strategies; time management; organizing and managing safe and attractive facilities; and building support from parents, organizations and adult groups within the community.

Reformers have called for the establishment of teacher induction programs to ease the transition of beginning teachers into full-time teaching (Huling-Austin, 1990; Odell, 1986). Interest in beginning teacher induction programs has spread rapidly in the U.S.A. The occurrence of state-level induction activities increased from 14 states in 1983 to 47 states in 1988 (Defino and Hoffman, 1984; Neuweiler, 1988). In 1999, the percentage of beginning full-time public school teachers who had participated in a formal induction program during their first year of teaching had increased from 59% in 1993-94 to 65% in 1998. The report also indicated that 22% of the formal induction programs were 8 months or less; 66% were 9 months to one year, and 12% were more than one year (U.S. Department of Education, 1999).

Though implemented to assist in their socialization into the profession and improve their quality of teaching, beginning teachers enrolled in teacher induction programs also improve in self-confidence and classroom management (Conner, 1984), lesson planning and discipline (Eisner, 1984), and specific behaviors such as voice inflection, eye contact, and review techniques (Huling-Austin and Murphy, 1987). Research results also indicate that teachers involved in induction programs have more positive attitudes toward teaching and plan to continue in the profession longer than those who have not participated in induction programs (Ode11 & Ferraro, 1992; Henry, 1988; Varah, Theune, & Parker, 1986).

The Division of Agricultural, Food, and Environmental Education at the University of Minnesota initiated a multi-faceted approach to recruitment, preparation, and retention of quality instructors in response to the current and upcoming teacher shortages. Aware of the need and importance to programmatically assist beginning teachers transition from their student to teacher roles and responsibilities (Super, et al., 1957), leaders of agricultural education in Minnesota established a the Minnesota Agricultural Education Teacher Induction Program (TIP) pilot program for beginning agricultural education teachers. The program was developed in cooperation with the Minnesota Department of Children, Families, and Learning; the Minnesota Association of Agricultural Educators; local school district principals and superintendents, and the Minnesota Agricultural Education Leadership Council. With goals to

enhance planning, monitoring, and delivery of the teacher induction project programming, researchers sought to further understand the backgrounds, characteristics, needs, and forms of assistance (Heath-Camp, Camp, Adams-Casmus, Talbert, & Barber, 1992) received by a diverse cohort of beginning agricultural education teachers.

Purpose and Objectives

The purpose of the study, therefore, was to determine the nature of the events experienced and forms of beginning teacher assistance provided by school personnel to newly hired Minnesota secondary agricultural education teachers. The objectives of the study were to describe the:

1. Demographic characteristics of beginning agricultural education teachers;
2. Nature and impact of assistance provided to beginning agricultural education teachers by local school district personnel;
3. Nature and impact of events experienced by beginning agricultural education teachers; and
4. Perceptions of the beginning agricultural education teachers relating to their levels of stress and satisfaction with their jobs.

Methods and Procedures

This census study was descriptive in nature. The population consisted of beginning Minnesota secondary agricultural education teachers who attended a seminar sponsored by the Minnesota Agricultural Education Teacher Induction Project. The beginning teachers of this study included one teacher with one year teaching experience and 22 newly hired teachers without classroom teaching experience.

The research instrument consisted of a questionnaire developed and tested by Heath-Camp, Camp, Adams-Casmus, Talbert, and Barber (1992). The instrument was re-formatted by changing the layout and altering the fonts and line spacing to improve the readability. The questionnaire consisted of three sections: demographics, assistance, and events. The items in the assistance section were derived from the list of common and high priority forms of desired assistance submitted by beginning teachers in the nationwide Heath-Camp, Camp, Adams-Casmus, Talbert, and Barber (1992) study that focused on the induction needs of beginning vocational education teachers. For listed items in the assistance section, the subjects indicated whether the event had occurred (yes/no) and then selected an impact rating on a five point Likert-type scale. Impact referred to the affect the form of assistance had on the beginning teacher, regardless if it did or did not occur.

For the listed items in the events section, the subjects indicated the frequency rating on a five point Likert-type scale and then selected an impact rating on a five point Likert-type scale. Events were defined as occurrences that affected them in some meaningful manner. The internal consistency values reported by Heath-Camp et al. (1992) were a Cronbach's Alpha coefficient of .74 for the OCCURRED/FREQUENCY scales and a Cronbach's Alpha coefficient of .88 for the IMPACT scale.

The questionnaire was distributed and administered in-person by the researchers at a seminar for beginning agricultural education teachers in October of 1999. Participants unable to attend the seminar were contacted and provided a questionnaire. Questionnaires were returned through the mail within ten days of the seminar. The data from the questionnaire were entered into and analyzed in EXCEL©. Descriptive statistics were used to summarize the data from the three sections of the questionnaire.

Findings

Objective 1 Describe the selected demographic characteristics of the beginning agricultural education teachers.

The mean age of the 23 Caucasian agricultural education teachers participating in the teacher induction program was 26.0 (SD=5.79) years. Four of the 23 teachers taught on a part-time basis. The cohort of was made up of 57% (n= 13) females and 43% (n=10) males. Nine percent (n=2) and 9 1% (n=21) of the teachers had completed their masters and bachelors degrees, respectively. The average length of contracts for the 19 full-time teachers was 10.3 months (SD= 1.06). The average salary for the full-time instructors was $29,072 (SD=$2240). The beginning teachers were afforded two to thirty days to attend workshops and prepare for classes before the beginning of the fall term. Four teachers received between 21 and 30 days; 1 teacher received between 11 and 20 days; 18 teachers received 10 or less days.

Ninety five percent (n= 22) and 17% (n=4) of the teachers taught in Minnesota high schools and middle schools, respectively. Ninety-one percent (n=21) of the teachers taught students in grade 1 O-12. Thirteen percent (n=3), 26% (n=6), and 78% (n=18) of the instructors taught students in grades 7, 8, and 9, respectively. All (n= 23) of the teachers taught agricultural education courses. Thirty-five percent (n=8) also taught one or more courses in biology or industrial and technology education.

The mean time invested each week for the full-time teachers was 52.58 (SD=13.6) hours. The weekly hourly investment was spent teaching middle and secondary level students (M=22.87, SD=7.16); planning, grading papers, and other teachingroles (M=17.67, SD=8.86); working with the FFA officers, members, and other committees (M=6.82, SD=6.26); and supervision of student work experience (M=1.35, SD=2.14).

Thirty-five percent (n=8) of the beginning agricultural education teachers reported they were involved in a beginning teacher assistance program sponsored by their local school district. Of the eight teachers who reported being involved in a local mentoring program, seven indicated that they were assigned a local teacher mentor, and four reported that they attended scheduled seminars or workshops for beginning teachers.

Objective 2: Describe the nature and impact of the assistance provided to beginning agricultural education teachers by local school district personnel.

The beginning agricultural education teachers were asked to respond to the occurrence and impact of selected forms of beginning teacher assistance. Examination of their responses in Table 1 indicates that the four most frequently reported forms of assistance were: (a) an orientation on school policies was given (91%); (b) planning time was available before school started (87%); (c) my students' parents provide support for my program (82%); and (d) a workshop for new teachers was held (78%). Thirteen of the 22 forms of assistance provided by local school districts were perceived to have a major or critical impact on the beginning teachers (M = 2.5 or higher). The top three forms of assistance in terms of impact were: (a) My students' parents provide support for my program (M=3.22, SD=0.67); (b) adequate materials, textbooks, and workbooks are provided (M=3.24, SD=0.83); and (c) planning time was available before school started (M=3.13, SD=0.97). The lowest rated forms of assistance in terms of impact were: (a) a vocational student organization orientation was held (M=2.09, SD=1.41); and (b) an in-service to explain the curriculum was provided (M=1.95, SD=1.36). The data shows that the assistance items rated as major or critical (M = 2.50 or higher) were also among the most frequently reported. Of the thirteen items rated at 2.5 or higher, eight were reported to have occurred by over half of the respondents. The

Table 1. Forms of Assistance that Resulted in Various Levels of Perceived Impact for 23 Beginning Minnesota Agricultural Education Teachers.

Forms of Assistance	Impact[a] M	Impact[a] SD	Frequency[b] %
My students' parents provide support for my program	3.22	0.67	82
Adequate materials, textbooks, and workbooks are provided	3.14	0.83	65
Planning time was available before school started	3.13	0.97	87
Information on purchasing supplies/equipment is provided	2.87	1.06	52
Curriculum guides are available for my program area	2.86	1.17	43
Extra planning period is provided for beginning teachers	2.86	1.17	9
My principal provided helpful evaluation and feedback	2.73	1.16	55
Clerical support is provided for beginning teachers	2.73	0.98	35
A list of available resources and vendors was provided	2.71	1.10	30
A mentor or buddy teacher provided	2.65	1.03	57
An orientation tour of school facilities was given	2.61	1.20	61
An in-service on classroom management was provided	2.59	1.10	17
A workshop for new teachers was held	2.55	0.96	78
An orientation on school policies was given	2.48	0.99	91
Time is available to observe other teachers teaching	2.48	1.08	22
A teacher's aid is provided to beginning teachers	2.45	1.37	9
An in-service on time and stress management was provided	2.41	1.10	9
A beginning teachers' handbook was provided	2.32	1.21	43
An in-service on counseling students was provided	2.14	1.04	4
Extra duties (bus, etc.) reduced for beginning teachers	2.13	1.32	26
A Vocational Student Organization orientation was held	2.09	1.41	0
An in-service to explain the curriculum was provided	1.95	1.36	4

[a]Impact Scale: 0 = None, 1 = Minor, 2 = Moderate, 3 = Major, 4 = Critical. [b] Percent Occurrence = (number of teachers / total number of teachers) * 100

extra planning period for beginning teachers was viewed by the cohort of beginning teachers to have a potential major impact (M=2.86, SD=1.17), although it only was reported by only 9% of the respondents.

A comparison of the data in Table 1 shows that the assistance items rated as moderate impact (mean rating of 1.50 – 2.49) were also the least frequently reported. Of the nine items rated at impact of 1.50 – 2.49, eight were reported to have occurred by less than half of the respondents. The orientation on school policies was rated as a moderate impact item (M=2.48, SD=0.99), although they were reported by 91% of the respondents.

Objective 3: Describe the nature and impact of the events experienced by beginning agricultural education teachers.

Six of the 3 9 events in Table 2 experienced by the beginning teachers were perceived to have a critical impact (M = 3.50 and above) on their teaching. Six events rated as critical were also the most frequently occurring events. All six of the items rated as critical were also rated as occurring often (M= 2.50 and above). A sense of feeling in control of their program, which occurred often (M=2.65, SD=0.65) had a critical impact (M=3.74, SD=0.45) on their experience. Other events that occurred often and had a critical impact were: (a) my principal supports me

(M=3.65, SD=0.57); (b) I experience satisfaction when an activity succeeds (M=3.6 1, SD=0. 58); (c) I feel self-confident in my classroom teaching" (M=3.57, SD=0.66), (d) students act with respect towards (M=3.57, SD=0.79); and (e) I see my students succeeding in my class (M=3.52, SD=0.59). Twenty-six of the 39 events were perceived to have a major impact (M = 2.50 – 3.49) on their teaching. Twelve of those events were reported to occur often (M = 2.50 or above) and fourteen were reported to occur occasionally (M = 1.50 – 2.49). The data in Table 2 indicate 17 events happened on an occasional basis (mean score of 1.50-2.49). All of these events were perceived to have a major impact (M=2.50-3.49) with the exceptions of (a) I receive help from my state vocational supervisor; (b) I receive help from my local vocational supervisor/director; and (c) being compared to the former teacher. They all had a moderate impact. The top five major impact events that occurred occasionally were: (a)I have insufficient funds for supplies and equipment; (b) I see my students working to have a better future; (c) I receive positive feedback from my students; (d) I receive positive feedback from my principal; and (e) I receive expressions of gratitude from my students."

Table 2. Perceived Impact of Selected Events Upon 23 Beginning Minnesota Agricultural Education Teachers

	Impact[a]		Frequency[b]	
Events	M	SD	M	SD
1 feel in control of my program	**3.74**	**0.45**	**2.65**	**0.65**
My principal supports me	**3.65**	**0.57**	**3.04**	1.26
I experience satisfaction when an activity succeeds	**3.61**	**0.58**	**3.70**	**0.7**
I feel self-confident in my classroom teaching	**3.57**	**0.66**	**2.78**	**0.67**
Students act with respect towards me	**3.57**	0.79	**2.87**	**0.55**
I see my students succeeding in my class	**3.52**	0.59	**2.78**	**0.52**
My job allows me to be creative	3.39	**0.66**	**3.35**	**0.71**
I have more work to do than I have time to do it	**3.35**	0.88	**3.52**	**0.73**
I have insufficient funds for supplies and equipment	**3.32**	**0.84**	**2.13**	**1.06**
The subject matter I teach is already familiar to me	**3.3**	**0.63**	**2.57**	0.59
My peers act with respect towards me	**3.26**	**0.75**	**3.22**	**0.74**
I see my students working to have a better future	**3.22**	0.80	2.09	**0.6**
I receive positive feedback from my students	**3.17**	**0.83**	**2.05**	**0.65**
Local businesses provide support for my program	**3.17**	**0.65**	**2.70**	**0.63**
My students show pride in their accomplishments	**3.17**	**0.65**	**2.61**	**0.66**
I receive positive feedback from my peers	**3.14**	**0.71**	**2.61**	0.94
I receive positive feedback from my principal	**3.13**	0.97	1.96	**1.3**
Job tasks that I am doing are already familiar to me	**3.13**	**0.76**	**2.57**	**0.73**
My students participate in vocational club activities (FFA)	**3.13**	**0.63**	**2.57**	0.59
I have obtained the goals that I set for myself	3.09	0.90	**2.52**	0.59
I receive expressions of gratitude from my students	**3.04**	**0.77**	1.91	**0.67**
My program is misunderstood by others; such as parents, students, counselors, and/or administrators.	2.96	**1.15**	**2.30**	**1.02**
My students display a lack of self-discipline	2.91	**0.85**	2.39	**0.78**
I have inadequate curriculum materials	2.91	**1.35**	1.91	**1.04**

(table continues)

Events	Impact[a]		Frequency[b]	
	M	SD	M	SD
My home life is negatively affected because of my school work	2.87	1.36	1.87	1.06
I have inadequate equipment	2.83	1.07	2.65	0.93
I have to do recruitment activities for my program	2.83	0.94	2.22	1
I am taking classes to further my education	2.82	1.30	2.41	1.1
My students act unmotivated towards my subject area	2.74	0.81	2.22	0.67
I have inadequate facilities (classroom, lab, etc.)	2.74	1.36	2.39	1.08
I have had success using new teaching approaches	2.74	0.92	2.65	0.57
My class sizes are not appropriate for my subject	2.57	1.27	1.52	1.04
I receive help from my state vocational supervisor	2.48	1.16	1.74	0.92
I receive help from my local vocational supervisor/director	2.32	1.29	1.50	1.1
I have trouble making and sequencing lesson plans	2.14	1.36	1.30	0.76
I experience problems because I don't understand school policies or procedures	2.04	1.36	1.17	0.89
I run into problems because my administrator does not give clear job expectations	1.96	1.40	0.83	0.89
I am compared to the former teacher in this program	1.91	1.44	2.43	1.34
I run into problems because of my poor organizational skills	1.87	1.49	1.17	0.83

[a]Impact Scale: 0 = None, 1 = Minor, 2 = Moderate, 3 = Major, 4 = Critical. [b] Frequency Scale: 0 = Never, 1 = Rarely, 2 = Occasionally, 3 = Often, 4 = Always

Objective 4: Describe the perceptions of the beginning agricultural education teachers relating to their levels of stress and satisfaction with their jobs.

The teachers responded to their levels of satisfaction and stress by circling numbers on 7-point Likert-type scales. The mean score was 4.26 (SD=1.66) on the satisfaction scale (O=very unsatisfied and 7=very satisfied) The mean score on the stress scale was 5.22 (SD=1. 17).

Conclusions

Findings from this study provided the researchers with the information for formulating the following conclusions:

1. The beginning Minnesota agricultural education teachers received differing frequencies of assistance that resulted in a moderate to critical impact on the teachers. The forms of assistance provided by local school district personnel that had the highest perceived impact on the beginning agricultural education teachers included parental support, availability of materials and textbooks, planning time, curriculum guides for the program, and feedback from the principal. The order of these findings is almost identical to the order of assistance preferred by the vocational education teachers who participated in the Heath-Camp, Camp, Adams-Casmus, Talbert, and Barber (1992) study. Mundt and Connors (1999) and Talbert, Camp, and Heath-Camp (1994) also found that beginning teachers often experienced challenges in obtaining, organizing, and maintaining facilities and supplies.

2. The beginning agricultural education teachers indicated that having an additional planning period each day would have made a major impact on their initial teaching experience. Respondents in the Heath-Camp and Camp (1992) study concurred

that this allowance could strengthen the initial teaching experience of all beginning career and technical education teachers.

3. Events related to student management, student respect, self-confidence, personal satisfaction, student success, support from the principal, and the amount of their workload are perceived by beginning teachers as having a major impact on their initial teaching experience. Similar findings resulted in similar conclusions from other researchers in the 1990's (Ganser, 1999; Heath-Camp & Camp, 1992; Mundt & Connors, 1999; Talbert, Heath-Camp & Camp, 1994;).

4. The beginning agricultural education teachers experienced a high level of stress during the first 7-8 weeks of the school year. The level of stress indicated by participants was higher that that reported in the Heath-Camp and Camp (1992). The difference may be partially attributed to the fact that the assessment in the Heath-Camp and Camp (1992) study was completed after more weeks of teaching.

5. The beginning teachers were experiencing a moderate amount of job satisfaction after the first seven to eight weeks of the school year. This finding supports results reported by Mundt (1991) regarding beginning agricultural education teachers.

6. The nature of the highest ranking forms of assistance, events, and elevated stress levels of the beginning agricultural education teachers of this study reflect some of the usual levels of concerns, experiences, and needs expressed by individuals transitioning into the exploratory-trial and/or establishment-trial sub-stages of their career (Super, et al., 1957). However, the experiences of beginning agricultural education differ from most new employees. They are responsible not only for teaching full loads with numerous preparations like veteran teachers, but they also are responsible for learning about and advising FFA chapters and managing a department-wide supervised agricultural experience program.

7. The proportion of the beginning agricultural education teachers enrolled in a beginning teacher assistance program sponsored by their local school district was low compared to what most beginning teachers from across the United States are experiencing. Thirty seven percent of the beginning agriculture teachers in this study were involved in a beginning teacher assistance program sponsored by their local school district. This is higher than the 25% reported by Heath-Camp and Camp (1992), but lower than the 65% reported by the U.S. Department of Education (1999).

8. The beginning teachers invested over 50 hours per week teaching, preparing to teach and other teaching roles, working with the FFA, and supervising the supervised agriculture experience (SAE) programs of the students. The majority of the time was spent preparing for and teaching class; however, less than two hours per week was devoted to working with the supervised agricultural education program.

Implications and Recommendations

The findings and conclusions of this study have implications for the teacher education programs of the institutions that prepare beginning teachers, state agricultural education supervisory staff, professional organizations, school administrators of beginning agricultural education teachers, and the Minnesota Agricultural

Education Teacher Induction Program (TIP). First of all, the findings of the study should be used to guide the in-service education needs of the participants of the study. The highest ranking desired forms of assistance and major events should serve as guiding principles of subsequent in-service activities. Second, teacher educators and pre-service teachers from the teacher education programs represented by graduates participating in this study may find the results very useful in identifying some of the most important needs ofbeginning agricultural education teachers.

Pre-service teachers may benefit greatly by discussions and exercises that teach them how to maximize the positive and minimize the negative impact of the selected forms of assistance and events. For example, pre-service teachers can be taught specifically how to properly enlist the support of parents; select and obtain instructional materials, books, supplies and equipment; use planning time available before the start of school, and; interact with and receive timely feedback and evaluation from their principals. Likewise, pre-service teachers need to be able to identify, understand, and know how to navigate through various stages of their vocational development as they progress through their working careers (Super, et al., 1957). Third, local school principals, professional organizations, TIP leaders, and agricultural education state staff need to be mindful of the forms of assistance that impact the teaching experience of the beginning agricultural education teachers. They need to be involved in meeting the needs of the beginning teachers by supporting and offering access to programmatic teacher induction in-service activities and programs (Heath-Camp, Camp, Adams-Casmus, Talbert, & Barber, 1992).

Parental support was one of the events that had a major impact on the beginning teachers in this study. The data also revealed that beginning agricultural education teachers invested an average of 1.3 5 and 6.8 hours per week, respectively, working with the students and their supervised agricultural experience programs and the FFA. Additional time working with the students may increase the number of opportunities to secure the cooperation and support of the parents. Pre-service teacher education and TIP partners need to take time to assist pre-service teachers in developing effective strategies for implementing quality supervised agriculture programs and FFA chapters.

Researchers need to continue to explore how the nature, impact, and occurrence of desired forms of assistance and the events experienced by beginning teachers of agricultural education differ or remain the same with additional cohorts of agricultural education teachers. Since it takes a community of professionals to prepare individuals to become fully inducted teachers, the views of teachers, principals, mentors, professional organization leaders, and state staff regarding effective forms of assistance should be investigated. Researchers also need to explore the relationship between job stress, satisfaction, and the impact and occurrence of selected forms of assistance and the teaching events experienced by the beginning agricultural education teachers. And finally, concurrent with these efforts, researchers need to determine if the nature and scope of the forms of assistance and events change as the beginning agricultural education teachers progress through the steps of various models of the induction process (Furlong and Maynard, 1995; Waters, 1988; Ryan, 1986).

References

Conner, E. L. (1984). Evaluation of the 1983-84 beginning teacher program. Miami, FL: Dade County Public Schools Office of Educational Accountability. (ERIC Document Reproduction Service No. ED 257 853).

Curtis, S. M. (1985). Profiles of teachers of agriculture in Pennsylvania. University Park, PA: Pennsylvania State University, Department of Agricultural Education.

Darling-Hammond, L. (2000). How teacher education matters. Journal of Teacher Education. 5 1(3), 166-l73.

Defino, M. E., & Hoffman, J. V. (1984). A status report and content analysis of state mandated teacher induction programs. (Report No. 9057). Austin, TX: Texas University Research and Development Center for Teacher Education.

Eisner, K. (1984). First year evaluation results from Oklahoma's entry-year assistance committees. Paper presented at the meeting of the Association of Teacher Educators, New Orleans, LA. (ERIC Document Reproduction Service No. ED 242 706).

Fuller, F. F., & Bown, 0. H. (1975). Becoming a teacher, In K.Ryan (Ed.) Teacher education: the seventy-fourth year book of the National Society for the Studv of Education, part 2. Chicago: University of Chicago Press.

Furlong, J. & Maynard, T. (1995). Mentoring student teachers: The growth of professional knowledge. New York: Routledge.

Ganser, T. (1999). Reconsidering the relevance of Veenman's (1984) meta-analysis of the perceived problems of beginning teachers. Paper presented at the meeting of the American Educational Research Association, Montreal, Canada. (ERIC Document Reproduction Service No. ED 429 964).

Gardner, D.P. (1983). A nation at risk: The imperative for educational reform, (WWW document). URL http://www.ed.gov/NatAtRisk/title. html.

Griffen, G. A. (1985). Teacher induction: Research issues. Journal of Teacher Education, 36(1), 42-46.

Heath-Camp, B. & Camp, W. G. (1992). Professional development of beginning vocational teachers: Implementation system. (NCRVE Publication No. MDS-273). Berkeley, California: National Center for Research in Vocational Education.

Heath-Camp, B., Camp, W. G., Adams-Casmus, E., Talbert, B. A., & Barber, J. D. (1992) On becoming a teacher: An examination of the induction of beginning vocational teachers in American public schools. (NCRVE Publication No. MDS – 018). Berkeley, California: National Center for Research in Vocational Education.

Henry, M.A. (1988). Multiple support: A successful model for inducting first-year teachers. Teacher Educator, 74(2), 7-12.

Huling-Austin, L. (1990). Teacher Induction programs and internships. In W. R. Houston (Ed.), Handbook of research in teacher education. New York: Macmillan.

Huling-Austin, L., & Murphy, S. C. (1987). Assessing the impact of teacher induction programs: Implications for program development. Austin, TX: Texas University Research and Development Center for Teacher Education.

Huling-Austin, L., Odell, S. J., Ishler, P., Kay, R., & Edelfelt, R. A. (Eds). (1989) Assisting the beginning teacher. Reston, VA: Association of Teacher Educators.

Ingersoll, R.M. (1999). Teacher turnover, teacher shortages, and the organization of schools. (Document W-99-l). University of Washington: Seattle: Center for the Study of Teaching and Policy.

Jensen, M. C. (1986). Induction programs support new teachers and strengthen their school. Eugene, OR: Oregon School Study Council. (ERIC Document Reproduction Service No. 273 012).

Marso, R. N., & Pigge, F. L. (1997). A

longitudinal study of persisting and nonpersisting teachers' academic and personal characteristics. The Journal of Experimental Education. 65(3), 243-254.

Marso, R. N., & Pigge, F. L. (1987). Differences between self-perceived job expectations and job realities of beginning teachers. Journal of Teacher Education, 38(6), 53-56.

Mundt, J. (199 1). The induction year - A naturalistic study of beginning secondary teachers of agriculture in Idaho. Journal of Agricultural Education, 32(1), 18-23.

Mundt, J. P., & Connors, J. J. (1999). Problems and challenges associated with the first years of teaching agriculture: A framework for preservice and inservice education. Journal of Agricultural Education, 40(1), 3 S-48.

Nichols,L.S. & Mundt, J. (1996). Surviving the first year of teaching: Perceptions of critical competencies from four educational perspectives. Journal of Familv Education and Consumer Sciences Education. 14 (2), 23-39.

Neuweiler, H. B. (1988). Teacher education policy in the states: A 50 state survey of legislative and administrative actions. AACTE: Washington, DC. (ERIC Document Reproduction Service No. ED 296 997).

Odell, S. J. (1986). Induction support of new teachers: A functional approach. Journal of Teacher Education. 37(1), 26-29.

Odell, S. J., & Ferraro, D. P. (1992). Teacher mentoring and teacher retention. Journal of Teacher Education. 43 (3), 200-204.

Ryan, K. (1986). The induction of new teachers. Bloomington, IN: Phi Delta Kappa Education Foundation.

Schulman, L. S. (1987). Learning to teach. AAHE Bulletin, pp. 5-9. Washington, DC: American Association of Higher Education.

Super, Crites, Hummel, Moser, Overstreet, and Warnath (1957). Vocational development: A framework for research. New York, NY: Teachers College Press.

Talbert, B .A., Camp, W. G., & Heath-Camp, B. (1994). A year in the lives of three beginning agriculture teachers. Journal of Agricultural Education. 35(2), 3 l-36.

U.S. Department of Education. (1999). Teacher qualitv: A report on the preparation and qualifications of Public School Teachers. (Publication No. NCES 1999-080). Washington, DC: U.S. Government Printing Office.

U.S. Department of Education. (1999). The condition of education. 1999. (Publication No. NCES 1999-022). Washington, DC: U.S. Government Printing Office.

Varah, L. J., Theune, W. S., & Parker, L. (1986). Beginning teachers: Sink or swim? Journal of Teacher Education. 37(1), 30-34.

Veenman, S. (1984). Perceived problems of beginning teachers. Review of Educational Research. 54(2), 143-178.

Waters, R.G. (1988). An overview of the beginning teacher induction process. In W.G. Camp and B. Heath (Eds.), On Becoming a teacher: Vocational education and the induction process. (NCRVE Publication No. MDS-018). Berkeley, CA: The National Center for Research in Vocational Education.

William M. Mercer (1999). Survev of registered nurse attraction and retention. Atlanta, GA: William M. Mercer, Inc.