© Journal of Agricultural Education
Volume 52, Number 3, pp. 50–63
DOI: 10.5032/jae.2011.03050

How Do Early Career Agriculture Teachers Talk About Their Time?

Misty D. Lambert, Assistant Professor
Oregon State University
Anna L. Henry, Associate Professor
John D. Tummons, Instructor
University of Missouri

This phenomenological study of early career agriculture teachers sought to determine the meaning early career agriculture teachers ascribe to their time. Seven teachers with a range of experience from mid-first year to beginning of sixth year were chosen. Interviews were used to make meaning of their time. Five themes were found in the information: (a) the day consists of patterns that vary depending upon the time of the year; (b) there is a conscious allocation of work time; (c) the process of managing time adapts and evolves over time; (d) personal and social time for the teacher is woven into or around work; and, (e) tensions exist between how teachers would like to spend their time and how they actually spend their time. Recommendations include taking stock of workload and personal time, identifying times that are most productive and adjusting their schedule to accommodate, developing a rhythm to their work, making decisions about how to spend time and realizing it is an evolving process.

Keywords: early career, agricultural education, time, phenomenology

Secondary teachers face the critical intersection of increased requirements for teacher certification and student performance with reduced support levels not seen in a generation (Durr, 2008; Strauss, 2002). Under these challenging circumstances, novice agriculture teachers are particularly susceptible to job related stress and have little trouble filling their work schedules (Mundt, 1991; Mundt & Connors, (1999); Talbert, Camp, & Heath-Camp, 1994; Torres, Ulmer, & Aschenbrener, 2007). In fact, beginning secondary agriculture teachers typically spend over forty-five hours per week at work (Joerger & Boettcher, 2000; Lambert, Torres, & Tummons, 2009).The argument seems to be that better understanding of the tasks occupying their time could lead to a better understanding of the roles the teacher must fulfill as well as the time consumed by each role, leading to lower stress and higher job satisfaction. Therefore, recent research in agricultural education has focused on the high school classroom teacher including the daily routine, time allocation, job satisfaction, and stress levels of the teacher (Edwards & Briers, 1999; Myers, Dyer, & Washburn, 2005; Torres, Lambert, & Lawver, 2008). These studies tend to be quantitative in nature and many times call for follow-up studies that could be qualitative in nature to gather more details. Rarely does this follow-up happen.

The National Commission on Teaching and America's Future (1996) stated highly qualified teachers are the most important component of a child's education. However, one of the most critical issues in agricultural education is the shortage of highly qualified teachers (Camp, Broyles, & Skelton, 2002; Connors, 1998; Kantrovich, 2007). Kantrovich projected a 38% deficit of qualified agriculture teachers nationwide for the fall 2007 semester, a phenomenon that is not new.

In fact, this concern has been expressed in the profession's supply and demand reports spanning over 40 years (Roberts & Dyer, 2004). The variability of the agriculture teacher career description (Greiman, Walker, & Birkenholz, 2005; Mundt & Connors, 1999; Walker, Garton, & Kitchel, 2004) is believed to place additional

pressure on new teachers. Researchers found the less attention paid to beginning teachers early in their careers, the less likely they were to return for another year (Greiman et al., 2005). With a high rate of teacher turnover and a number of retirements looming in the immediate future, the profession cannot afford to lose teachers in these early stages (Boone & Boone, 2007; Smith & Ingersoll, 2004).

Literature Review

One of the key factors indicated in the literature that contributes to teacher burnout is stress (Chan, 1998). Teacher stress occurs when teachers have interactions with others or among their daily work environment which they perceive to be emotionally, physically, or psychologically taxing to the extent that teachers lack the personal or physical coping resources, thereby resulting in disruptions of their daily routines (Lazarus & Folkman, 1984). Teachers experience a number of career-related stressors which include working with unmotivated students, classroom discipline, workload and time demands, poor working conditions, challenging relationships with colleagues and administrators, among other factors (Kyriacou, 2001).

Kyriacou (2001) stated that workload demands can be a source of teacher stress. Cole (1981) reported average work weeks of between 45 and 65 hours for agricultural education instructors. Nelson and O'Brien (1993) report that "teachers in the United States devote more hours to instruction and supervision of students each week and have longer required workweeks than in any other country, including the nations with six-day school weeks, such as Japan and Switzerland" (p. 75). This finding was supported by recent quantitative findings within agricultural education (Torres et al., 2008). Secondary agriculture teachers often work well beyond a 40-hour work week to manage the student organization, supervise student projects, coach career development teams, evaluate student work, and prepare lessons (Croom, 2003; Straquadine, 1990). Some of these items are also true of non-career and technical education teachers while some are specific to agriculture teachers.

The trend of increasing job responsibilities in agricultural education is well documented in the literature (Delnero & Montgomery, 2001). One early observation cited by the National Research Council (1988) was that secondary agriculture teachers spend a great deal of time helping students excel in production-oriented FFA competitive events and award programs and less time on classroom instruction. Trends in recent years show more, not less, has been included in the job responsibilities within agricultural education. Moore and Camp (1979) found that long hours were the primary reason given by teachers for leaving teaching. While most teachers agree that teaching is rewarding, it is a difficult career because of the lack of resources, too much paperwork, crowded classrooms, students with emotional problems, low salary, and the pressure of high-stakes standardized testing (Strauss, 2007). Peiter, Terry, and Cartmell (2003) found that many first-year agricultural educators experience problems during their initial year of teaching. Research by Torres et al. (2008) indicated that the hours a teacher spent at work was the greatest predictor of high teacher stress. This same study showed that teachers with less experience were spending more hours at work and experiencing higher levels of stress than their more experienced colleagues. Thus, theoretically, this study was framed particularly around the external sources of teacher stress and micro and macro level factors influencing stress about time management, which could ultimately lead to teacher burnout.

Conceptual Framework

The conceptual framework for this study was a model of teacher stress developed by Montgomery and Rupp (2005) in a meta-analysis of 65 studies on the causes and effects of teacher stress, and adapted for the purposes of this particular study. In this model, the teacher experiences stress through a series of external events. They develop either positive or negative coping mechanisms, elicit an emotional response to the stressors, and then, depending upon their coping abilities, burn out of the profession as a result (see Figure 1). In this model, the environment in which the teacher works, levels of personal support, and personality factors all serve as macro-level constructs that shape the ways in which teachers will react to external stressors. At the heart of the model, external factors such as student behavior, the structure of the school, workload, colleagues, administration,

and personal life all serve as potential sources of teacher stress. In this particular study, given that teacher stress is linked to disruptions on the daily routine which can ultimately lead to burnout depending upon individual coping strategies, the ways in which teachers spend their time and the particular external stressors that can detract from that time or daily routine were of focus in the study.

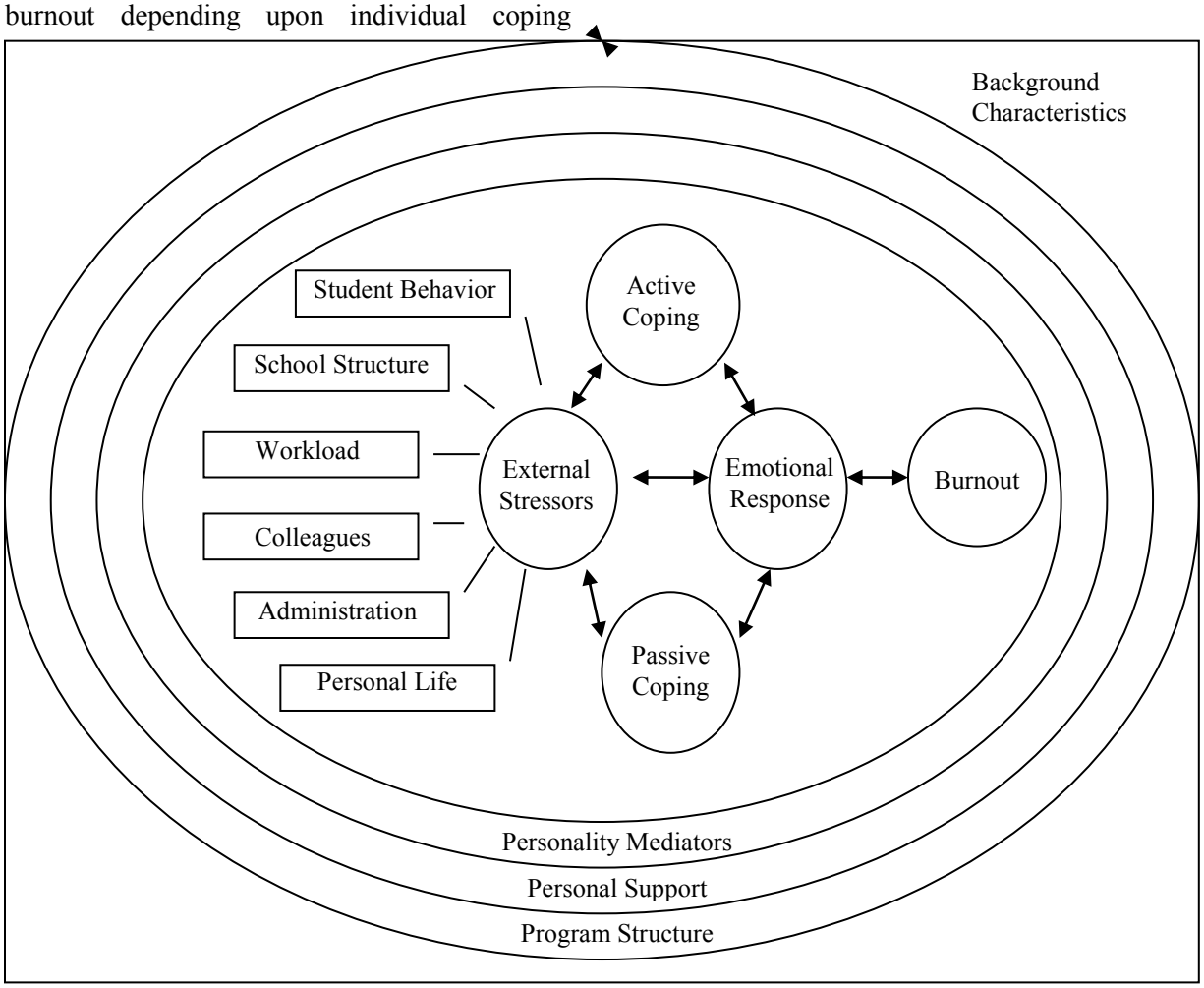

Figure 1. Theoretical-empirical model of construct relationships of teacher stress. Adapted from Montgomery and Rupp (2005)

Quantitative data has been collected on agriculture teachers that would reflect how they perceive spending their time. Torres, Ulmer, and Aschenbrener (2007) conducted a study using document analysis on a weekly journal where agriculture teachers self-reported using 13 pre-defined categories of time usage. The study included student teachers, new teachers (first year), and experienced teachers (more than 3 years). Such approaches generate interesting questions to consider from a research methodology standpoint. Would the results of this study be different if the teachers were not self-reporting their time allocation? Would the results be different if the teachers' time did not have to fit into one of these pre-determined categories? This study is different from the current literature base on agriculture teachers because it attempts to quantify their daily activities not through an instrument or through self-reporting, but from the viewpoint of gaining a deeper understanding of the meaning early career agriculture teachers ascribe to their time, and how external stressors impact their time. This is critical for understanding the workload of early career teachers. We know that large

investments of time lead to stress at work, which could ultimately lead to burnout.

Purpose and Objectives

The purpose of this phenomenological study was to investigate the meaning early career agriculture teachers ascribe to their time. Early career agriculture teacher was defined as a full-time employee in high school agricultural education with six years or less of experience on the job. The objectives were: (a) How does an early career teacher spend their time; (b) What statements characterize the phenomenon of time for early career teachers; and, (c) What is the intersection of stress and time for early career teachers of agriculture?

Methods and Procedures

This was a phenomenological study. Phenomenology is a qualitative research method used to describe "the meaning of the lived experiences for several individuals about a concept or the phenomenon" (Creswell, 1998, p. 51).

Participants

The size of qualitative studies is usually quite small, averaging between one and twenty participants (Creswell, 1998). Using criterion sampling, seven different early career teachers were selected as the focus of the study. Criterion-based selection techniques involve determining participants based upon the goals of the study and, consequently, works well with phenomenological studies (Creswell, 1998). The participants were selected because they each met the selection criteria as teachers with six years, or less, of experience at the secondary agriculture level. This criterion was chosen because Missouri teachers can first attain tenure at the beginning of their sixth year in the profession. Qualitative researchers make use of non-probabilistic sampling procedures to focus the study from its inception, identifying cases demonstrating the specific characteristics of interest (Patton, 2002). All of these teachers had experienced the phenomenon of being an early career teacher. Permission was granted through the individual and the Institutional Review Board.

Procedures

Data were collected through semi-structured interviews. Questions were planned ahead of time based on the central questions being investigated and aimed to capture the typical school day, weekend, summer, vacation, and social time as well as planning time, departmental workload balance, and how teachers describe their own time. Specific questions were also asked to understand how the organization impacted their time. The interviews lasted approximately 40 minutes per teacher.

Bracketing

Objectivity and confirmability were established by attempting to bracket the experiences and biases of the researchers that could have potentially influenced the interpretation of the results. The researchers are all former high school teachers and are all presently involved in teacher education. One researcher taught in Missouri while another was a teacher in North Carolina. These experiences influenced how they observed, interacted with, and received responses from an agriculture teacher, but every attempt was made to minimize this influence by triangulating data and being aware of these possible influences.

Data Analysis

The coding process began with a review and re-read of all collected data. The next step was an attempt at open-coding where each transcript was reviewed for possible themes or connections to the phenomenon of interest. Those themes were compiled and analyzed for overlapping information. The researchers performed the coding individually, and then met as a group to confirm their individual codes. The researchers, at that meeting, consulted their individual codes and reflective notes taken during the coding process and while some minor adjustments were made in wording, all 3 researchers were 100% consistent on the original codes that they had identified. The researchers then met a second time to condense their individual codes into themes, creating five over-arching themes of teachers and their time. Quotes were selected which supported each theme.

Trustworthiness

Qualitative researchers use measures of validation formed from the credibility,

transferability, dependability, and confirmability achieved through the methods (Lincoln & Guba, 1985). Credibility relates to the level of confidence in the researcher, design, and findings, to accurately represent and interpret the data (Ary, Jacobs, Razavieh, & Sorensen, 2006). Credibility of the data was established through the use of reference materials, peer debriefing, and member checks. First, interviews were audio recorded, and transcribed word for word. According to Kvale (1996), transcripts are translations of the lived interview experience into the text format and are interpreted differently as a result. Therefore, transcripts were submitted to participants to allow them to check for the accuracy of statements. The interviewees also checked the resultant themes to confirm their accuracy as well. Throughout the data collection, individual coding, and group coding process, the lead researcher consulted an outside peer in order to debrief the process as well, and further ensure through an outside perspective that the results could hold true (or be considered credible). To establish transferability, participants were purposively selected for the study based upon their level of experience with the phenomenon. Thick descriptions were also utilized to further support the transferability of the results. Finally, to ensure the dependability and confirmability of the results, the raw interview protocol, records of the audio transcripts, raw individual and group codes, and researcher reflections have been maintained, so that future researchers could feasibly conduct the study with other participants.

Participants

Seven teachers participated in the study. The first was in the spring of her first year of teaching. She was a single, traditionally-trained teacher in a two-teacher department at a large, comprehensive high school in North Carolina. The next teacher was a single, traditionally-trained teacher in August of her second year as a teacher at a career center for a large, urban/suburban area of Missouri. She was in a multi-teacher department. The third teacher in the study was beginning his third year teaching in a two-teacher department in Missouri. He was traditionally certified in a teacher education program. The fourth participant was a married male teacher in his third year teaching in a single-teacher department in a small Missouri community. The fifth participant was a fourth year teacher at a rural town in southern Missouri. She worked in a two-teacher department in a high school where enrollment was about 400 students. She was a parent of a young child. The sixth teacher in this study was in the middle of his fifth year in a two-teacher, comprehensive agriculture program in North Carolina. He was traditionally certified teacher in a recently committed relationship. The last teacher in the study was just beginning her sixth year as a teacher in a rural Missouri school district. She was working in a multi-teacher program with a lateral-entry teacher as a teaching partner. She was married and the mother of a young child.

Limitations of the study

While qualitative research, by purpose and design, focuses on a smaller number of participants in greater depth, it is important to note that this study is limited in scope. While potentially transferable to other settings, the findings from this study are limited to the context of the seven individuals across two states who participated. Qualitative research is not intended to be generalized, and the findings should not be interpreted beyond the scope of the participants in this study.

Findings / Results

The first objective was to characterize how an early career teacher spends their time. For this objective, the theme of patterns emerged.

Theme 1: The day consists of patterns that vary depending upon the time of the year

From both early observations as well as the interviews it became apparent that there were consistent patterns to not only the way the teacher operated within the scheduled class period, but also to how they moved through the day (see Table 1). Further investigation showed that teachers had a pattern in mind for the way the year would operate and could talk about what they would be doing months ahead. When asked to talk about a typical day, teachers could describe a pattern they see on a daily basis.

The pattern these early career agriculture teachers find in their time seems to vary depending upon whether the teacher is in an academic year, summer, or school breaks. It also seems to vary depending upon what FFA

events are occurring. When asked about the hours per week the teachers worked, it was difficult to get a response. This time was dependent upon the non-instructional time events of the day. Many teachers seemed to break the year down by which CDE was occupying the time outside of school. When questioned about summer, there seemed to be an understood pattern because the teachers began listing events and time frames without pausing or checking a date book.

Table 1
Sub-theme Seen within the Teachers' Patterns

Pattern sub-themes	Teacher Quotations
Pattern to Class Period	"Typically start the day out with…a journal everyday… announcements everyday about what's going on…. I review a little bit or quiz …then move on to new stuff. And, I try to mix up the note taking with some sort of activity."[a]
Pattern to School Day	"School at 6:15. Get stuff together for the day. Work on whatever students have dropped off. Get stuff together for…after school. Teach three periods. Go to meetings. After school I practice some CDE team… Work with greenhouse and animals. Go home around 6 or 7."[f]
Pattern to School Year	"I can pretty much tell you based on last year … what's coming up and what I am going to spend my time doing for the next three weeks."[b]
Pattern to Summer	"Before state convention it's … practicing for teams during the day … and, then state convention… camp… and, then leadership school, then about the middle of July… SAE visits [are] all we do."[f]
Pattern guided by FFA/CDEs	"Last fall I did dairy judging…then this semester I had a junior ag sales team and … Farm Business team… I am doing a livestock judging team now." [a]
Pattern is Seasonal	"Spring is more … hands-on and the fall is more …classroom."[d]
	"In the fall, the majority of my time goes just into classroom instruction. Now in the springtime … I would say a majority of my day goes to state degrees, proficiencies, contests."[c]
Pattern is Influenced by Non-instructional Events	"Think about fair week. That is way more than 70 hours. Think about national convention. Preparing for that is way more than 70 hours."[f]

[a]1st year; [b]2nd year; [c]3rd year, two-teacher; [d]3rd year, one-teacher; [e]4th year; [f]5th year; [g]6th year

The second objective sought to describe the phenomenon of teacher time as characterized by early career teachers. For this objective, two major themes emerged regarding the allocation of work time as well as the adaptation and evolution of time as described by early career teachers.

Theme 2: There is a conscious allocation of work time

These early career teachers seemed to have recognized when they work best as well as what time they will not give up for school work (see Table 2). Some have decided to work all seven days at school as part of their routine. Making this decision to work at school every day has

allowed them not to take work home while other teachers do. One teacher stated "You do what you can do and you make it work" while also saying "I don't like to brag on myself but you know I do spend many hours at school." However, it was very telling that more than one teacher stated "I am really only at home to sleep."

Table 2
Allocations of Work Time

Where and When of work	***Yes***	***No***
Working on Weekends	"Sometimes I take it home and I never touch it 'cause I just don't want to…this weekend, I will be grading SAE books at home all weekend."[a] "I have to feed the animals every day on the weekend."[a]	"I have to have some me time to get away from here and my weekends are for that."[g]
Working at Home	"During the weeknights…I have a computer at home and I would much rather go home, sit there and do my PowerPoints than … sit at school until 10:00 doing them."[b] "I am going to have to find a happy medium…because I am finding myself getting a day late and a dollar short…in the classroom…so I am going to try to do that at my home."[g]	"Since I am home very little I try to take as little home as possible…I am…showing up maybe just 30 minutes earlier or something in the morning and try to do maybe grading of papers then and or just doing whatever I need to do whether its new PowerPoints or something like that in the morning."[d]
Downtime at school	"Take a mental break… and you just have to step back and count to 10, whether it's between classes … I try to do my best every single period whether it is in class or between classes or whatever to have a moment where at some point we are laughing about something."[f]	"I try to utilize every minute that I have, even in between classes…I try to get in a phone call or return a couple emails."[g] "You never will find me just sitting and staring out into space while students work on a project…I utilize that time to get other things done."[g]

[a]1st year; [b]2nd year; [c]3rd year, two-teacher; [d]3rd year, one-teacher; [e]4th year; [f]5th year; [g]6th year

Theme 3: The process of managing time adapts and evolves over time

The teachers in the study all talked about how the time they spend on the job has evolved. Those in the first and second years talked about living day-to-day while the teachers in years three through six could recall how difficult the earliest years were. As the teachers advanced in their careers, they talked about how planning for instruction had become easier and less time consuming. However, they noted they were not necessarily spending less time at work. Teachers were simply re-allocating that instructional planning time to FFA and SAE events (see Table 3).

Table 3
Sub-themes from the Evolution of Time

Sub-themes	Teacher Quotations
The earliest years are hardest	"My first year first semester… I don't know if I left here before 10 for the first two or three months and I was here at 6am, you could set your clock by that."[f]
	"Well, this semester is a lot easier than last semester….last semester was my first semester… and I had three preps… it was a day to day thing. Like, during third period I was getting ready for 4th."[a]
	"My first year teaching…I would come in at 6:30 to 6:45 in the morning and… I would sometimes stay until 9 or 10:00 at night. I was not married. I lived 20 minutes away from school."[g]
	"First year to two years was spent primarily doing that kinda paperwork and … getting familiar with the curriculum…then… I didn't have to worry so much about the curriculum because I was teaching classes I was very familiar with already after having done it for 3 years."[g]
Planning gets easier	"… I would say I am spending the least amount of time that I have spent at school during my career so far. Last year…I was still staying until 5:00 or 5:30. I would get to school about 7:00 and I would stay until 5:00 or 5:30 and, of course, this year … I don't get to school until 7:30 and I have to leave by 4:20 … because of my family commitments."[g]
	"I think I am getting a little faster knowing what needs to happen and getting it done earlier."[b]
FFA fills the time space when planning efficiency improves	"And then somehow you still manage to fill that time with something else like I don't spend it planning but we seem to be doing 16 more FFA things you know so you are doing that instead but I just lessen the time I spend planning and just spend it doing other things."[b]

[a]1st year; [b]2nd year; [c]3rd year, two-teacher; [d]3rd year, one-teacher; [e]4th year; [f]5th year; [g]6th year

Objective three sought to describe the intersection of stress and time for early career teachers of agriculture. Two themes emerged for this objective as outlined below regarding the weaving of personal time with work, and tensions regarding how teachers spend their time.

Theme 4: Personal and social time for the teacher is woven into or around work

It seemed that even when talking about social or personal time, school was factored into the decision. The thoughts might have involved how the social time affects school or how school is creating a lack of social time, but the two seemed to be inexplicably tied. Even though their time seems to be arranged around the school schedule, teachers agreed that it was necessary to find social and personal time, either as a vacation, or after school, on the weekends, or even in some smaller way during the actual school day. Many teachers talked about how their family was being impacted by, or making an impact upon, their role as an agriculture teacher (see Table 4).

Table 4
Sub-themes Regarding Personal and Social Time

Sub-themes	Teacher Quotations
School affects social time	"I have found out as Ag teachers there is always something to do and whether it is to fix the welder or whether it is to grade papers or whatever put grades in the computer, I think there are times when I just say well you know it's 6:00 I am going to take the wife out for dinner tonight or something so I think you have to be smart with it to just say tonight is me time."[d]
	"[Work] stuff is always in the back of your head."[f]
School affects family/relationships	"My husband and I have had a long discussion about this because we have to find that happy balance, the happy medium."[g]
	"We look around and consider to be some of the best Ag teachers you know in the state…we also see that a lot of times their family life did not go so well. They spent a lot of time at school probably and lost their wives in the deal and I know several Ag teachers that have been divorced."[d]
Relationships blur with school time	"I… involve the wife and she goes to a lot of places with us...She'll come up and she'll like train the Ag sales team…. She'll go on … officer retreat with us where I need a female chaperone."[d]
	"I am getting married this summer. It will be the first week that I have taken an entire week and not come to school and not done anything related to my job…I think it is going to be real positive because … it's gonna sorta give us a third ag teacher that is a female."[e]
School affects vacations	"I take a weekend trip to the beach, but that doesn't happen in the spring time. I can do that in the summer. I can do it …in the fall, if we aren't training for nationals. I do a lot at Christmastime." [f]
	"I don't know that I would ever be able to use an entire months' vacation in the summer."[b]

[a]1st year; [b]2nd year; [c]3rd year, two-teacher; [d]3rd year, one-teacher; [e]4th year; [f]5th year; [g]6th year

Theme 5: Beginning teachers experience tensions between how they would like to spend their time and how they actually spend their time

The teachers had ideas about how they would want to spend their time and this did not always coincide with how they were spending their time. The teachers were asked if there was a part of their job they would choose to do all day (and nothing else), what would that be? Five teachers answered they would want to only do the teaching part with one saying "If I could do something every day it would be... just teach the kids that wanted to be there." Two teachers answered they would only do the FFA part of the job with one stating, "the whole reason I became an ag teacher was for FFA stuff and that is what I love to do." Additional items came up that teachers indicated they wanted to be doing while they seemed pulled into another direction (see Table 5).

Table 5
Sub-themes within Tensions of Time Theme

What teachers wanted to be doing	What teachers said they were doing
Teaching	"You have to spend an hour in the office talking with this kid and their parent or whether it's just a silly piece of paperwork that seems to take forever to fill out… people that just seem to take your time up …or it's the principal coming down and saying "hey … we need you to do this." [d]
FFA	"Fill out this paper, this kid needs a pass, you need to write a discipline slip on this kid… fill out this paperwork to go on this trip, you need this for this."[d]
Planning	"My…plan period which is … not used for planning. I usually try to return phone calls, and chat with my teaching partner about issues related to the FFA chapter and because I have … a child, I have to leave school by 4:00."[g]
Saying No	"We are so competitive and we want to be so involved that we just keep piling those things on and …I know that it is not good for me, but in my mind I rationalize it saying that it is going to be good for the kids or that it's giving them an opportunity."[g]
Getting it all done	"A lot of times I don't get done what I wanted to [because I am] interrupted in class a lot of times."[d]

[a]1st year; [b]2nd year; [c]3rd year, two-teacher; [d]3rd year, one-teacher; [e]4th year; [f]5th year; [g]6th year

Conclusions/ Recommendations/ Implications

Time is a scarce resource among these early career teachers; however, these early career teachers talk about time in a hopeful, yet accepting, way. They accept a heavy workload as part of the job. The teachers hope they will get better at managing their time and acknowledge that during their tenure thus far, instructional planning has improved each semester. They agree that the job is a twelve–month position. They acknowledge that having greenhouses and livestock on campus affords them teaching opportunities that they might not otherwise have and are willing to trade some time every weekend to maintain this opportunity. All of the teachers in this study reported working well over a 40 hour work week, every week. This is consistent with prior research (Croom, 2003; Straquadine, 1990; Nelson & O'Brien, 1993; Torres et al., 2008). These findings imply that workload and time management could be a major source of teacher stress and ultimately lead to burnout as indicated by Moore and Camp (1979). It is recommended further quantitative research be conducted to examine the ways in which teachers cope with the workload stress. Further research could compare early to more seasoned teachers regarding time management and coping strategies. It is also recommended that a similar qualitative inquiry be conducted to examine the notion of teacher time on a deeper level with more experienced teachers to determine if teachers conceptualize time differently as experience increases.

A further conclusion from the findings of this study was that time for teachers is consciously allocated and patterned, and even woven into their own personal down time. This is consistent with the conceptual framework, suggesting that teacher workload, school structure, and personal life are all micro-level external stressors in the teacher's schedule and teachers have developed coping mechanisms to deal with these stressors. The days and years tended to run in patterns, but teachers were

always anticipating the unexpected that goes against those plans. Further, teachers expressed a lack of down time during the pattern of the workday, consistent with teachers telling of their allocation, management, and lack of time. Teachers mentioned that, in order to accomplish all of the work required of them in one day, they were multi-tasking in class, working during passing periods, working through lunch breaks, and working their entire planning periods. This finding was a bit different from the literature that indicated teachers are working many hours (Torres et al., 2007) in that it highlighted the conscious patterning of time and illustrated a true absence of down time for teachers.

While this can be viewed as a positive and a potential testament to their productivity and time management, the implication of this finding is that an absence of *down time* leaves little time for coping, reflection on teaching, or even time to regenerate and regroup. It is recommended that teachers should figure out times that are most productive and adjust their schedule to accommodate, while leaving downtime and time to reflect and rejuvenate within a day. Individuals who can find their true work rhythm and work within the times they are productive might accomplish the same tasks with less time and energy. Are these teachers forcing themselves to work against their natural work tendencies? Further quantitative studies should be conducted on the impact of lack of down time on how teachers reflect and think on and about their teaching practice.

A third conclusion from this study is that while time and the use of time is an evolving process as one progresses in years of teaching, the work-load increases to fill up available time. The implication of this finding is that teachers, while becoming more efficient and effective in planning and other management activities and thereby saving time, are not getting that saved time back because they then fill the found time with more activities. Further quantitative studies should be conducted comparing the amount of time teachers spend working in a typical week (on all work-related activities) and compare student learning and FFA outcomes between teachers who work differing numbers of hours during the week. In short, does it truly make a difference in regard to student outcomes if a teacher is working 80 hour work weeks, and why do teachers wear extended time at work as a badge of honor?

Finally, it was concluded that teachers experience external stressors that create tensions between how they spend their time and how they would like to spend their time, thereby changing how they work and what they do or do not accomplish. The teachers in this study reported that they would prefer to spend their time teaching, going to FFA activities, and managing a program as opposed to dealing with parent or administrative problems or paperwork. This finding is consistent with previous research on teacher stress (Montgomery & Rupp, 2005) which identified student problems, administrators, and workload as particular external stressors that shape and change how teachers spend their time. This finding supports the conceptual model that external stressors elicit an emotional response from teachers, thus creating tensions that may lead to teacher burnout. Additionally, the model suggests that coping strategies and emotional responses are not set and may change over time, and individual teachers will cope with specific micro-level stressors in a unique manner. Is it possible that veteran teachers have found ways to adjust their coping mechanisms to reduce the possibility of burnout? It is recommended that further quantitative studies be conducted regarding comparisons between how teachers would like to spend their time and how they currently spend their time and its impact on teacher motivation, teaching effectiveness, and teacher attrition.

This study was the beginning of an investigation of the phenomenon of teacher time, workload and stress. It can serve as a starting point for individuals engaged in teacher development to further provide mechanisms to help teachers manage time. Further investigations should evolve this notion of teacher time and explore the exact nature of coping and stress as it leads to burnout among agriculture teachers to ensure that the profession is able to retain a number of high quality, successful teachers for future generations.

References

Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2006). *Introduction to research in education* (7th ed.). Belmont, CA: Thomson Wadsworth.

Boone, H. N., Jr., & Boone, D. A. (2007). Why do agricultural education teachers continue to teach? A qualitative analysis. *Proceedings of the American Association for Agricultural Education Research Conference*, *34,* 561-570.

Camp, W. G., Broyles, T., & Skelton, N. S. (2002). *A national study of the supply and demand for teachers of agricultural education in 1999-2001*. Blacksburg, VA: Virginia Polytechnic Institute and State University. Retrieved from http://aaaeonline,org/files/teachersupply2002.pdf

Chan, D. W. (1998). Stress, coping strategies, and psychological distress among secondary school teachers in Hong Kong. *American Educational Research Journal, 35*(1), 145-163.

Cole, R. L. (1981). Time management is not a game! *The Agricultural Education Magazine, 54*(1), 5-6.

Connors, J. J. (1998). A regional Delphi study of the perceptions of NVATA, NASAE, and AAAE members on the critical issues facing secondary agricultural education. *Journal of Agricultural Education, 39*(1), 37-47.doi:10.5032/jae.1998.01037

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.

Croom, D. B. (2003). Teacher burnout in agricultural education. *Journal of Agricultural Education, 44*(2), 1-13. doi:10.5032/jae.2003.02001

Durr, A. J. (2008). *Identifying teacher capacities that may buffer against teacher burnout.* (Doctoral dissertation, The Ohio State University). Retrieved from http://etd.ohiolink.edu/send-pdf.cgi/Durr&%20Anthony%20John.pdf?osu1227554195

Delnero, J., & Montgomery, D. (2001). Perceptions of work among California agriculture teachers. *Journal of Agricultural Education, 42*(2), 56-67. doi:10.5032/jae.2001.02056

Edwards, M. C., & Briers, G. E. (1999). Assessing the inservice needs of entry-phase agriculture teachers in Texas: A discrepancy model versus direct assessment. *Journal of Agricultural Education, 40*(3), 40-49. doi:10.5032/jae.1999.03040

Greiman, B. C., Walker, W. D., & Birkenholz, R. J. (2005). Influence of the organizational environment on the induction stage of teaching. *Journal of Agricultural Education*, *46*(3), 95-106. doi:10.5032/jae.2005.03095

Joerger, R. M., & Boettcher, G. (2000). A description of the nature and impact of teaching events and forms of beginning teacher assistance as experienced by Minnesota agricultural education teachers. *Journal of Agricultural Education, 41*(4), 106-117. doi:10.5032/jae.2000.04104

Kantrovich, A. J. (2007). *A national study of the supply and demand for teachers of agricultural education from 2004-2006*. Retrieved February 25, 2009, from http://aaae.okstate.edu/files/supplydemand07.pdf

Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing.* Thousand Oaks, CA: Sage.

Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review, 53*(1), 27-35. doi: 10.1080/00131910120033628

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Montgomery, C., & Rupp, A. A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education, 28*(3), 458-486.

Moore, C. E., & Camp, W. C. (1979). Why vocational agriculture teachers leave the profession: A comparison of perceptions. *Journal of the American Association of Teacher Educators in Agriculture*, *20*(3), 11-18. doi: 10.5032/jaatea.1979.03011

Mundt, J. (1991). The induction year - A naturalistic study of beginning secondary teachers of agriculture in Idaho. *Journal of Agricultural Education, 32*(1), 12-23. doi: 10.5032/jae.1991.01018

Mundt, J. P., & Connors, J. J. (1999). Problems and challenges associated with the first years of teaching agriculture: A framework for pre-service and in-service education. *Journal of Agricultural Education*, *40*(1), 38-48. doi:10.5032/jae.1999.01038

Myers, B. E., Dyer, J. E., & Washburn, S. G. (2005). Problems facing beginning agriculture teachers. *Journal of Agricultural Education, 46*(3), 47-55. doi:10.5032/jae.2005.03047

National Commission on Teaching & America's Future. (1996). *What matters most: Teaching for America's future*. New York, NY: Carnegie Corp.

National Research Council. (1988). *Understanding agriculture: New directions for education*. Washington D.C.: National Academy Press.

Nelson, F. H., & O'Brien, T. (1993). *How U.S. teachers measure up internationally: A comparative study of teacher pay, training, and conditions of service*. Washington, D.C.: American Federation of Teachers.

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd Ed.). Thousand Oaks, CA: Sage.

Peiter, R. L., Terry, R. Jr., & Cartmell, D. D. (2003). Identification of mentors for first year agricultural education teachers. *Proceedings of the 2003 AAAE Research Conference*, *30*, 175-189. Retrieved from http://aaaeonline.org/allconferences.php?show_what= National

Roberts, T. G., & Dyer, J. E. (2004). Inservice needs of traditionally and alternatively certified agriculture teachers. *Journal of Agricultural Education*, *45*(4), 57-70. doi:10.5032/jae.2004.04057

Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, *41*(3), 681-714.

Straquadine, G. S. (1990). Work, is it your drug of choice? *The Agricultural Education Magazine, 62*(21), 11-12.

Strauss, V. (2007). *Everyday problems*. Retrieved from http://www.washingtonpost.com/ wp-dyn/articles/A61601-2002Oct21.html

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), 31-36. doi: 10.5032/jae.1994.02031

Torres, R. M., Lambert, M. D., & Lawver, R. G. (2008). Predictors of job stress among agriculture education teachers. *Proceedings of the NC AAAE Research Conference*, (6), 204-216. Retrieved from http://aaaeonline.org/allconferences.php?show_what =NorthCentral

Torres, R. M., Lambert, M. D., & Tummons, J. D. (2010). Does the ability to manage time influence the stress level among beginning secondary agriculture teachers? *Proceedings from the 2010 AAAE Research Conference,* Retrieved from http://aaaeonline.org/allconferences.php?show_what= National&sorter_conf=National&sorter_year=2010

Torres, R. M., Ulmer, J. D., & Aschenbrener, M. (2007). Distribution of time usage among agriculture education teachers: A comparison of workloads. *Proceedings of the 2007 AAAE Research Conference*, (34), 571-584. Retrieved from http://aaaeonline.org/ allconferences.php?show_what=National

Walker, W. D., Garton, B. L., & Kitchel, T. J. (2004). Job satisfaction and retention of secondary agriculture teachers. *Journal of Agricultural Education*, *45*(2), 28-38. doi:10.5032/jae.2004.02028

MISTY D. LAMBERT is an Assistant Professor of Agricultural Education in the Department of Agricultural Education and General Agriculture at Oregon State University, 112 Strand Ag Hall, Corvallis, Oregon 97331, Misty.Lambert@oregonstate.edu.

ANNA L. HENRY is an Associate Professor of Agricultural Education in the Department of Agricultural Education at the University of Missouri, 120 Gentry Hall, Columbia, Missouri 65211, ballan@missouri.edu.

JOHN D. TUMMONS is an Instructor of Agricultural Education in the Department of Agricultural Education at the University of Missouri, 120 Gentry Hall, Columbia, Missouri 65211, tummonsj@misouri.edu.