A Case Study of CTE Teacher Retention: Transitioning from Mid-Career to Veteran Teacher Status

Nicole A. Graves South Dakota State University

Laura Hasselquist

South Dakota State University

Schools across the country are facing a shortage of Career & Technical Education (CTE) teachers. Variables such as low pay, absence of adequate teaching resources, and lack of administrative support associated with CTE teacher attrition have been noted throughout the literature. This study sought to identify developmental experiences associated with teacher retention via focus group interviews with mid-career (7-15 years) and veteran (20+ years) CTE teachers representing the fields of agriculture and family and consumer sciences (FCS). A comparison of the mid-career and veteran teachers was conducted in an attempt to identify gaps in developmental experiences that could be used to inform programming and develop support systems to help mid-career teachers transition to veteran status. In general, veteran teachers are more skilled at balancing work and home, building positive working relationships with administrators, advocating for their programs, feeling empowered by program success, maintaining a strong network of colleagues, and connecting with the community. Findings suggest that mediating factors for transitioning from mid-career to veteran teacher status include establishing boundaries, setting priorities, networking, taking on leadership roles, building and maintaining strong partnerships with administration and the community, and advocating for CTE programs.

The current shortage of classroom teachers is not a new phenomenon. According to the U.S. Department of Education (2016) at least two-thirds of states were experiencing a shortage in at least one area of Career and Technical Education (CTE). Werhan (2013) reported that half of states were experiencing shortages of highly qualified family and consumer sciences (FCS) teachers. It was later discovered that the extent of the FCS teacher shortage had been underrepresented in national U.S. Department of Education data due to inconsistent coding of FCS teacher positions (Werhan & Whitbeck, 2017). Agricultural education is also facing a teacher shortage. Foster et al. (2020) reported at least 60 teaching vacancies went unfilled nationwide in 2019.

Recruiting the next generation of CTE teachers is a concern for many content areas and has led to special efforts including the National *Teach Ag!* and *Say Yes to FCS* campaigns (National Association of Agricultural Educators, n.d); American Association of Family & Consumer Sciences, 2018). Retention of current CTE teachers should also play an important role in addressing the current shortage. A wide body of literature exists exploring new and beginning teachers job satisfaction and other factors associated with career longevity (Clark et al., 2014; Crutchfield et al., 2013). However, there are gaps in the literature that help to explain how mid-career teachers transition to veteran status.

Veteran teachers, those with 20 or more years of teaching experience, have found success in striking a healthy work-life balance and protecting personal time (Clark et al., 2014). On the other hand, one common concern expressed by mid-career agriculture teachers was finding a balance between work and personal lives (Crutchfield et al., 2013; Smalley & Smith, 2017). They may have entered the profession as single individuals but later started or expanded families which required a recalibration of balancing family and work responsibilities. Among mid-career agriculture teachers, many found it more common for work to interfere in their personal lives, than their personal matters to interfere with work (Crutchfield et al., 2013). Close to half of a sample of FCS teachers who had left the profession cited responsibilities related to family (Mimbs, 2000).

Supportive school administration (Morris, 2006) and communities (Clark et al., 2014; Inman & Marlow, 2004; Johnson et al., 2011) have been shown to influence teacher job satisfaction (Morris, 2006) and encourage early career teachers to stay in the classroom (Inman & Marlow, 2004). Clark et al., (2014) found agriculture teachers who experienced strong administrative support remained in the profession for extended periods of time as did veteran teachers who felt supported by their community (Inman & Marlow, 2004; Johnson et al., 2011). However, lack of administrative support can be detrimental, and is cited as a reason why agriculture teachers left the classroom prior to retirement (Boone & Boone, 2007; Walker et al., 2004). When seeking suggestions to improve FCS teacher recruitment and retention, in-service teachers highlighted the need to improve support from administration, counselors, and school boards (Mimbs, 2000).

The importance of strong and healthy collegial and student relationships for career longevity should not be overlooked (Brunetti, 2006; Clark et al., 2014; Gu & Day. 2007). Midcareer agriculture teachers have expressed desires to build collaborative relationships with other CTE teachers (Smalley & Smith, 2017). Relationships between teachers are important for continued pedagogical development (Hasselquist, 2017; Johnson et al., 2011). When teachers do not have strong peer relationships, it can lead to a sense of isolation and lack of belonging. This lack of belonging may lead to teacher attrition (Clark et al., 2014; De Lay & Washburn, 2013). The ability to make a positive difference in the lives of students is also positively correlated with teacher satisfaction. Social service (i.e. the chance to do things for others) was ranked the highest satisfier among mid-career and veteran FCS teachers (Tucker, 2009). Early career FCS teachers were motivated to teach because they could help young people and families (Godbey & Johnson, 2011), which also contributed to job satisfaction (Mimbs, 2002).

Financial support for teachers and CTE programs is also a factor related to teacher retention. Higher salaries and other types of support, such as health insurance, have a positive correlation with teacher retention (Shen, 1997; Morris, 2006). Due to CTE's connection to industry, schools are faced with a unique financial situation in both equipping classrooms with updated technology and paying teachers a salary comparable to those available in industry. Agriculture teachers who left the profession cited the financial incentives of working in higher-paying industry positions as a reason for leaving (Lemons et al., 2015; Quinton, 2017). Some FCS teachers who had left the profession admitted that the time commitment and extra responsibilities for teaching FCS did not compare to other occupational opportunities and financial rewards found in industry (Mimbs, 2000). To further complicate things, CTE programs often have unique budgetary and facilities considerations. Having the adequate facilities and proper budgetary support to maintain programs has traditionally been a concern for teachers and can have a negative impact on teacher job satisfaction (Boone & Boone, 2009; Brunetti, 2001;

Mundt & Connors, 1999; Morris, 2006; Torres et al., 2008). Lack of proper facilities, equipment, and monetary support can be frustrating to CTE teachers as they try to prepare students for the workforce.

Teachers work in a complex environment and are often influenced by personal and organizational variables (Fessler & Christensen, 1992). Teachers stay and leave the profession for a variety of reasons. Relationships with administrators, other teachers (both in and outside of their districts), and community members can all play a role in a teacher's decision to continue teaching or to leave the profession. Beyond relationships, feelings of autonomy or empowerment and personal and program financial support also matter to teachers. Despite the numerous professional aspects associated with career longevity, finding a balance between their personal and professional lives is crucial. This study seeks to explore how personal and organizational environments translate into career longevity.

Conceptual Framework

Fessler & Christensen's (1992) teacher career cycle model served as the guide for this study to contextualize, identify, and categorize the complex events and incidents that impact teachers across their careers. Fessler and Christensen (1992) propose that teacher development is not linear in nature and influenced by personal and organizational (professional) factors. Organizational factors include items related to school governance, administration, and public perceptions. Personal environment focuses on a teacher's life outside of school and includes family support, hobbies, personal dispositions, and crises. The model identifies eight stages of a teacher's career: preservice, induction, competency building, enthusiastic and growing, career frustration, career stability, career wind-down, and career exit (Fessler & Christensen, 1992). Traditionally, heavy emphasis is placed on the preservice stage of career development while college students complete a teacher preparation program (Fessler & Christensen, 1992). However, more attention should be paid to the types of support teachers need at all stages of their career (Rust, 2010). The current study is designed to examine the teacher experience between the stages of career frustration and career stability (Fessler & Christensen, 1992) and to reveal experiences and variables associated with career longevity in the field of CTE with a focus on the fields of agriculture and FCS.

Purpose

The primary purpose of the study was to examine teacher experiences associated with CTE teacher retention in a rural Midwestern state. With states facing a shortage of qualified CTE teachers, it is important to explore the experiences of mid-career (7-15 years) and veteran (20+ years) teachers to better inform preservice and in-service CTE teacher programming to recruit, support, and retain future generations of CTE teachers. The guiding question for this study was "What experiences are impactful for CTE teacher career longevity?"

Methods

This study is part of a larger data set and the methods may be similar or identical to methods used in extensions of this study. This instrumental case study (Creswell, 2013; Stake 1995) focused on mid-career and veteran CTE teachers to better illuminate needs associated with teacher retention and career longevity. The target population was CTE teachers in South Dakota. The bounded systems were CTE teachers who were South Dakota Association for Career and Technical Education (ACTE) members, attended the summer 2018 state ACTE conference, and

had the appropriate years of experience. Prior to the conference, a recruitment letter was posted to the organization's website, focus group sessions were listed in the program, conference rooms were reserved, and fliers were included in registration materials.

All 16 individuals who volunteered to participate in this study were included in the data set: four mid-career and 12 veterans representing the fields of Agriculture, Food, and Natural Resources; FCS; and Arts, AV Technology, and Communications. Each focus group was led by the primary researcher, lasted approximately one hour, and utilized a semi-structured format with questions focused on teacher longevity. The interviews were recorded and transcribed to aid in analysis. Line by line coding was used to identify categories and themes related to the group's experiences. Data were approached using a constructivist lens (Creswell, 2013). The researchers reflexively positioned themselves as former CTE teachers. These experiences have influenced the researcher's subjectivity; however, trustworthiness was ensured through member checking, peer debrief, and an audit trail (Creswell, 2013; Stake 1995).

Once themes had been identified for each data set, work began on comparing the findings between mid-career and veteran teachers' experiences. To do this, the research team identified developmental experiences related to teacher retention from across the literature as a guide. Information related to those developmental experiences that were already embedded in the themes from the original data sets were extrapolated to expose the gaps between mid-career and veteran teacher's experiences with the ultimate goal of identifying ways to help support midcareer teachers to continue the journey to veteran teacher status.

Results

This section compares the mindset of mid-career teachers with veteran teachers regarding several developmental experiences that have been correlated with teacher retention.

Work-Life Balance

Analysis of the mid-career teacher sample from this study revealed that these teachers had made strides in seeking balance and establishing boundaries, but still had not achieved it. The veteran teachers reported a mastery in work-life balance and allocation of time. They also demonstrated a matured perspective and ability to see the big picture.

Mid-career teachers admitted that they were much better at balancing workload than earlier in their career. One teacher shared "your first couple of years, you're all excited and you want to do everything. Now it's like 'hmm, no.'" All had admitted that they had become more discerning about what projects they decided to include in the curriculum.

Life circumstances of the mid-career teachers had changed since beginning their career. One Ag teacher shared "Our spouses weren't in the picture when we first got started and as it came to be our priorities shifted and I wonder what it would've been like had I started right away with a wife and a child, I don't know if I would've... lasted three years."

The mid-career teachers in this sample were still trying to reconcile their career values with decisions related to time and energy invested outside of school hours. An Ag teacher shared, "You want every opportunity for your students; that's the problem." An FCS teacher shared disappointment she felt after allocating extra time and not feeling recognized or appreciated by students, parents, or administration. All recognized that time is a commodity that needs to be carefully spent and they were getting better at prioritizing. One teacher commented, "That is why figuring out what to spend your time on as you have some experience it's a little bit easier because that time is so valuable."

The veteran teachers addressed the concepts of balance and priorities from a matured perspective. One said, "you realize that things come and go, like what was a crisis to you when you were in year two is [now] a minor little blip on the radar." She went on to say:

A teacher will let a bad class run them out of teaching. Heck, those kids are gone in four years, four years is nothing, you know, and so, I think perspective brings a lot of that when you realize that these things that you are stressing over really aren't that big of an issue.

Relationships with Administrators

In general, the mid-career teachers felt they had less administrative support than veteran teachers. The veterans shared how building relationships with administrators was the result of advocating for their programs.

Three mid-career teachers expressed frustration and disappointment with school administration. They agreed that part of the issue was administrations' "lack of understanding" and misconceptions related to the CTE programs. They wished administration "had their back" more often by supporting the programs. An Ag teacher mentioned that he felt that veteran teachers were treated better by administration. "they [veteran teachers] are telling you about the things that they are doing, and you're like 'my administration would never let me do that'."

Veteran teachers appeared less fearful of approaching administration to fight for their programs. Some noted that when communicating with administration it was wise to "choose the right battles" and then be willing to advocate strongly for what you believe in. A veteran FCS teacher shared her sentiments related to the need to advocate for CTE programs

Basically, I had an administrator tell me tell and other teachers that in some ways I am a pain because I've advocated for my program... but it's important...if we don't advocate for our programs and we don't make people aware of what we offer and what we need who else will?

One Ag teacher recounted a story when he joined forces with an Industrial Tech teacher to advocate for a much-needed shop,

He [the administrator] pretty much threatened to throw me out of the office because...he thought I was angry. No, I am passionate about what I do and it's important to me and by the time he left my high school he was an honored supporter of Ag Ed, but he had to know that I was passionate about what I was doing.

Another important lesson learned from a veteran teacher regarding building relationships with administrators was shared,

the first thing you need to do in terms of winning over administration is you have to do your job and you have to do it very well. The kids you have in your program and their parents over time will build on that.

Teacher Empowerment

Mid-career teachers from this sample were driven by their ability to innovate in the classroom; whereas, veteran teachers reported being empowered by the positive outcomes they knew their programs were having on students and the community.

Some of the mid-career teachers referenced having more time to innovate compared to the first few years of teaching. "I can start doing more with newer technology and new things. And it is easier to incorporate into the classroom than it was in the first years when you are still trying to figure out content standards and figure out how to teach." Additional comments related to a continued passion for teaching, "If you keep doing that and keep yourself interested, you're going to stay motivated and you are going to keep teaching because you get to buy a drone, you get to use a CNC machine... and it's cool it's fun."

Veteran teachers expressed feelings of continued motivation due to the positive outcomes of their programs. One teacher remarked, "I like to watch the growth of the kids from when I first have them to when they leave my program. I think I get the biggest kick out of that to see how they've changed over the years and you hope that you had a part in that." Another commented about remaining motivated to learn, "If you like to learn the kids will love to learn..."

Other veteran teachers spoke of their professional dedication in relation to keeping the curriculum up-to-date. A few noted that they do not like to use the same set of notes or materials year after year and were able to make decisions regarding changes to the curriculum. One teacher commented, "We're trying something new all the time, the kids love to learn just as much as you do."

Collegial Relationships

In general, mid-career teachers from this sample had built strong professional networks that contributed to their continued desire to teach. However, some still struggled with how isolating it can be to be a single teacher program. The veteran teachers noted that their colleagues had become a "family" of sorts which supported them and contributed to job satisfaction and career success.

All of the mid-career teachers from this sample mentioned the importance of their relationships with other CTE professionals and the importance of their involvement in professional organizations. One Ag teacher shared that his CTE network was partially responsible for his decision to stay in the profession; "I think one of the reasons why I'm still teaching, and that's helped us [himself and two other focus group members] is having that connection." Despite having connections with other CTE teachers from across the state and nation, one teacher shared that it can still be isolating to be the only CTE teacher in the school building. "And in other areas of education you have a math group, an English group, a science group, we are generally departments of one… I definitely feel like an island."

When making the transition from mid-career to veteran status, the veterans teachers discussed how the relationships deepened into something more than just a professional network. They often referred to it as a "family." One teacher said, "I really like the network of teachers and the family that is created whether that Agricultural Education family or the FCS family that you have beyond the school." Another teacher focused on how she believed CTE was unique, "I believe that's what makes being a CTE teacher special over just any teacher, the comradery that develops because we do know each other."

Community Support and Program Advocacy

Little was said about community support in the mid-career teachers' focus group. The veteran teachers spoke of the importance of building community support and advocating for programs. The veteran teachers had a good deal to share about lessons learned about the importance of community support to the success and well-being of a CTE program. One FCS teacher advised, "Don't worry about the moms and dads, worry about the grandmas and grandpas." An agriculture teacher concurred, "the older people in the community they are the ones that vote."; therefore, this teacher had learned that when he wanted support for student organizations that he needed to reach out to the older members of the community to garner that support.

One veteran teacher connected community support with one more way of getting the message across to the school administrators that the FCS program was worth fighting for. She commented, "the business community is seeing kids come out with work skills." She went on to say, "because he [the principal] knows he has people within the community that have written notes, that say, 'Your kids did a really good job!' and so he sees that."

Finances

While finances were not discussed much by teachers in either sample, both the midcareer and veteran teachers referenced that their passion for teaching and ability to positively impact students and the community superseded monetary compensation. One mid-career teacher shared, "Actually time for me is more valuable to me than money." Another teacher commented "...I've always felt it's a calling and I don't do it for the money. I don't do it for the glory--those things are great--but you do it for the students and becomes who you are."

While veteran teachers recognize that business and industry have better paying jobs, they often commented on the pride they feel in making a positive difference in the community. One teacher said, "...You have to have the passion, the will to want to be a teacher more than just wanting to get paid for what you are doing."

Discussion

There were some important distinctions between mid-career teachers and veteran teachers in relation to the concept of work-life balance. While the mid-career teachers were still working to find a happy balance, the veteran teachers had resolved those issues. The veteran teachers spoke mostly of lessons learned, recognizing the big picture, and making a positive difference in the lives of students. The findings were consistent with the literature that reported veteran teachers were able to achieve a healthy work-life balance Clark et al., 2014), while mid-career agriculture teachers were still working to balance work and personal lives (Crutchfield et al., 2013; Smalley & Smith, 2017).

While mid-career teachers saw administration as an entity that would either stand in the way of or support innovation, the veteran teachers viewed their interactions with administration as a sign of professional dedication. The veteran teachers spoke more often of the need to advocate for their programs and seemed more assured that their programs were making a positive difference and were willing to go out of their way to make those facts known by administration and the community. Support of the administration has been noted in the literature as important for both agriculture (Clark et al., 2014) and FCS (Mimbs, 2000; Mimbs, 2002) teacher job

satisfaction and retention. In a study of FCS teachers, administrative support was noted as a key factor related to teacher's social integration at school as well as teachers' desire to continue teaching (Dainty et al., 2011). Mid-career teacher's efforts to building healthy relationships with administrators could also contribute to an atmosphere of teacher empowerment (Ndoye et al., 2010).

Community support was discussed more often by veteran teachers than the mid-career teachers. Veteran teachers also spoke of knowing which battles to choose to fight and which issues were best left alone. The mid-career teachers did not mention taking on the role of an advocate. However, learning to take a stand for programs early on may help mid-career teachers through the *career frustration phase* (Fessler & Christensen, 1992) because strong administrative support has been positively correlated with extended teacher retention (Clark et al., 2014).

The importance of networking was apparent to mid-career and veteran teachers. Midcareer teachers spoke about the need for proper mentoring and the importance of building a trusted professional network via involvement in professional organizations. The veteran teachers were more explicit in describing their CTE network as a "family" and addressing how they integrated their home life and work life. Since relationships between teachers are important for continued pedagogical development (Hasselquist, 2017; Johnson et al., 2011), professional organizations should continue to provide opportunities for CTE professionals to learn together in face-to-face and digital settings.

Finances were not discussed much by either group of teachers, but when it was discussed, it was described as an issue that was not on the top of the values list. The lack of emphasis on salary and financial aspects is divergent of literature, which has stressed in the importance of it (Boone & Boone, 2009; Brunetti, 2001; Lemons et al., 2015; Mundt & Connors, 1999; Morris, 2006; Quinton, 2017; Torres et al., 2008).

Implications

One identifiable gap between mid-career and veteran teacher's developmental experiences appears to be the veteran teachers' ability to focus on the big picture and not getting overly concerned with small matters. Perhaps it could be useful to mid-career teachers to map out long-range goals and plans (such as a five-year or 10-year plan) for their programs so that they can begin to see the larger picture? Mid-career teachers may also benefit from taking on an advocacy role, which relates to relationships with administration and the community. Efforts should be made to help mid-career teachers develop program advocacy skills and become comfortable being program advocates. This can be particularly rewarding for Agriculture and FCS teachers who can also connect their students to the community via involvement in CTSOs such as FFA and FCCLA. Mid-career teachers seem to be on the right track in relation to staying involved in professional organizations and nurturing their professional networks. Veteran teachers also seemingly have a more student-centered approach to decision making which empowers them to continue learning and updating curriculum.

Directions for future practice would include partnerships between post-secondary teacher education programs, school administrators, and CTE related professional organizations to provide workshops and educational opportunities to further foster professional networking, advocacy, and healthy relationships with administration. Encouraging Agriculture and FCS teachers who are planning for retirement to host a student teacher in an effort to fill that teaching spot upon the teacher's departure could also help to combat the teacher shortage issues those programs have been facing. School administrators could also foster teacher collaboration across the school system so that CTE teachers feel less isolated. There would be several opportunities for Agriculture and FCS teachers to collaborate on projects. Professional organizations could provide additional advocacy ideas and promotional resources for mid-career teachers to use in their local communities. Areas for future research should include a deeper dive into the experiences of mid-term career teachers to explore other variables related to teacher attrition such as burnout and compassion fatigue, exploring how professional networks influence career satisfaction and longevity, and working to determine in financial support impacts career satisfaction.

References

- American Association of Family and Consumer Sciences (2018). Say yes to FCS: Filling the FCS educator pipeline. http://www.aafcs.org/sayyes/sayyes-educator/career-info
- Boone, Jr., H. N., & Boone, D. A. (2007). Problems faced by high school agricultural education teachers. *Journal of Agricultural Education*, 48(2), 36-45. doi:10.5032/jae.2007.02036
- Boone, Jr., H. N., & Boone, D. A. (2009). An assessment of problems faced by high school agricultural education teachers. *Journal of Agricultural Education*, 50(1), 21-32.doi: 10.5032/jae.2009.01021
- Brunetti, G. J. (2001). Why do they teach? A study of job satisfaction among long-term high school teachers. *Teacher Education Quarterly*, 28(3), 49-74.
- Brunetti, G. J. (2006). Resilience under fire: Perspectives on the work of experienced, inner city high school teachers in the United States. *Teaching and Teacher Education*, 22(7), 812-825. doi: 10.1016/j.tate.2006.04.02
- Clark, M. S., Kelsey, K. D., & Brown, N. R. (2014). The thornless rose: A phenomenological look at decisions career teachers make to remain in the profession. *Journal of Agricultural Education*, 55 (3), 43-56. doi: 10.5032/jae.2014.03043
- Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (Third ed.). Thousand Oaks, CA: Sage.
- Crutchfield, N., Ritz, R., & Burris, S. (2013). Why agricultural educators remain in the classroom. *Journal of Agricultural Education*, 54 (2), 1-14.doi:10.5032/jae.2013.02001
- Dainty, J.D., Sandford, B.A., Su, S., & Belcher, G. G. (2011). Factors influencing the retention of secondary Family and Consumer Sciences teachers. *Journal of Career and Technical Education*, 26(2), 42-56.
- De Lay, A. M. & Washburn, S. G. (2013). The role of collaboration in secondary agriculture teacher career satisfaction and career retention. *Journal of Agricultural Education*, 54(4), 104-120. doi: 10.5032/jae.2013.04104

- Fessler, R., & Christensen, J. C. (1992). *The teacher career cycle: Understanding and guiding the professional development of teachers*. Boston, MA: Allyn & Bacon.
- Foster, D. D., Lawver, R. G., & Smith, A. R., (2020). National Agricultural Education Supply and Demand Study, 2019Executive Summary. Retrieved from: http://aaaeonline.org/Resources/Documents/NSD2019Summary.pdf
- Godbey, K., & Johnson, C. A. (2011). Career choice influences and job satisfaction for early career Family and Consumer Sciences teachers. *Journal of Family & Consumer Sciences Education*, 29(2), 12-25. https://www.natefacs.org/Pages/v29no2/v29no2Godbey.pdf
- Gu, Q., & Day, C. (2007). Teachers' resilience: A necessary condition for effectiveness. *Teaching and Teacher Education*, 23(8), 1302-1316. doi: 10.1016/j.tate.2006.06.006
- Hasselquist, L., (2017). *The process of literacy integration in agriculture classrooms: A grounded theory*. (Doctoral Dissertation) University of Missouri, Columbia, MO.
- Inman, D., & Marlow, L. (2004). Teacher retention: Why do beginning teachers remain in the profession? *Education*, *124* (4), 605-614.
- Johnson, B., Down, B., Le Cornu, R., Peters, J., Sullivan, A., Pearce, J., & Hunter, J. (2011). Conditions that support early career teacher resilience. *Report to the Australian Research Council Linkage Projects*.
- Lemons, L. L., Brashears, M. T., Burris, S., Meyers, C., & Price, M. A. (2015). Factors contributing to attrition as reported by leavers of secondary agriculture programs. *Journal of Agricultural Education*, 56 (4), 17-30. doi:10.5032/jae.2015.04017
- Mimbs, C. A. (2002). Practicing teachers' advice for marketing and recruitment of educators and revisiting the identity issue. *Journal of Family and Consumer Sciences Education*, 20 (1), 48-57.
- Mimbs, C. A. (2000). Retention of certified family and consumer sciences teachers: Implications for teacher supply and demand. *Journal of Family and Consumer Sciences Education*, 18(1), 38-49. <u>https://www.natefacs.org/Pages/v18no1/v18no1Mimbs.pdf</u>
- Morris, H. J. (2006). Analysis of retention factors that influence Georgia's secondary career and technical education teachers to remain in the teaching profession (Doctoral Dissertation). http://digitalcommons.georgiasouthern.edu/etd/213/
- Mundt, J. P., & Connors, J. J. (1999). Problems and challenges associated with the first years of teaching agriculture: A framework for preservice and in-service education. *Journal of Agricultural Education*, 40 (1), 38-48. doi: 10.5032/jae.1999.01038

- National Association of Agricultural Educators (n.d.). *Forward progress: Solving the Agriculture teacher shortage*. https://www.naae.org/teachag/Forward%20Progress %20Solving%20the%20Agriculture%20Teacher%20Shortage.pdf
- Ndoye, A., Imig, S. R., & Parker, M. A. (2010). Empowerment, leadership, and teachers' intentions to stay in or leave the profession or their schools in North Carolina charter schools. *Journal of School Choice, 4* (2), 174-190. doi:10.1080/15582159.2010.483920
- Quinton, S. (2017, April 9). States want more career and technical training, but struggle to find teachers. https://www.pbs.org/newshour/education/states-want-career-technical-training-struggle-find-teachers
- Rust, F. O. (2010). Shaping new models for teacher education. *Teacher Education Quarterly*, 5-18.
- Shen, J. (1997). Teacher retention and attrition in public schools: Evidence from SASS91. *The Journal of Educational Research*, *91* (2), 81-88. doi:10.1080/00220679709597525
- Smalley, S. W., & Smith, A. R. (2017). Professional development needs of mid-career agriculture teachers. *Journal of Agricultural Education*, 58 (4), 282-290. doi:10.5032/jae.2017.04282
- Stake, R. E. (1995). The Art of case study research. Thousand Oaks, CA: SAGE Publications,
- Torres, R. M., Lawver, R. G., & Lambert, M. D. (2008, September). Job-related stress among secondary agricultural education teachers: Highs and lows. Paper presented at the North Central Region American Association for Agricultural Education Research Conference, Ithaca, NY. http://aaaeonline.org/uploads/allconferences/5814NCAAE2008.pdf
- Tucker, M. L. H. (2009). Are they satisfied? A study of urban secondary family and consumer sciences teachers. (Unpublished doctoral dissertation), Iowa State University, Ames. https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=2233&context=etd
- U.S. Department of Education. (2016). *Teacher shortage areas: Nationwide listing 1990-1991 through 2016-2017.* Retrieved from https://www2.ed.gov/about/offices/list/ope/pol/tsa.pdf
- Walker, W. D., Garton B. L., & Kitchel, T. J. (2004). Job satisfaction and retention of secondary teachers. *Journal of Agricultural Education*, 45(2), 28-38. doi: 10.5032/jae.2004.02028
- Werhan, C. R. (2013). Family and consumer sciences secondary school programs: National survey shows continued demand for FCS teachers. *Journal of Family & Consumer Sciences*, 105(4), 41-45.
- Werhan, C. A., & Whitbeck, D. A. (2017). Family and consumer sciences teacher shortage inaccuracies: Collaborating to set the record straight. *Journal of Family and Consumer*

Sciences Education, *34*, 24-28. https://www.natefacs.org/Pages/v34se2/v34se2Werhan.pdf

About the Authors

Nicole A. Graves is an assistant professor in the Department of Teaching, Learning, and Leadership at South Dakota State University.

Laura Hasselquist is an assistant professor in the Department of Teaching, Learning, and Leadership at South Dakota State University.

Citation

Graves, N.A. (2021, Spring). A case study of CTE teacher retention: Transitioning from mid-career to veteran teacher status. *Journal of Family and Consumer Sciences Education, 38*(1), 1-12.