Meaningful Work: Novice Agriculture Teachers and Retention in the Profession

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Introduction

Decreasing student enrollment in university agricultural education programs (Jalil et al., 2023), combined with the exodus of agriculture teachers from the field (Kantrovich, 2010; Smith & Smalley, 2018; Sorensen et al., 2016), has and continues to be a primary concern for the industry of agriculture. Previous studies have identified that the first five years of teaching have the highest number of "leavers" from the profession (Admiraal, 2022; Carver-Thomas & Darling-Hammond, 2017; Gray et al., 2015; Kelly et al., 2019; Morton & Maresh, 2024). In addition to stemming the flow of Novice teachers leaving the classroom, the influential role of agriculture teachers on student career preparation and choices (Parola et al., 2023; Steward & Roberts, 2024; Wong et al., 2021) demands that teachers' experiences and perceptions, particularly those of Novice teacher, be examined. Our larger study explored U.S. agriculture teachers' perspectives on their role in preparing and influencing student career readiness and choices. This part of the study focused specifically on how Novice agriculture teachers perceive their professional experiences, how these perceptions affect their plans to stay in the profession, and the impact this has on how they prepare students for the workforce. Three research questions guided this study: 1) How do Novice agriculture teachers rate various aspects of their job? 2) How do Novice agriculture teachers prepare students for the workforce? 3) To what extent do experience-related factors affect Novice agriculture teachers' plans to continue teaching?

Theoretical Framework

Given our study's emphasis on plans of Novice teachers to continue teaching, the Four-Capital Theoretical Model of Teacher Retention (Mason & Matas, 2015) was used to contextualize teachers' positionality and experience and the resulting consequences, including decisions to leave the classroom sooner, and, in turn, the resulting impact on their students' future careers. This model stipulates four categories of capital: (1) human capital, or teacher knowledge and experience, (2) social capital, or teacher relationships and support systems, (3) structural capital, or school-based resources and factors and (4) positive psychological capital, or teacher experiences and sentiments. In adopting this framework, we matched study variables to each form of capital; for instance, teachers' educational and licensure backgrounds (human capital); perceived support in the classroom and from the community (social capital); the time teachers expend finding career-related resources (structural capital); and overall job satisfaction and sentiments about their role (positive psychological capital). This allowed our study to examine the role of Novice agriculture teachers through their experiences in the classroom and the impact on their students' future careers.

Methodology

We used a descriptive research design with an online Qualtrics survey to collect data in spring 2025. The population for the study was 15,298 U.S. agriculture teachers; we received 1,755 usable responses for an 11.5% response rate. Responses were not forced-choice, so not all respondents answered all questions. Variables reported on for this poster are teachers' backgrounds, job satisfaction, feelings at work, perceived fulfillment and effectiveness at work, perceived support, time spent outside of work finding career resources, influence on students' careers and years remaining in teaching.

To identify Novice respondents, we modified Booth et al.'s (2021) compilation of various career models and stages to classify four career stages (Novice, Early Career, Mid-Career and Late Career), similar to other organizations' classifications (NAAE, 2024; National Center for Education Statistics, 2024). A similar approach was used to classify agriculture teachers' career plans (intended years continuing to teach): Immediate Future (0-3 years), Short Term (4-10 years), Long Term (11-20 years) and Extended Career (21+ years).

Scales were created for Feel Positive at Work and Feel Negative at Work. The highest Cronbach alpha (.843) for the Positive scale was obtained using five positive feelings (engaged, excited, happy, hopeful, and effective), as dropping the sixth positive feeling (safe) increased the alpha. The highest Cronbach alpha (.856) for the Negative scale was obtained using all five negative feelings (exhausted, frustrated, overwhelmed, stressed out, and worried).

The survey responses were analyzed using SPSS. Descriptive statistics and means-based analyses (MANOVAs) were used to describe and identify significant (α=0.05 significance level a priori) differences in Novice agriculture teachers' experiences in the classroom and their career plans, as well as their influence on student career decisions.

Results/Findings

Novice agriculture teachers, compared to others, were comprised of more alternatively certified (26.5%) or special/emergency grant licenses (9.0%), less likely to have both agricultural work and high school agricultural education experiences (53.2%), and more likely to be the only agriculture teacher in their agriculture program (62.8%). Novice agriculture teachers, more so than others, stated teaching agriculture is not a form of stable employment (17.6%) and were less satisfied with their job (Not at all, 4.1%; Slightly, 12.3%). Novice agriculture teachers are frequently or almost always Exhausted (66.3%), Frustrated (36.9%), Overwhelmed (67.6%) and Stressed Out (62.2%) at work. More than other career stage teachers, Novices feel work is only slightly (5.9%) or somewhat (20.7%) Fulfilling. Novices also felt the least effective at work compared to other career stages. About one in five (21.8%) felt a lack of a support system extremely affected their ability as an agriculture teacher and had the highest percentage report a lack of community support for their agriculture program (14.5%). More than half of Novice agriculture teachers (57.2%) reported not having an FFA Alumni/Supporters Chapter.

Consistent with other career stages, about one in five (18.6%) Novices recommend becoming an agriculture teacher to students. Notably, 19.1% of Novices reported spending 5 or more hours outside of the classroom weekly to gather career-related information and resources. Of those who had an FFA Alumni/Supporters chapter, Novices were the least likely to report receiving career-related support for students from the chapter (33.8%).

Multiple ANOVA results revealed a significant difference between the career stage and career plans of agriculture teachers and their job experience ratings. Novice teachers had the highest means for negative feelings at work, such as exhausted, frustrated, worried, overwhelmed and stressed out. Novice teachers also had the lowest means for positive feelings at work such as

engaged, happy, hopeful, effective and excited. Those planning to leave teaching in the immediate future had the lowest means for positive feelings at work. Career plans and negative feelings at work was not significant at the .05 level. Compared to other career stages, 15.3% of Novice agriculture teachers indicated planning to leave teaching in the Immediate Future (within 0-3 years) and 33.2% in the Short Term (within 4-10 years). Immediate Future teachers had the lowest mean for the extent to which work matters and for is fulfilling.

Table 1
Respondents' Career Stage by Feeling at Work

Scale	Career Stage	*n*	*M*	*F*	*p*
Feel Positive at Work				2.770	.041
	Novice $_{a}$	185	2.59		
	Early Career $_{ab}$	188	2.63		
	Mid Career $_{ab}$	151	2.64		
	Late Career $_{b}$	121	2.80		
Feel Negative at Work				7.331	<.001
	Novice $_{a}$	185	2.52		
	Early Career $_{ab}$	188	2.42		
	Mid Career $_{bc}$	151	2.28		
	Late Career $_{c}$	121	2.12		

Note. Levels: 0 = Almost Never; 1 = Once in a While; 2 = Sometimes; 3 = Frequently; 4 = Almost Always.
Note. Means with same subscript do not differ at the $p = .05$ level by Tukey HSD post hoc tests.

Table 2
Respondents' Career Plans by Feeling at Work

Scale	Career Plans	*n*	*M*	*F*	*p*
Feel Positive at Work				10.620	<.001
	Extended Career $_a$	161	2.76		
	Long Term $_a$	170	2.63		
	Short Term $_a$	207	2.73		
	Immediate Future	103	2.34		
Feel Negative at Work				2.127	.096
	Extended Career	161	2.38		
	Long Term	170	2.34		
	Short Term	207	2.30		
	Immediate Future	103	2.53		

Note. Levels: 0 = Almost Never; 1 = Once in a While; 2 = Sometimes; 3 = Frequently; 4 = Almost Always.
Note. Means with same subscript do not differ at the $p = .05$ level by Tukey HSD post hoc tests.

Table 3
Respondents' Career Plans by Perspectives on Work

Item	Career Plans	*n*	*M*	*F*	*p*
How much work matters				3.061	.028
	Extended Career $_a$	162	3.38		
	Long Term $_a$	176	3.27		
	Short Term $_a$	213	3.35		
	Immediate Future	105	3.16		
How fulfilling is work				7.268	<.001
	Extended Career $_a$	162	3.09		
	Long Term $_a$	176	3.02		
	Short Term $_a$	213	2.99		
	Immediate Future	105	2.66		

Note. Work Matters Levels: 0 = Does Not; 1 = A little bit; 2 = Some; 3 = Quite a lot; 4 = Tremendous amount.
Note. Work Fulfilling Levels: 0 = Not at all; 1 = Slightly; 2 = Somewhat; 3 = Quite a lot; 4 = Extremely.
Note. Means with same subscript do not differ at the $p = .05$ level by Tukey HSD post hoc tests.

Conclusions, Implications, and Recommendations

This study supports findings of previous studies reporting teachers' negative job experiences and sentiments, which may lead to burnout (Marzolino & McKim, 2024; Marzolino et al., 2024; Sorenson et al., 2016) and has further documented the substantial number of Novice agriculture teachers reporting such feelings. Novice teachers reported plans to teach only into the Immediate Future compared to those in other stages, except for Late Career (which may indicate plans to leave soon for retirement). The implied trend line is that the more experienced an agriculture teacher is, the less overwhelmed they feel at work. Therefore, if Novice teachers can

stay until Mid-Career, the outlook, according to these results, is positive for them to have an extended career as an agriculture teacher.

In accordance with the Four-Capital Theoretical Model of Teacher Retention, efforts and materials aimed at Novice agriculture teachers must be integrated into existing processes or resources, as Novice teachers likely do not have the capacity for additional work. Moreover, Novice agriculture teachers need ready-to-use resources to support and facilitate their impact on agriculture students. Whenever a new agriculture teacher is hired, particularly Novices, invested stakeholders need to be proactive or receptive to relationship building with and providing resources to Novice agriculture teachers. In doing so, Novices will feel more supported, connected and may find their work to be more fulfilling, potentially staying in the profession for longer and potentially impacting their students' future careers to a greater extent. Limitations for this study include the inability to extrapolate these findings to the broader agricultural teaching profession and the reliance upon self-reported information from survey respondents. Future research should continue to identify and assess the types of support systems, resources and relationships that have significant, positive impacts on retaining Novice agriculture teachers.

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