

**Insights from the Frontlines: Evaluating Recent Teacher Preparation Graduates'
Satisfaction with their Pedagogical Content Knowledge**

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Introduction, Purpose, and Objective

Over the last several decades, agricultural education's largest issue has been recruiting and retaining highly qualified educators (Lemons et al., 2015). While numerous factors contribute to teacher attrition, one of the primary motivators is a lack of confidence in their content knowledge (McKim et al., 2017). Solomonson et al. (2018) determined that a "Lack of Confidence to Teach the Curriculum" and a "Lack of Confidence in Ability to Teach Students" were two of the top five reasons educators leave the profession (p. 331). This lack of confidence is also evident in approximately 50% of early career educators leaving the profession within their first five years (Moser & McKim, 2020). This lack of confidence often stems from poor pedagogical content knowledge development (McKim et al., 2017). This is particularly concerning for teacher educators because the primary source of pedagogical content knowledge for preservice and early career teachers is the teacher preparation program (Rice & Kitchel, 2015). Unfortunately, many preservice educators are unsatisfied with the quality, quantity, and transferability of the pedagogical content knowledge received from their teacher preparation program (Rice & Kitchel, 2015). This study sought to evaluate recent graduates' perceptions of the pedagogical content knowledge they received from their teacher preparation training. The following research objective guided this study:

- 1.) Evaluate recent teacher preparation program graduates' satisfaction with the pedagogical content knowledge they received from their training.

Theoretical Framework

The human capital theory (HCT) guided this study's research objective (Becker, 1993). Becker (1993) suggests that as education, experience, and specialized training increase, an individual's competence in their profession will subsequently increase. This study sought to evaluate recent graduates' satisfaction with the pedagogical content knowledge received during their teacher preparation training. Rice and Kitchel (2015) determined that some preservice educators are unsatisfied with their content knowledge. If teacher preparation programs can improve the quality, quantity, and transferability of the content knowledge presented to preservice educators, it could increase their confidence and reduce attrition.

Methods

This study utilized a qualitative phenomenological case study design to address the study's research objective. The population for this study included recent agricultural teacher preparation graduates from any preparation program nationally. Post-secondary department heads were solicited for a list of recent program graduates and their email. The researchers emailed those recent graduates and asked for participation in a 30-minute semi-structured interview (Marriam & Tisdell, 2016). Additionally, the researchers' professional connections

were leveraged to identify other potential participants. A total of fifteen ($f = 15$) recent graduates accepted the invitation for an interview. The researchers created five questions to guide the semi-structured interviews, including 1.) “Upon entering the classroom, which agricultural content area did you feel the most confident to teach and why?” 2.) “Upon entering the classroom, which agricultural content area did you feel the least confident to teach and why?” 3.) “In your preparation program, were there any content classes that you felt were ineffective in building your pedagogical content knowledge?” 4.) “As a new teacher, how often do you reference knowledge from college coursework to teach?” 5.) “If you could provide one piece of advice to your department head to improve their preparation program what would it be and why?”.

Guided by a naturalistic approach (Lincoln & Guba, 1985), fifteen ($f = 15$) 30-minute semi-structured interviews were conducted with eight ($f = 8$) participants from New Mexico, two ($f = 2$) from Montana, one ($f = 1$) from Alabama, one ($f = 1$) from Minnesota, one ($f = 1$) from Maryland, one ($f = 1$) from Oklahoma, and one ($f = 1$) from North Carolina. The interviews were conducted over Zoom. The researchers used an inductive coding process utilizing open and axial coding followed by theoretical coding to analyze the data once saturation was met (Bryman, 2016). To further improve trustworthiness, data triangulation occurred by analyzing field notes, a reflexive journal, and interview transcriptions. The interviews were transcribed using Microsoft Word, and the researchers conducted member checking by sending the transcript to each participant to improve confirmability further. The fifteen interviews provided thick, rich descriptions that met saturation and allowed the researchers to identify themes and subthemes. Exemplary statements made by participants were utilized to support each theme.

Results, Conclusions, and Recommendations

The themes that emerged from the interviews indicate that recent graduates believe they would have benefited from transitional courses that helped them turn their content knowledge into pedagogical content knowledge. Some participants indicated that they would have benefited from more in-depth content courses (M3, F6, M6), while others wished they had been required to specialize in an AFNR area (M5) rather than trying to become “a jack of all trades but a master of none” (M3). Two others (F4, F5) shared that they felt the most confident teaching an Intro to Agriculture course rather than one specific content area because it touched primarily on the basics that they had learned in their college content courses. The reoccurring responses included the background of the individual before entering their teacher preparation program and the pathway or courses they gravitated toward within the post-secondary setting. Interviewees (M1, M2, M3, M5, M6, F2, F3, F6, F7) identified different perceived needs for improvement of the content courses in their teacher preparation programs, but each agreed that change needs to happen to prepare future educators better. While some (M3, M6, F6, F7) felt that the content they learned in college was adequate, they expressed concerns about being able to apply and share that knowledge in the classroom. Several individuals (M3, M7, F3, F5, F6, F7) cited that they would have greatly benefited from entering the classroom earlier and obtaining more hands-on experiences in their teacher preparation program. Multiple interviewees expressed concern about their abilities to adequately operate their school-based agricultural education programs from a business perspective (F1, F4, F8, M3, M4, M5, M7). Additionally, several (M3, M4, M5, M7) indicated that rather than experiencing ineffective content courses, they felt that some of their educational theory, diversity, and differentiation courses were ineffective or unrelatable to their classroom experiences. The researchers recommend that teacher preparation programs identify

gaps in their coursework. If teacher preparation programs can close these gaps, it could improve the education and specialized training received by program graduates, improve their human capital (Becker, 1993), and reduce their risk of attrition.

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