

**Rooted in Reflection: Strengthening Field Experiences in Agricultural Education**

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## Introduction

Field teaching experience is a fundamental component of agricultural education, allowing preservice teachers to apply the theoretical knowledge of pedagogy in a real-world setting. Teacher attrition rates have doubled in the past fifteen years, and the cost of teacher turnover is an estimated 4.9 billion dollars (Rice & Kitchel, 2015). Researchers have argued that the student teaching “experience” plays a significant role in the formation of attitudes and perceptions of preservice teachers (Harlin, Edwards, & Briers, 2002). Improved content knowledge and preparation could be one way to counteract the teacher’s attrition problem. (Rice & Kitchel, 2015). Kolb (1984) expressed the importance of reflection during the experiential learning process discussing that “knowledge results from the combination of grasping experience and transforming it” in a process that heavily emphasizes using reflection. The ability for preservice teachers to do this prior to teaching at their placement can give them a needed opportunity to identify strengths and weaknesses. This challenge examines the impact of reflection during a one class period of teaching experience on preservice teachers at Texas Tech University the last semester prior to going full-time to their required semester of student teaching placement.

## How it works

Preservice teachers at Texas Tech University are required to complete a Methods of Teaching Course as a part of the degree requirements. This course identifies various teaching methods and the best practices of pedagogy. However, due to time constraints, it is challenging to provide preservice teachers with the opportunity to deliver a complete lesson to high school students prior to student teaching. To address this gap, a field teaching experience was added to the course, providing preservice teachers with critical hands-on experience before their full-time student teaching placement. This component offered ample opportunities for feedback and reflection, enabling the teachers to adjust their teaching methods and practices.

Over the course of one month, preservice teachers at Texas Tech University were assigned a specific class, course description, and lesson topic to teach at a local secondary career and technical education school. They began the process by submitting a first draft of their lesson plan, which was reviewed by professors. The feedback focused on identifying areas for improvement, providing guidance on how to strengthen their lesson plan, and ensuring it was set up for success. After making revisions based on the feedback, the preservice teachers resubmitted their lesson plans for final review, ensuring all necessary details were included before teaching.

Once approved, the preservice teachers delivered their complete lesson in the assigned class, recording the entire session to review afterward. Following the lesson, they watched the recording and completed a reflective assignment, analyzing their performance. The reflection required them to assess their teaching methods, classroom management strategies, and the effectiveness of achieving their desired outcomes. It also prompted them to identify strengths and areas for growth. The reflection encouraged the application of their learning about teaching theories, instructional methods, and pedagogy in a real-world setting, while also guiding them to propose improvements for future teaching experiences in the course and their student teaching experience.

### **Results to date**

In the Fall 2024 Methods of Teaching Course at Texas Tech University, fifteen preservice teachers completed the field teaching experience, where they taught a complete lesson at the Lubbock ISD AgriStem Center. The preservice teachers reflected on their experience in written paper format after watching their recorded lesson. They were asked to discuss their experience as a whole, identify areas of strength and areas of growth, as well as recommend changes. Some stated, “overall, having the opportunity to teach at the STEM center was extremely beneficial”, and “gaining the experience of teaching in front of a real high school ag classroom allowed me much-needed practice before teaching at the Lubbock ISD AgriStem Center.” A student reported that this opportunity has a pivotal role in allowing them to feel more confident before teaching at their placement in the future. A common theme of descriptors included “beneficial”, “fun, but difficult”, “necessary before teaching at their placement”, and “an important learning opportunity”. Additionally, the preservice teachers discussed being thankful for the experience and that it was eye-opening to be able to apply the methods that they were learning in a theoretical sense during lecture, into real practice when teaching their full lesson. Many of the sample identified that they recognized the importance of classroom management during the experience and how critical it is to student engagement and reaching the desired results. To conclude, every preservice teacher highlighted the importance of the field teaching experience and it being critical to better prepare them before student teaching at their placement and suggested improvements to enhance its effectiveness in future courses.

### **Future plans**

Texas Tech University plans to continue to incorporate the field teaching component into the Methods of Teaching course for all future course offerings with adjustments made from the participant feedback. Based on student feedback, it is recommended that students teach one lesson at the school they are observing prior to the teaching experience to make the opportunity teaching an unknown class more effective and enjoyable for all parties. Students also suggested a more organized and planned approach for their lesson planning purposes, including clear class sizes, class expectations that are already implemented, and clear directions for the preservice teachers, to improve overall clarity and effectiveness. It is also recommended to ensure adequate class time and lesson planning time is provided for future classes.

### **Costs/resources needed**

The costs associated with this field teaching experience are minimal other than the costs of materials to execute the lesson. The fifteen student teachers taught over a period of two days in three different agriculture classrooms with three different agricultural educators. Each preservice teacher taught a 45-minute block period, totaling 15 periods. Therefore, you need to plan enough time within the course to allow this to be implemented. Resources that need to be created are a lesson plan template and a list of clear instructions. Technology is strongly encouraged, as it was heavily used to create lesson resources. Lastly, it is crucial to partner with a school that is willing to accommodate a multitude of preservice teachers and their evaluators.

### References

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