

## Examining Student Teacher and Cooperating Teacher Reflective Practices

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### Introduction

Reflective practice is the process where individuals learn from their own experiences by examining their actions, assumptions, and outcomes (Osterman & Kottkamp, 2004). Reflective practice allows educators to consider their practices and make informed decisions to support student learning (Dewey, 1938). The process of reflecting on experiences to continuously learn is a core tenet of experiential learning (Kolb, 2015). Reflective practitioners adapt their classroom practices, improve teaching, and enhance student learning (Schön, 2017). Scholars propose that reflective practices allow teachers to examine their feelings and actions to improve practice (Moon, 2013), make evidence-based decisions about teaching (Larrivee, 2008), and respond to diverse educational environments (Brookfield, 2017).

Reflective practice is recognized as a crucial tool for teacher professional growth (Bolton & Delderfield, 2018; Moon, 2006, p. 200, 2013). Nduagbo & Casale (2023) found that reflective practice had a positive impact on teacher self-efficacy. In one instance, teachers reported positive impacts on their social-emotional understanding and well-being (Decker et al., 2023). In addition to supporting teachers' professional growth, reflective practice has been linked to improved instructional practice and student engagement (Miller, 2023). Further, reflective practice helps educators adapt to challenges by using innovative and transformative ideas (Sunar et al., 2024).

Reflective practice should be incorporated into teacher education programs to achieve consistent educational outcomes (Zajić et al., 2023). This recommendation aligns with a developmental approach to reflective practice, which posits that reflective thinking skills are not inherent but rather taught and developed through intentional exercise (Atkins & Murphy, 1993; Boud et al., 2013; King & Kitchener, 1994; Moon, 2006, 2013). Educators who regularly engage in reflection are more likely to experience improvement in their teaching abilities, develop more profound insights into their educational practices, and make informed decisions that positively impact their students and their professional journey (Brookfield, 2017).

Researchers have explored various aspects of reflection in SBAE, including in teacher preparation and early career teaching. In SBAE teacher preparation, previous research provides insights on modalities of reflection (Blackburn et al., 2015; Epler et al., 2013; Lambert et al., 2014), collaborative reflection (Paulsen et al., 2016; Sellick, 2016), reflection in field experiences (Coleman et al., 2021; Smalley & Retallick, 2011), reflection in instructional planning and design (Ball & Knobloch, 2004; Greiman & Bedtke, 2008) and reflection in cross-cultural settings (Hains & Hains, 2021). Research shows that early career SBAE teachers benefit from reflective practice (Ermiş et al., 2022; Meder et al., 2018). Further, empirical work supports that reflective practice enables SBAE teachers to assess and improve their teaching methods (Coleman et al., 2021; Meder et al., 2018; Paulsen et al., 2016).

The purpose of this exploratory case study is to understand the reflective practices of Student Teachers (STs) and Cooperating Teachers (CTs) in SBAE teacher preparation. The question driving this work is, "What are ST and CT experiences with reflective practice?" This work

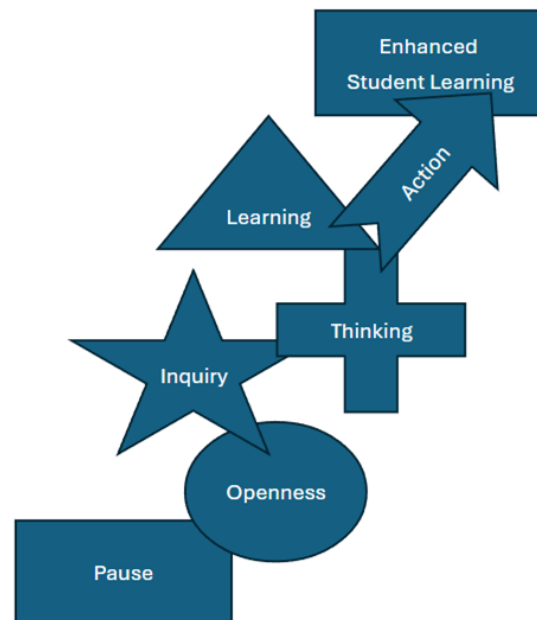
contributes to a foundational understanding of how agricultural educators process their teaching experiences to develop their teaching skills and enhance student learning.

### Theoretical Frameworks

Reflective practice is a principal component of preparing educators who continuously improve their teaching. As a professional skill, reflection can be developed through teaching and practice. Teacher education programs are positioned to foster the development of reflective practice during ST preparation. When it comes to applying reflective practice to educational contexts, York-Barr et al. (2005) propose a “Theory of Action for Reflective Practice” (Figure 1). They contend that action leading to enhanced student learning is the ultimate desired outcome of educators’ reflective practice, which results from a process that includes taking time to pause, being open to changing classroom practices, inquiring into new knowledge, thinking about an issue of practice, and learning from newly acquired knowledge.

**Figure 1**

*Theory of Action for Reflective Practice*



*Note.* Figure adapted from York-Barr, et al. (2005) (p. 9).

### Methods

In this exploratory case study, reflective practice is examined as an educational process. The research is grounded in a constructivist paradigm and employs qualitative interviews to study SBAE teachers’ experiences. The research drew on Merriam’s (1998) case study approaches and examines the reflective practices of STs and CTs in SBAE. This research context was SBAE in the United States in the spring academic term of 2025. Participants were recruited using convenience sampling methods, and invitations were sent to 20 teacher preparation institutions in 15 states. Recruitment resulted in 12 enrollments (7 STs and 5 CTs). Participants represented six teacher preparation programs from five states, including Illinois, Iowa, Kentucky, Michigan, and Missouri.

The procedures for this research were approved by Iowa State University Institutional Review Board for human-subjects research. Participants were recruited via email and sent a Microsoft Form to provide their consent. A 40-minute semi-structured interview protocol was developed, with an average interview duration of 37 minutes. The interview protocol was piloted and revised after conducting three practice interviews. The interview focused on participants' experiences with reflective practice, including various aspects of their reflective processes, such as their strategies for reflection, the role of collaborative reflection, and the benefits and challenges of reflecting.

Interview data were recorded and transcribed using Zoom. Participants received a copy of the interview transcripts for member-checking and were asked to review the study's findings to confirm the results. This ongoing dialogue added trustworthiness to the research by improving the internal validity of the findings (Merriam, 1998). Participant correspondence, field notes, and reflexive journals were used to achieve triangulation and referenced to improve the reliability and internal validity of the data analysis. In addition, the investigator's positionality was examined, and an audit trail was maintained to strengthen reliability. Finally, external validity was addressed by providing rich, thick descriptions of the research situation; including participants who represent a typical situation; and maximizing variation in a multisite design.

Thematic analysis of the data drew on strategies from narrative inquiry (i.e., Riessman, 2008). Open coding was conducted using Dedoose, and theory was used to inform the interpretation of the findings. Thematic coding was achieved in three rounds, which generated codes, categories, and themes. The first round of data analysis resulted in 74 codes. In round two coding, the codes were iteratively refined into 12 categories. Four themes emerged in the final round of coding.

## **Findings**

This study examines ST and CT reflective practices. Analysis resulted in four themes: benefits of reflective practice, challenges in reflective practice, student teachers' reasons for reflection, and individual tools versus collaborative reflection. The findings are reported by theme.

### **Benefits of Reflective Practice**

STs and CTs identified the same benefits of reflecting on their teaching, including improvements to teaching outcomes, individual satisfaction, gaining new perspectives, and having a plan for instruction. As STs and CTs saw improvements in their teaching, they also benefited from feeling more confident in their teaching abilities. Maria (CT) characterized the benefits of reflective practice this way: "The more I teach a class, the more confident I am in the materials, the better the lessons get, and the more kids get out of it."

Participants shared that their reflective practice supported their individual satisfaction with teaching. Kelsey (CT) emphasized that improvements to student outcomes from reflective practice resulted in individual satisfaction. She said, "There are lots of benefits, but for me, it's more the high of them staying engaged, and it's more student led." Lane (ST) described reflective practice as a tool to achieve being a more dynamic educator and to avoid stagnation.

Gaining perspectives from others was another benefit of reflective practice. James (CT) talked about having a group of teachers with which to discuss his teaching practices. Matthew (CT) said "having one person in the room" was "the main obstacle to overcome" in being a teacher, and how having an ST allowed for "the reflection piece of talking through [lessons] and overcoming

those obstacles.” Anna (ST) said talking with her peers helped her “realize that there’s going to be good days and bad days” and “it’s okay not to be perfect all the time.”

Reflective practice helped STs and CTs plan for teaching. Lane (ST) said, “Driving time allows me to plan what I would want that day to look like before I get to the classroom and write down the plans fully.” Kelsey (CT) described that reflecting on her plan gave her the satisfaction of a “more organized, better practice classroom” where “we get further in the curriculum” and “students get more excited about what we’re doing.”

### **Challenges of Reflective Practice**

STs and CTs faced four shared challenges with their reflective practice: reflecting in isolation, not teaching repeated courses, a lack of time and energy to reflect, and negative reflection. STs shared additional challenges related to not knowing how to reflect and situational stressors.

Matthew (CT) described challenges related to being isolated in the reflective process as “[getting] stuck in our own train of thought.” Lane (ST) used descriptors like “brain fog” and “blindness” to describe the risks of reflecting in isolation. Madison (ST) directly stated, “I don’t have a good way to reflect by myself.” She goes on to say, “I won’t get feedback on my reflection to know if I’m doing it right, so then I would know if I’m reflecting the right way... I can get easily lost there.”

STs and CTs discussed having limited opportunities to teach the same class twice in one day, which restricted their ability to reflect on their teaching and make improvements. Instead, they reflect on what they can do differently next time, or on how they can make changes to improve the students’ experience for the next lesson. Matthew (CT) said it this way, “If you only have one section of class, you might not teach that lesson again until next semester or next year... reflection helps more when it’s recent.”

Lack of time and energy to reflect was another consistent challenge STs and CTs faced. Bailey (ST) recognized that she had less time to reflect as the semester progressed. She shared, “It takes up more time than it did when I was doing one or two lessons a week.” Madison (ST) said, “I find it hard to consciously reflect on the classes when you’re teaching back-to-back-to-back classes... I get them mixed together.”

Negative reflection, such as being self-critical and a lack of constructive feedback, were two additional challenges STs and CTs identified with reflective practice. Maria (CT) said, “I’m probably overly critical about my teaching.” Anna (ST) put it this way, “You tend to think about all the negatives. This is all you remember from that class period.” Madison (ST) shared challenges with both self-criticism and lack of constructive feedback, “You can very easily get down on yourself and never think you’re improving something... I would acknowledge something I needed to work on, but then I wasn’t getting feedback on how to improve that.”

STs faced additional challenges of not knowing how to reflect and situational stressors. STs struggled with the lack of structure to guide their reflective practice. James (CT) validated this struggle in retrospective reflection by sharing, “never once did we talk about once [a lesson’s] done how to go back and look at it, or how to evaluate your program on a larger scale... it came out of necessity.” Madison (ST) said, “I don’t know of any reflection tools. If I did, I would use them.” When Melissa (ST) reached out to experienced teachers for support, she said they told her, “You just learn to walk yourself through a reflection because there’s not a tool or a guide.”

## **Student Teachers' Reasons for Reflection**

STs used reflection for unique purposes compared to CTs. STs shared their experiences using reflective practice to process their feelings, reflect on self-growth, and reflect on positive things. STs dedicated time to affective reflection after the school day. Courtney (ST) shared, "I take my drive time to and from school to reflect on how the day went and how I feel about what happened throughout the day before I can be at peace and let the day go." STs processed their emotions with their family and friends or individually in personal journals.

When sharing what they reflect on, STs talked about reflecting on themselves for self-growth. Lane (ST) said, "I think about my own growth. That sounds a little selfish, but I suppose reflection in itself is selfish in a sense... I do think about my personal growth." Courtney (ST) reflects on herself and her student for mutual benefit. She said she reflects to figure out, "How can I take all of those things and make them into something that benefits me, but also benefits my students and my classroom environment?"

STs reflected on the positive experiences that helped them overcome the challenges of student teaching. Lane (ST) said, "I feel my emotions, and I'll feel them for a while after something's happened. If I've had a really good day at school, I'll keep that emotion with me and I'll think back, 'What were the positive things that happened to help bring me up?'" STs reflected on how they felt about how lessons went, as well as how students felt about their learning experience.

## **Individual Tools versus Collaborative Reflection**

While STs and CTs both used tools for reflection, STs used more individual reflection tools compared to CTs and were more likely to propose innovative tools for individual reflection. Tools used for reflection included discussion and observation, physical tools such as journals, and digital tools such as videos, slide decks, iPads, learning platforms, and web resources. Other tools included logs or records, sticky notes, social media platforms.

While STs used a broader range of tools for reflection, they also leveraged fewer relationships for collaborative reflection. CTs had more robust professional networks to draw on for engaging in collaborative reflection. CTs' collaborative reflection was based on discussion. CTs kept in contact with their university supervisors and their CTs to engage in reflective practice. In addition to these groups, CTs reach out to co-teachers, mentors, and stakeholders.

## **Conclusion**

The Theory of Action of Reflective Practice espouses that enhanced student learning is the desired outcome of being a reflective practitioner (York-Barr et al., 2005). The reflection interviews revealed that STs and CTs teachers highlighted enhanced student learning as a benefit of reflective practice, but also faced several challenges with reflecting effectively.

SBAE teachers reported a lack of training on how to reflect. James (CT) shared that he "had to figure it out on [his] own" and that if he had the knowledge sooner, he "could have helped [his] kids five years earlier." He said, "That's something I would like to see for these teachers- we need to give them the tools to be successful." Several studies in SBAE support the integration of intentionally guided, standardized, and formalized tools and strategies for reflective practice (Blackburn et al., 2015; Paulsen et al., 2016; Smalley & Retallick, 2011). Teacher preparation

programs should provide training for STs and CTs that includes structured guidance on reflective practice, including resources for supporting reflective practices.

This study highlights a variety of tools STs and CTs teachers use for reflective practice. STs used more individual reflection tools, while CTs leveraged a broader professional network to engage in collaborative reflection. Scholars suggest that reflection is most effective when it is employed individually and collaboratively (York-Barr et al., 2005). In SBAE, collaborative reflection and peer networks have been shown to positively support reflective practices (Epler et al., 2013; Sellick, 2016). These findings suggest that teacher preparation programs should support STs in collaborative reflection while equipping CTs with individual reflection strategies.

### References

- Atkins, S., & Murphy, K. (1993). Reflection: A review of the literature. *Journal of Advanced Nursing, 18*(8), 1188–1192. <https://doi.org/10.1046/j.1365-2648.1993.18081188.x>
- Ball, A. L., & Knobloch, N. A. (2004). An exploration of the outcomes of utilizing ill-structured problems in pre-service teacher preparation. *Journal of Agricultural Education, 45*(2), 62–71. <https://doi.org/10.5032/jae.2004.02062>
- Blackburn, J. J., Robinson, J. S., & Kacal, A. (2015). Determining the effects of reflection type and cognitive style on students' content knowledge. *Journal of Agricultural Education, 56*(3), 195–209. <https://doi.org/10.5032/jae.2015.03195>
- Bolton, G. E. J., & Delderfield, R. (2018). *Reflective practice: Writing and professional development*. SAGE Publications.
- Boud, D., Keogh, R., & Walker, D. (2013). *Reflection: Turning experience into learning*. Taylor and Francis.
- Brookfield, S. D. (2017). *Becoming a critically reflective teacher*. Jossey-Bass.
- Coleman, B. M., Ferand, N. K., Bunch, J. C., & Israel, G. D. (2021). Examining preservice teachers' performance during a 14-week student teaching experience: A longitudinal study. *Journal of Agricultural Education, 62*(3), 258–274. <https://doi.org/10.5032/jae.2021.03258>
- Decker, K. B., Cook, G. A., & Brophy-Herb, H. (2023). Students' experiences of reflective practices as pedagogy in early childhood higher education. *Journal of Early Childhood Teacher Education, 44*(3), 261–287. <https://doi.org/10.1080/10901027.2021.2020938>
- Dewey, J. (1938). *Experience and education*. Simon and Schuster.
- Epler, C. M., Drape, T. A., Broyles, T. W., & Rudd, R. D. (2013). The influence of collaborative reflection and ThinkAloud protocols on pre-service teachers' reflection: A mixed methods approach. *Journal of Agricultural Education, 54*(1), 47–59. <https://doi.org/10.5032/jae.2013.01047>

- Ermis, G. L., Lay, A. M. D., Freeman, S., Thomason, J., & Spiess, M. (2022). Pandemic pedagogy: How early career agriculture teachers reflect on their practice. *Journal of Agricultural Education*, 63(2), 71–87. <https://doi.org/10.5032/jae.2022.02071>
- Greiman, B. C., & Bedtke, M. A. (2008). Examining the instructional planning process taught in agricultural education teacher preparation programs: Perspectives of university faculty. *Journal of Agricultural Education*, 49(4), 47–59. <https://doi.org/10.5032/jae.2008.04047>
- Hains, B. J., & Hains, K. D. (2021). An emotional rollercoaster: The emotional and pedagogical impact of cultural experiences on agricultural education undergraduate students. *Journal of Agricultural Education*, 62(3), 232–247. <https://doi.org/10.5032/jae.2021.03232>
- King, P. M., & Kitchener, K. S. (1994). *Developing reflective judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults*. Jossey-Bass.
- Kolb, D. A. (2015). *Experiential learning: Experience as the source of learning and development*. FT Press.
- Lambert, M. D., Sorensen, T. J., & Elliott, K. M. (2014). A comparison and analysis of preservice teachers' oral and written reflections. *Journal of Agricultural Education*, 55(4), 85–99. <https://doi.org/10.5032/jae.2014.04085>
- Larrivee, B. (2008). Development of a tool to assess teachers' level of reflective practice. *Reflective Practice*, 9(3), 341–360. <https://doi.org/10.1080/14623940802207451>
- Meder, A., Smalley, S., & Retallick, M. (2018). Evaluating first year agriculture teachers' use of reflection. *Journal of Agricultural Education*, 59(2), 289–304. <https://doi.org/10.5032/jae.2018.02289>
- Merriam, S. B. (1998). *Qualitative research and case study applications in education. Revised and expanded from "Case study research in education."* Jossey-Bass Publishers.
- Miller, L. S. (2023). Supervision to support reflective practices. *Journal of Educational Supervision*, 6(1), 1–18. <https://doi.org/10.31045/jes.6.1.1>
- Moon, J. A. (2006). *Learning journals: A handbook for reflective practice and professional development*. Routledge. <https://doi.org/10.4324/9780203969212>
- Moon, J. A. (2013). *Reflection in learning and professional development: Theory and practice*. Routledge. <https://doi.org/10.4324/9780203822296>
- Nduagbo, K., & Casale, C. (2023). Preservice teachers' reflective practices, self-efficacy, and professional growth. *Experiential Learning and Teaching in Higher Education*, 6(1), 56–66. <https://doi.org/10.46787/elthe.v6i1.3555>
- Osterman, K. F., & Kottkamp, R. B. (2004). *Reflective practice for educators: Professional development to improve student learning*. Corwin Press.

- Paulsen, T. H., Clark, T. K., & Anderson, R. G. (2016). Using the tuning protocol to generate peer feedback during student teaching lesson plan development. *Journal of Agricultural Education*, 57(3), 18–32. <https://doi.org/10.5032/jae.2016.03018>
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. SAGE.
- Schön, D. A. (2017). *The reflective practitioner: How professionals think in action*. Routledge. <https://doi.org/10.4324/9781315237473>
- Sellick, S. A. (2016). *Experiences of agricultural education preservice teachers engaging in critical friendships*. University of Arkansas.
- Smalley, S. W., & Retallick, M. S. (2011). Purposes, activities, and documentation of early field experience in agricultural teacher education: A national delphi study. *Journal of Agricultural Education*, 52(3), 100–109. <https://doi.org/10.5032/jae.2011.03100>
- Sunar, P. K., Pant, B. P., & Dahal, N. (2024). Knowing, doing, and becoming reflective practitioners: A narrative inquiry of STEAM educators. *Alberta Journal of Educational Research*, 70(1), 114–129. <https://doi.org/10.55016/ojs/ajer.v70i1.77719>
- York-Barr, J., Sommers, W. A., Ghere, G. S., & Montie, J. (2005). *Reflective practice to improve schools: An action guide for educators*. Corwin Press.
- Zajić, J. O., Maksimović, J. Ž., & Sretić, S. R. (2023). Reflective practice: The online teaching quality in the time of the coronavirus pandemic. *Problems of Education in the 21st Century*, 81(2), 269.