

Teach for a Day, Believe for a Career: The Power of Practice Teaching on Preservice Teacher Self-Efficacy

Donavan Phoenix, University of Nebraska-Lincoln

Aaron McKim, Michigan State University

Catlin Goodwin, Michigan State University

Becky Haddad, University of Nebraska-Lincoln

Introduction and Literature Review

Self-efficacious teachers, those confident in their abilities to successfully execute tasks, are more likely to foster educational environments conducive to learning (Duffin et al., 2012) and remain in the profession (McKim & Velez, 2016). In this way, self-efficacy supports two key goals: retaining teachers and fostering quality learning environments. In this study, we examined the self-efficacy and career confidence of preservice teachers before and after engaging in a mock school day as a high school teacher. Prior research found school-based agricultural education (SBAE) preservice teachers often hold higher self-efficacy compared to peers in other disciplines (Gates et al., 2020), and focused learning experiences (e.g., courses, course activities) further enhance this self-efficacy (Albritton et al., 2023; Sheehan & Moore, 2019; Toombs et al., 2022). Our study builds on this work by exploring how a novel, high-pressure mock school day may support skill application in an authentic setting, thereby addressing the theory-to-practice gap often cited in teacher education (Darling-Hammond, 2009; Southgate et al., 2013). We also contribute to scholarship on SBAE teaching intentions, which is driven by the ongoing need for qualified teachers (Foster et al., 2025). Preservice teachers often perceive teaching requires expert skill and recognize teaching agriculture demands hard work and dedication (Hainline et al., 2025; Lawver & Torres, 2011). Furthermore, preservice teachers are motivated by the potential to provide desirable opportunities (e.g., leadership development, agricultural content, diverse learning environments) to students and communities (Eck et al., 2021). Our work contributes to these lines of inquiry by investigating a mock school day and the self-efficacy and career confidence of participants.

Theoretical Framework

We employed Social Cognitive Theory as the theoretical framework for this study (Bandura, 1977); specifically, the central concept of self-efficacy. Self-efficacy refers to an individual's assessment of their ability to successfully execute a course of action to achieve an intended outcome (Bandura, 1986). Self-efficacy has been used extensively in SBAE due to its association with positive outcomes for learners and educators (McKim & Velez, 2016). Additionally, scholars gravitate to self-efficacy because it is malleable. Specifically, self-efficacy can be changed via four types of experiences: mastery, vicarious, social persuasion, and physiological and emotional states (Bandura, 1986; McKim & Velez, 2016). A simulated day as an SBAE teacher is replete with opportunities for these four types of experiences. *Mastery* experiences entail an individual completing the task (Bandura, 1986; McKim & Velez, 2016), possible as preservice teachers taught high school students during the simulated day. Preservice teachers also had opportunities to observe their peers' preparation. This provided *vicarious* experiences: individuals observing contemporaries attempting a task (Bandura, 1986; McKim & Velez, 2016). Furthermore, *social persuasion* entails an individual being told their potential or observed performance on a task (Bandura, 1986; McKim & Velez, 2016). This could include preservice teachers' interactions with facilitators and mentors during the simulated day. Finally,

preservice teachers navigated internal reactions before, during, and after the simulated school day. In other words, they experienced *physiological and emotional* states in considering the task (Bandura, 1986; McKim & Velez, 2016).

Research Purposes and Objectives

The purpose of our study was to determine the extent preservice teacher self-efficacy changed before and after participating in a mock school day experience, Husker High School Day (HHSD). Additionally, we sought to determine whether participating in the experience was related to preservice teachers' confidence in pursuing a teaching position after graduating from the University of Nebraska-Lincoln (UNL). We set four objectives to pursue our research purposes:

1. Determine the self-efficacy of UNL preservice teachers before participating in the mock school day experience.
2. Determine the self-efficacy of UNL preservice teachers after participating in the mock school day experience.
3. Compare preservice teacher self-efficacy before and after participating in HHSD.
4. Examine the relationship between preservice teachers' self-efficacy and their perceived likelihood of teaching.

Methods

We conducted a census of the target population, which included juniors enrolled in the SBAE and skilled and technical sciences (STS) teacher preparation program at UNL during the 2024-2025 academic year. This population was selected because they participated in the mock school day as a requirement of their Methods of Instruction course. Although small compared to typical sample size guidelines (Wilson VanVoorhis & Morgan, 2007), these participants represented 100% of our population ($N = 23$).

We employed a single-group pre-experimental design by measuring participant self-efficacy before and after the mock school day intervention (Marsden & Torgerson, 2012; Privitera, 2012). We measured self-efficacy using the Ohio State Teacher Efficacy Scale (OSTES; Tschannen-Moran & Woolfolk Hoy, 2001). We used the long form, as recommended by the instrument developers, because the factor structure for preservice teacher scores has lacked clarity, thereby requiring the full 24-item scale to distinguish between the three OSTES domains: student engagement, instructional strategies, and classroom management (Tschannen-Moran & Woolfolk Hoy, 2001). Participants responded to all items in the construct using a 9-point Likert scale (1 = *Nothing*, 3 = *Very Little*, 5 = *Some Influence*, 7 = *Quite a Bit*, 9 = *A Great Deal*) (Tschannen-Moran & Woolfolk Hoy, 2001). We included an additional item to measure participants' confidence in pursuing an SBAE or STS teaching position post-graduation, which we referred to as likelihood to teach. That is, the extent to which participants saw themselves entering the SBAE or STS teaching profession. Participants responded using a 6-point Likert scale (1 = *Low Confidence*, 6 = *High Confidence*).

We administered the OSTES to the participants four times during our study: (1) at the beginning of the semester, (2) the day before HHSD, (3) the day after HHSD, and (4) at the end of the semester. Nearly all participants ($n = 22$) completed the OSTES via our learning management system, resulting in a 95.6% response rate. For this abstract, we focused on data

from the day before and the day after, as these time points are most closely tied to our questions related to a specific simulated experience.

We analyzed all data using Microsoft Excel, and we set significance levels *a priori* at 0.05. We calculated descriptive statistics to address objectives one and two, regarding the pre- and post-mock school day self-efficacy scores. We addressed objective three using a paired samples *t*-test to compare the pre- and post-mock school day self-efficacy scores (Ross & Wilson, 2004; Wilkerson, 2008). We used Pearson's Correlation Coefficient to examine the relationship between participants' self-efficacy scores and likelihood to teach, addressing objective four (Privitera, 2012). We calculated Cronbach's alpha to ensure internal consistency for both OSTES administrations and found comparable results to Tschannen-Moran and Woolfolk Hoy's (2001) original findings (Table 1).

Table 1

Reliability of the OSTES from this Study, Compared to Reliability of the Instrument's Developer

Scale	Before α	After α	Tschannen-Moran and Woolfolk Hoy (2001) α
Overall Self-Efficacy	0.91	0.96	0.90
Student Engagement	0.79	0.91	0.81
Instructional Strategies	0.88	0.92	0.86
Classroom Management	0.63	0.92	0.86

Note. > 0.9 = Excellent, 0.8-0.9 = Good, 0.7-0.8 = Acceptable, 0.6-0.7 = Questionable, 0.5-0.6 = Poor, < 0.5 = Unacceptable (George & Mallery, 2003).

Results

Research objective one was to determine the self-efficacy of participants before HHSD. Participants reported moderate to high levels of self-efficacy across all domains (Table 2), with the highest confidence in classroom management ($M = 6.19$, $SD = 0.81$) and the lowest in instructional strategies ($M = 6.04$, $SD = 0.20$).

Research objective two focused on participants' self-efficacy after the mock school day. Following the experience, participants continued to report high self-efficacy (Table 2): classroom management ($M = 6.37$, $SD = 0.24$) and instructional strategies ($M = 6.35$, $SD = 0.16$) remained the strongest, while student engagement remained the lowest ($M = 6.10$, $SD = 0.42$).

Table 2

Mean OSTES Levels

Scale	Self-Efficacy Before		Self-Efficacy After	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Overall Self-Efficacy	6.09	0.55	6.26	0.31
Student Engagement	6.09	0.56	6.10	0.42
Instructional Strategies	6.04	0.20	6.35	0.16
Classroom Management	6.19	0.81	6.37	0.24

Research objective three utilized paired samples *t*-tests to compare changes in self-efficacy before and after the intervention (Table 3), the recommended method for comparing two related means (Mara & Cribbie, 2012). We found a statistically significant increase in self-efficacy from pre- to post-instrument administrations for both overall self-efficacy and instructional strategies. Additionally, the effect size, reported using Cohen's *d*, was moderate for overall self-efficacy and large for instructional strategies. We observed no statistically significant change in student engagement and classroom management.

Table 3

Self-Efficacy Comparison Before and After Mock School Day

Scale	<i>t</i>	Cohen's <i>d</i>
Overall Self-Efficacy	-2.074*	0.381
Student Engagement	-0.206	0.012
Instructional Strategies	-4.660*	1.710
Classroom Management	-0.864	0.304

Note. * $p < 0.05$.

Finally, objective four examined the relationship between preservice teachers' self-efficacy and their likelihood to teach. Participants' self-reported likelihood to teach decreased insignificantly ($t(21) = 0.253, p = 0.401$) from before ($M = 4.50, SD = 1.74$) to after ($M = 4.46, SD = 1.82$) the mock school day, and pre-mock school day overall self-efficacy scores showed no relationship with their likelihood of teaching ($r(21) = 0.30, p = 0.177$). Conversely, Pearson's Correlation Coefficient between post-mock school day overall self-efficacy and likelihood to teach revealed a strong, statistically significant, positive relationship ($r(21) = 0.679, p = 0.001$).

Conclusions and Implications

The accuracy of our results was likely impacted by the self-reported nature of the OSTES (Groves et al., 2009; Keese et al., 2022); however, given the purpose and design of our study, collecting data in ways other than self-reporting would have been impractical. While our sample was small, it is representative of our population, and others have demonstrated analyses such as paired samples *t*-tests, even with samples as small as two pairs, can yield reasonable results (de Winter, 2013). Fritz et al. (2012) concluded similarly, arguing effect sizes of at least 0.8 are interpretable with samples of $N = 6$. Nevertheless, future research with larger samples must examine how the nuances of simulated experiences develop preservice teacher self-efficacy.

Our findings offered meaningful implications for teacher education, especially in providing opportunities for preservice teachers to develop self-efficacy. The increase in overall self-efficacy suggested preservice teachers gained confidence as they were exposed to real challenges during the authentic, high-pressure mock school day experience. Moreover, the increase in self-efficacy within the instructional strategies domain showed HHSD might have been particularly effective in building instructional confidence, as it served as a capstone event where preservice teachers applied their preparation and practice in a high-stakes, classroom-like setting. These gains may have been driven by the presence of Bandura's (1986) four sources of self-efficacy found throughout the mock school day. Tasks such as taking attendance within a limited time, crafting six unique lesson plans, and facilitating instruction across multiple content areas provided preservice teachers with the opportunity to apply what they had been learning and

practicing in class to a novel, high-pressure setting. This bridged the theory-to-practice gap, possibly contributing to the boost in instructional confidence.

The lack of statistically significant change in the classroom management and student engagement domains led our team to wonder if these areas of teaching require more prolonged and scaffolded exposure to complex classroom dynamics. It may be possible single-event experiences, like our mock school day, do not afford enough depth for preservice teachers to process and grow in domains reliant on long-term teacher-student relationships or sustained behavioral routines, especially when the structure of the event emphasized planning and instructional delivery over classroom interaction, management, and engagement. Since preservice teachers worked with students across Nebraska, they had never met before; one day was likely not enough for them to build relationships and gain confidence in engaging students and managing the classroom. This raises important questions for our team: What can a single-day simulation reasonably accomplish? Should we focus these events intentionally on domains of self-efficacy they are best suited to develop, like instructional strategies? Moreover, we need to reconsider how we approach student engagement and management in these simulations, recognizing their structure may not have the capacity to support growth in these areas.

Finally, the strong positive correlation between post-mock school day self-efficacy and participants' likelihood to teach suggested the experience clarified the connection between confidence in teaching and career intent. Before the experience, self-efficacy and intent to teach were unrelated; afterward, those who felt more confident in their teaching abilities were also more likely to consider being a teacher. This shift implied our simulated school day may have helped participants connect their sense of teaching competence with their willingness to pursue teaching. In other words, feeling more capable in the role seemed to make the idea of becoming a teacher feel more realistic, achievable, and worth considering. Given national shortages in agricultural education (Foster et al., 2025), these findings indicate the need for future exploration of self-efficacy-building experiences in developing skills and cultivating teacher identities rooted in capability and a commitment to teaching.

Recommendations

Our findings provide clear direction for teacher educators seeking to design and facilitate experiences focused on developing preservice teacher self-efficacy. We anticipated stronger growth in these areas, yet we observed no statistically significant gains. This suggests single-day simulations, while valuable, may not develop self-efficacy across all domains. To support their intended purpose, simulations like ours should include structured opportunities for managing routines (e.g., taking attendance, communicating learning objectives), engaging with students (e.g., including students with diverse backgrounds, supervising lunch shifts), and reflecting on the experience in real time (e.g., mid-day and end-of-day debriefs to pause to share challenges, receive feedback, and adjust approaches). Ultimately, providing opportunities like our simulated school day can play an important role in teacher preparation. Further exploration is needed to understand how simulations can be embedded within a broader, scaffolded sequence of practice-based experiences, drawing on additional self-efficacy-building efforts, such as peer-to-peer coaching, video-based self-assessments, and structured reflection prompts. If we, teacher educators, wish to develop confident and capable teachers, we must provide opportunities for preservice teachers to apply their skills, build self-efficacy, and explore their interest in pursuing teaching as a career.

References

- Albritton, M., Roberts, T. G., DiBenedetto, C., & Bunch, J. C. (2023). Exploring how an integrated skills acquisition activity impacts the teaching ability and perceived self-efficacy to teach agricultural technical skills of preservice teachers. *Journal of Agricultural Education*, *64*(1), 156-170. <https://doi.org/10.5032/jae.2023.v64i1.35>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- de Winter, J. C. (2013). Using the students' t-test with extremely small sample sizes. *Practical Assessment, Research & Evaluation*, *18*(10), 1-12.
- Doebel, S., & Frank, M. C. (2024). Broadening convenience samples to advance theoretical progress and avoid bias in developmental science. *Journal of Cognition and Development*, *25*(2), 261-272. <https://doi.org/10.1080/15248372.2023.2270055>
- Duffin, L. C., French, B. F., & Patrick, H. (2012). The teacher's sense of self-efficacy scale: Confirming the factor structure with beginning pre-service teachers. *Teaching and Teacher Education*, *28*, 827-834. <https://doi.org/10.1016/j.tate.03.004>
- Eck, C. J., Toombs, J. M., Robinson, J. S. (2021). Intent to teach: Perspectives from pre-service agricultural education teachers. *Journal of Agricultural Education*, *62*(1), 212-226. <https://doi.org/10.5032/jae.2021.01212>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2015). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Foster, D. D., Smith, A. R., Rogers, A., Lawver, R. G., & Spiess, M., (2025). National Agricultural Education Supply and Demand Project [data set]. American Association for Agricultural Education. <http://nsd.aaeonline.org>.
- Fritz, C. O., Morris, P. E., & Richler, J. J. (2012). Effect size estimates: Current use, calculations, and interpretation. *Journal of Experimental Psychology: General*, *141*, 2-18. <https://doi.org/10.1037/a0024338>
- Gates, H. R., Shoulders, C. W., Johnson, D. M., Edgar, D., & Blythe, J. M. (2020). Preservice agricultural education and secondary education teachers' self-efficacy and professional identity. *Journal of Agricultural Education*, *61*(3), 112-127. <https://doi.org/10.5032/jae.v61i3.2332>
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Allyn & Bacon.
- Groves, R. M., Fowler, J. F., Couper, M. P., Lepkowski, J.M., Singer, E., & Tourangeau, R. (2009). *Survey methodology* (2nd ed.). John Wiley and Sons.

- Hainline, M. S., Smalley, S., & Ramstad, J. (2025). Pre-service teachers' motivation to pursue a career as an agricultural education teacher. *Journal of Agricultural Education*, 66(2), Article 2. <https://doi.org/10.5032/jae.v66i2.2901>
- Keese, J., Waxman, H., Asadi, L., & Graham, M. (2022). Retention intention: Modeling the relationships between structures of preparation and support and novice teacher decisions to stay. *Teaching and Teacher Education*, 110, 103594. <https://doi.org/10.1016/j.tate.2021.103594>
- Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, 8(1), 1-28. <https://doi.org/10.1525/collabra.33267>
- Lawver, R. G., & Torres, R. M. (2011). Determinants of pre-service students' choice to teach secondary agricultural education. *Journal of Agricultural Education*, 52(1), 61-71. <https://doi.org/10.5032/jae.2011.01061>
- Mara, C. A., & Cribbie, R. A. (2012). Paired-samples tests of equivalence. *Communications in Statistics – Simulation and Computation*, 41(10), 1928-1943. <https://doi.org/10.1080/03610918.2011.626545>
- Marsden, E., & Torgerson, C. J. (2012). Single group, pre- and post-test research designs: Some methodological concerns. *Oxford Review of Education*, 38(5), 583-616. <https://doi.org/10.1080/03054985.2012.731208>
- McKim, A. J., & Velez, J. J. (2016). An evaluation of the self-efficacy theory in agricultural education. *Journal of Agricultural Education*, 57(1), 73-90. <https://doi.org/10.5032/jae.2016.01073>
- Privitera, G. J. (2012). *Statistics for the behavioral sciences*. Sage Publications, Inc.
- Ross, A., & Wilson, V. L. (2004). *Basic and advanced statistical tests: Writing results sections and creating tables and figures*. Sense Publishers.
- Sheehan, C. Z., & Moore, L. L. (2019). Teacher self-efficacy in SBAE methods coursework: A mixed methods study. *Journal of Agricultural Education*, 60(3), 219-231. <https://doi.org/10.5032/jae.2019.03219>
- Tschannen-Moran, M., & Hoy, A. W. (2001). *Ohio State Teacher Efficacy Scale (OSTES)* [Database record]. APA PsycTests. <https://doi.org/10.1037/t11400-000>
- Toombs, J. M., Eck, C. J., & Robinson, J. S. (2022). The impact of a project-based learning experience on the SAE self-efficacy of preservice teachers. *Journal of Agricultural Education*, 63(1), 29-46. <https://doi.org/10.5032/jae.2022.01029>
- Wilkerson, S. (2008). Application of the paired t-test. *XULAnEXUS*, 5(1), 1-5.
- Wilson VanVoorhis, C. R., & Morgan, B. L. (2007). Understanding power and rules of thumb for determining sample sizes. *Tutorials in Quantitative Methods for Psychology*, 3(2), 43-50. <https://doi.org/10.20982/tqmp.03.2.p043>