I am a digital literacies scholar who teaches courses about reading and writing traditional and digital texts at both the graduate and undergraduate levels. Many of my students are or will be teachers in K-12 schools. My institution—located in the Southwestern United States—has a primary research mission. Even so, my college of education has a strong interest in providing effective teacher education. Our state consistently ranks low in K-12 student assessment scores (Barnum, 2019). We, along with public schools other teacher preparation entities in our state, bear criticism for this. There has been a recent legal case where the state public education department was found to be derelict in providing access to appropriate education for special population students including English learners, students with disabilities, and indigenous students in rural and urban settings (Yazzie/Martinez v. State of New Mexico, 2018). The public education department’s response to the ruling that they were derelict was to begin assigning letter grades (A-F) to schools of education in the state in addition to the letter grades they were already assigning to schools (Perea, 2018). Thus, there is a strong feeling of standing in a public spotlight as a teacher educator in my state.

The pressure to enact a strong teacher education practice led me investigate strategies that would support teachers in doing their work
with children and adolescents. One strategy that has garnered strong endorsement is instructor modeling. The practice of instructor modeling is presumed to be effective for developing myriad pedagogical skills in teachers (e.g., Aleccia, 2011; Korthagen, Loughran, & Russell, 2006; Loughran & Berry, 2005; Putnam & Borko, 2000). For example, Aleccia (2011) argued that to maximize effectiveness, “teacher educators must intentionally design their courses as models for their students” (p. 89). The name of Aleccia’s publication is Walk your talk, evoking the metaphor of the supermodel on the runway—a confident, enviable paragon in public view, demonstrating superior, optimally effective, teacher education practice. I was interested in learning about modeling in teacher education practice because of the strong endorsement it has enjoyed for being effective against my professional desire to do the best I can for the prospective and practicing teachers in my beleaguered state where teacher education practice is under such public scrutiny. I had also studied recommendations for modeling teacher education practice around technology integration and I wanted to understand modeling better as a concept in my field (Rice, 2016).

During this self-study of teacher education practices research, I studied modeling—its limitations and affordances—and then captured instances when I tried to be a super model of effective teaching practice. I paid attention to various learning theories and research perspectives as I modeled as well, considering which of these theories might provide superior opportunities to teach my subject matter while teaching about teaching. My research question for this work was: What are the major tensions in modeling as part of my teacher education practice?

Research Perspectives

No single definition of instructor modeling in teacher education appears in the literature to date, but many studies rely on Bandura’s
(1986) definition (Moore & Bell, 2019). Even so, modeling in educational practice can be viewed from various theoretical lenses, all of which depict super modeling differently. Table 1 captures the range of these theories.

### Table 1

**Models of Instructional Modeling**

<table>
<thead>
<tr>
<th>Theory of Modeling</th>
<th>Modeling Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviorist (1954)</td>
<td>Instructors link previously completed successful behaviors to highly similar new behaviors. The previous behavior serves as the model for the new behavior and a stimulus provides the impetus for shifting the old behavior to a slightly different (more advanced) one.</td>
</tr>
<tr>
<td>Constructivist (1986)</td>
<td>Instructors do a task while learners watch. Learners then replicate the modeled task exactly as the instructor had done. Instructors may also provide demonstrations, where students can use the same materials as the instructor to produce something akin and commensurate to, but not a replica of, the original product.</td>
</tr>
<tr>
<td>Cognitivist (1967)</td>
<td>As learners encounter realities (objects) they build models for accommodating the object. Increased exposure with feedback from error causes incremental adaptations over time. Models are comfortable spaces. Teachers must disrupt models to bring about learning.</td>
</tr>
</tbody>
</table>
Dynamic interactions with people and objects produce relationships to responsibilities in different communities. Increased opportunities for competence emerge over time as a result of scaffolded engagement in familiar contexts. Learners take on increasingly complex roles based on community needs and the support they receive from individuals and groups.

Learners derive more benefit from models when they have opportunities to reflect on them. Reflection is how one processes experience.

These various theoretical perspectives suggest different ways to think about modeling because they have different views of what constitutes learning. For the behaviorist, measurable and observable behaviors are the goal of learning so modeling would exemplify that view. The constructivist perspective is not far removed from behaviorism, but with the added interest in thinking and showing thinking rather than merely exhibiting behavior. Neither of those models honors error as a positive thing. The last three perspectives do honor error, but that does not mean they are interchangeable. Cognitivism still assumes that an individual experiences the world as an individual, even where social interactions are present. By contrast, the sociocultural view assumes that even when individuals interact with objects, those objects were made by people and therefore, all interaction is social. Finally, bringing reflection into learning is required in the Deweyan philosophical perspective (1944/1916), but there are numerous limitations. For example, prospective teachers often have limited experiences teaching children and so they are not always positioned for optimal benefits from reflecting (Rogers, 2002). Because these models are different in important ways, they also suggest different views of what it means to model something superbly.

In an attempt to classify various types of modeling in teacher
education research, Lunenberg, Korthagen, and Swennen (2007) offered four descriptions. These are described in Table 2.

**Table 2**

*Model Types and Descriptions. Lunenberg, Korthagen, and Swennen (2007)*

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Implicit modeling</td>
<td>Modeling alone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modeling + instruction about the modeling</td>
</tr>
<tr>
<td>2</td>
<td>Explicit modeling</td>
<td>Modeling + instruction about the modeling + reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explicit modeling and facilitating the translation into the student teachers’ practice</td>
</tr>
<tr>
<td>3</td>
<td>Connecting exemplary behavior to theory</td>
<td>Modeling + instruction about the modeling + reflection + connection to theory</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the authors, modeling practice (implicitly or explicitly) does not itself ensure that students can apply such practice in their teaching, and thus explicit discussion and guidance in such an application is necessary (i.e., Type 3). The explicit instruction and the way it is described is most in line with social cognitivist view (Bandura, 1986). Also, Lunenberg, Korthagen, and Swennen argued that most studies of instructor modeling could be classified according to their proposed four types, including Russell’s (2005) study where he referred to modeling as a procedure of demonstration, reflection, and projection to future application (i.e., Type 3). Reflection as a part of modeling aligns with Dewey’s work (1916/1944).
Importantly, there are counter-arguments to the idea that modeling in teacher education is a worthwhile effort. Some scholars have written about modeling as a kind of folk wisdom within the academy—a practice that seems sound and is often prescribed, but that lacks a strong research base. For example, Moore and Bell (2019) argued:

[M]any researchers take for granted that because modeling, in general, has been established as an effective teaching practice, that modeling in the context of teacher education is likewise established, even though it is not. This appears to be the case in several instances in the literature when instructor modeling is casually referred to as an effective practice without the provision of citations... (p. 327)

Looking back at research literature, I too, found mostly position papers about the importance of modeling in teacher education rather than empirical studies of it in any methodology. Moore and Bell (2019) found a small number of studies existed about modeling in teacher education (fewer than 30) and most were Type 2 from Table 2. Further, none of these directly connected modeling to successful future practice in teachers although all of the studies were positively perceived by teacher educators and their students. I felt some relief to realize that modeling was not yet established in teacher education because it made me feel better about not knowing how to be a super model yet. However, I also desired learn more about how I used modeling practices. I determined that self-study of teacher education practice could help me (Berry, 2007).

**Methodology**

The setting, data collection, and data analysis methods are described in this section.
Setting

I collected data collected for this study during two consecutive fall semesters (2017/2018). I focused on a cross-listed course in teaching writing. The cross-listed designation meant that undergraduates took this course to learn initial competencies and graduate students took it to learn advanced theory and practice. Most of the graduate students who enrolled were practicing teachers earning their master’s degrees in literacy; some were pursuing master’s degrees in teacher education in various content fields or they were doctoral students in literacy or bilingual education. In the course, we focused on learning theories and how those theories were manifest in different types of writing instruction, developing writerly identities through reflection and art, and helping students identify their purposes for writing to audiences of their choosing. Thus, there were rich opportunities to think about modeling to students with varying amounts of teaching experience. Some activities focused on my research interest in digital and online literacies while others supported writing practices offline. The students at my university are generally kind in person and in anonymous evaluations. The course evaluations for this class are higher than average in the department and college.

Data Collection

I drew on multiple documents of practice (LaBoskey, 2004). I wrote short reflections of about 300 words after each class, concentrating on what of my work might have been a model. After the semester was over, I annotated these reflections with wonderings I had based on Tables 1 and 2. Then, I did a second round of annotation where I linked information from the reflections to course syllabi, mandatory peer teaching observation notes and letters, and student evaluation comments.
**Data Analysis**

I also engaged with a critical friend about the critical incidents. My critical friend and I unpacked those critical instances in terms of the tensions they presented in light of previous research and conceptual thinking about modeling (Vanassche & Kelchtermans, 2015). My friend asked me questions like “Why did you label that modeling at all?” “If you are teacher educator, isn’t everything you do in the presence of your students a model of something...?” “What do you think the students felt you valued when you did that?,” and “Why do you think that example of modeling fits that particular learning theory and not some other one?” Such questions increased my responsibility in gathering and recording information and also provided additional opportunities to reflect on the research of my teaching (Fletcher, et al., 2016; Schuck & Russell, 2005). From my annotated and linked reflections and my notes from conversations with my critical friend, I developed a set of critical incidents around modeling (Table 3).

To move from critical incidents to tensions, considered Berry’s (2007) definition of tension:

Feelings of internal turmoil experienced by teacher educators as they found themselves pulled in different directions by competing pedagogical demands in their work and the difficulties they experienced as they learnt to recognize and manage these demands (p. 119).

Working from this definition I considered which parts of which incidents elicited strong feelings of turmoil and then I worked to identify the source. Again, Berry’s work was helpful with the classification of tensions as (a) telling and truth, (b) confidence and uncertainty (c) action and intent (d) safety and challenge (e) valuing
and reconstructing experience (f) planning and being responsive. As I worked to understand the turmoil I felt in certain instances identify what characteristics the tension had, I developed findings in relationship to my research question.

Findings

Two tensions were evident from the data. The first tension emerged as I worked to reconcile modeling across theories of learning. The second tension emerged as I considered the contextual constraints of trying to model sociocultural practice focused on building communities when I am not a teacher and when I do not agree with some practices teacher communities often endorse.

**Tension #1: Recognizing modeling within and across theories of learning**

The incidents of modeling did not fit neatly into one theory or another (Table 1) or even one type of modeling (Table 2). This brought tension because I felt pressure to try to use modeling in all theories and all types. But also, it made me feel like everything was modeling some days and nothing was modeling other days. Below is the first example from the first day of class the second fall semester I was gathering data for this study.

I wanted to use the digital projector but could not find the button to turn it on. I wanted to implicitly model troubleshooting for my students, so I continued to fumble about for the button. Because I want students to feel comfortable calling for help to use technology rather than abandon it, eventually called tech support. The technical support expert had no advice to offer me. I was
growing more frustrated and trying not to show it. One of the students spoke up and informed me that the button I needed was affixed to the pillar in front of where I was standing. They could all see it, but I could not. I told them how I thought I was doing great modeling because of my tenacity in searching my space and how I called tech support for help when people are reluctant to do that. We all laughed. Several students offered to help me set up the projector whenever I needed in whatever class I taught.

In the incident where I could not find the button to turn on the projector, I started out in a Type 1 where I was inexplicitly showing students to keep tinkering with technology. I did not want to offer formal instruction because class had not yet begun; it seemed strange to instruct them as they filed in and readied for class. This would have worked fine except that my actions did not yield positive results and eventually class began. Because I had failed, I tried to move Type 2 where I explained myself. During this time, I also moved from a behaviorally-driven practice to a constructivist one when I told them I was modeling. Since I was unsuccessful, my discussion of error moved me closer to cognitivism. My students solved the problem as an expression of sociocultural interaction. They could see what I could not see. Moreover, they did not blame me for not knowing and the moment was pleasant overall.

My other critical incidents show similar patterns of moving back and forth between learning theories and types of modeling. Below is another critical incident from the beginning of the first semester I collected data.

The first activity of the class is a writing survey. I offer several types questions (yes/no; open ended, scale ratings) and the students fill out the survey about
themselves as writers. We talk about their responses and I share research about general trends. They compare what I say to themselves as individuals and groups. Then, we return to the survey and they work in small groups to choose items or modify them for the populations they intend to teach (pre-K, elementary, secondary, university). They present their surveys and explain why they think those items are appropriate for their intended grades given their existing understandings about children/adolescent/adult development (generally and in writing). The activity assess their current understandings about teaching writing and teaching writers. For both semesters, students portfolio reflections revealed they appreciated the activity so they could learn about themselves—not so that they could have a way to learn about future students.

I worked from what I thought was initial dual frame where I wanted students to reveal their learning (cognitive) and share more about their identities (sociocultural). However, they were more comfortable with sociocultural pieces. Also, although I asked students to reflect on how they might use the practice in the future (Type 3), they needed more time to process—perhaps because it was so rare for them to be asked about who they were as writers in the context of learning to write and learning to teach writing.

**Tension #2: Challenging Sociocultural Practices that Others Are Modeling**

There were limits to my ability to help practicing and prospective teachers enter the community of practice of teachers because I am not a practicing teacher in a K-12 context anymore. At some point, teachers must learn from each other and they design and enact their community norms according to sociocultural theories. However, as a
teacher educator who carries experiences with children and adolescents in her heart, alongside many years of coaching and supporting teachers, there are norm I want to shift in the K-12 teacher community. In these cases, I am not necessarily speaking as a community insider and so my responses to what K-12 teachers tell me about teaching need to be measured.

The graduate students in my class have the opportunity to take over for part of one evening and present to students. I tell them to talk about their research if they are doctoral students and present some practical applications about writing based on their research findings. For master’s students, I ask them to share an activity and run it exactly as they would for the grade level they teach. One master’s level student presenter was running her activity and at one point (jokingly) threatened the students with additional writing work if they did not finish quickly enough. When the student finished, I got up and said “I know you were joking and don’t really do this with your children you teach, but let’s talk a few minutes about using writing as punishment. It is a very common practice. Given our course’s strong emphasis in helping children feel good about themselves and their writing, what are your thoughts?” The practicing teacher shared her thinking first. Then, other students told stories of when they had been punished with extra writing. They said things about punishment being a way to make kids less cooperative and experience writing time as a low time in the day. I thanked them for their contributions and reminded them that there would likely be days when they would want to do this, and I urged them to remember our conversation and reconsider. Then, class proceeded with the next activity.
In this critical incident, I objected to using writing punishment and worked to turn it into a reflective moment. To me, assigning writing as punishment is a behavioral tool that trains students to have negative feelings about writing. However, I also think it is unproductive socioculturally because it threatens the development of a positive writing identity and strains relationships with peers and the teacher.

Even so, I did not want my negative opinion about that practice to damage my relationship with the practicing teacher who made comment or the other students who I want to join the K-12 teaching community. In observational learning theory, Bandura (1986) argued that when one student is scolded, all the students feel scolded. For this reason, I felt like the best thing to do was say, “I know you don’t do this, but many teachers are tempted, so let’s talk about this.” Students took up my invitation to reflect by offering personal experiences and working to use the theories from the class. In so doing, I implicitly modeled (Level 1) how to turn class comments into productive moments. Also, in asking the teacher to model her cognition for the class, I was providing (Level 1).

**Discussion**

This study offers insight into the tensions I experienced while striving to adhere to advice to model practice for students (Aleccia, 2011; Lunenberg, et al., 2007; Russell, 2005). In some theories of modeling, this explicit teaching is necessary, but in other forms, it is not. Recall also that modeling in teacher education has not been empirically established as a universally effective strategy (Moore & Bell, 2019). Before this study, I always assumed that doing as much explicit modeling as possible and trying to involve students in my thinking would make me a super model. Instead, modeling in teacher education carries assumptions about best practices and how students learn. Perhaps being a super model is about developing the agility to
move back and forth between theories and modeling types while not looking awkward or losing one’s balance.

Although my students are cooperative, they are not always able and willing to move with me between theories or learning and/or types of modeling and so I must adjust—I must Walk multiple simultaneous talks. In several of my critical incidents I asked teachers to move to thinking about future practice and they wanted to remain focused on their prior learning and experiences. I did not view this as problematic. I wondered if this was a pattern where modeling could elicit personal knowledge of teaching that might lead personal practical knowledge over time as teachers spend more time in schools (Clandinin, 1985). Even so, I feel pressed to continually invite teachers—prospective and practicing—to consider how children and youth experience school and what practices would serve the learners best.

Before the study, I also did not understand reflection’s theoretical role in modeling. Previously, I had not had the opportunity to interrogate reflection as a pedagogical move to make teachers feel supported while I disrupted their notions of practice. Just as a beautiful fashion model might see flaws in her reflection that others might not notice, a supermodel teacher educator has to be a tough critic on themselves while telling teachers that they are beautiful in their potential. For me, some tension in teacher educating came in moments where I realized I wanted to show and tell (Berry, 2007). However, the showing and telling tension I was experiencing came just as much from a desire to show and tell about modeling as it did about showing and telling about content and other aspects of practice.

For my future research and practice, I have several additional questions.

- How can I help teachers understand modeling as a nuanced, even messy process in their learning to teach and in their
teaching?

- Who should be able to decide what super modeling practices are when there are so many theories of learning that have important pieces to contribute to teacher education?
- How can the tension of the pressure to model balance against its lack of research base in teacher education?
- How can teacher educators and teacher resolve tensions about modeling the practices of modeling in different theories?

These issues are bigger than just what theoretical orientation to learning to base the modeling. Instead, questions emerge about the dilemmas involved in super modeling in various contexts. In keeping with the theme, this project demonstrates complexities through delicate attempts to make private knowing public. I look forward to hearing stories and continuing conversations with fellow teacher educators. What I know is this. We all Better Work!

**References**


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