In this qualitative, grounded theory study, five preservice teachers, two early career inservice teachers, and two teacher educators were interviewed about their beliefs about teacher effectiveness. Participants identify four themes related to effectiveness: 1) that effective teaching is complex and requires sufficient skill in several different essential capacities (content knowledge, pedagogy, classroom management, and social and emotional support); 2) that effective teachers know their students and their unique individual situations, interests, and needs; 3) that effective teachers foster learning in each student through individualized, relevant, and engaging instruction; and 4) that effective teachers continually improve through reflective practice, professional development, and collaboration. Participants reveal that their understandings of effective teaching are consistent with prominent research in the field and that they want to continually improve through reflection on detailed and informative feedback.
Introduction

One of the most important factors in student achievement is the quality of the teacher (Darling-Hammond, 2000; Measures of Effective Teaching Project, 2011; Stronge, Ward, Tucker, & Hindman, 2007). As we prepare teachers to enter the profession, we would like to help shape their understanding of effective teaching and the attributes and behaviors of effective teachers so that they can contribute to achievement and success of their future students. To what extent do teacher candidates already implicitly understand teacher effectiveness? How can teacher educators capitalize upon, expand upon, or correct what teacher candidates already know about effectiveness, and which approach is necessary? Answers to such questions can help teacher educators support the development of preservice teachers into effective inservice teachers.

Methods

The present study was designed to explore the beliefs of teacher candidates about teacher effectiveness to inform the development and implementation of teacher work sample methodology (Henning, Kohler, Robinson, & Wilson, 2009; Rosselli, Girod, & Brodsky, 2011) in the teacher education programs of a large research university in the southeastern United States. Because the teacher work sample uses student learning data to inform teachers’ reflections on practice and help them improve effectiveness, the goal of this study was to explore the beliefs that teacher candidates hold about teacher effectiveness before being introduced to this project using a grounded theory approach to data collection and analysis (Creswell, 2007).

The goal of the present study is to understand the participants’ implicit beliefs about effectiveness, as such beliefs can be expected to guide quick, on-the-spot decisions related to heuristic processing (Chaiken, 1980). If participants were interviewed multiple times over a prolonged period of time, researchers could expect their responses to be more indicative of deeply considered reflection that guides more the careful decisions related to systematic processing (Chaiken, 1980). This study contributes to the field by helping teacher educators understand how teacher candidates and early career teachers implicitly view effective practice in their field so that they can determine which views to challenge deeply, and which views to help foster and refine.

The study was guided by three research questions:

1. How do teacher candidates at this institution in different stages of their teacher education program implicitly understand and describe teacher effectiveness?

2. How do teacher educators at this institution implicitly understand and describe teacher effectiveness?
3. How do these understandings and descriptions relate to the literature in the field and the public dialogue about teacher effectiveness?

**Design and Sample**

The study was designed as an exploratory qualitative investigation using a purposive convenience sample of teacher candidates in various stages of their teacher preparation programs, and the teacher educators that prepare them, at the large southeastern research university attended by the authors. Two participants were recruited for undergraduate teacher candidates in the early, mid, and late stages of their programs. While recruiting participants, the first author was also approached by two uncertified practicing teachers who were hired to teach in area schools with an undergraduate degree in their content area while completing a graduate initial teacher education program. Both early career teachers were included in the study as another category of participants. Two teacher educators, both with classroom teaching experience before teaching at the post-secondary level, also participated in the study.

Because the first author has given many workshops at this university related to the teacher work sample that include his views on teacher effectiveness, any teacher candidates that had attended one of these workshops or training seminars were disqualified from participation in the study. One of the early program participants, and the only male volunteer, dropped out of the study before contributing any data, leaving nine participants (see Table 1). While participants were not selected based on either race or gender, the final sample of participants seemed fairly representative of the characteristics of teachers and teacher candidates in general. Despite the growing diversity of students, teachers are still disproportionately white and female (Sawchuk, 2012; Snyder, 2014). The lack of diversity among participants may limit the present study and will be discussed more fully in the Limitations and Implications section. Furthermore, the early, mid, and late program participants in this study cannot be used to measure changes in time or to indicate the way in which the courses at this institution mold and develop teacher candidates' understandings of effective teaching. Each teacher candidate experiences the program in their own way and form an understanding of teacher effectiveness individually. To understand change over time, prolonged contact with the participants during a longitudinal study would be required, which is beyond the scope of the present study.

Each of the nine participants was interviewed individually using a semi-structured interview protocol. The interviews used non-directive questions and the interviewer approached the interviews as a learner so as not to bias or shape their responses (Glesne, 2011). During the interviews, a preliminary phase of member checking (Creswell & Miller, 2000) was conducted by paraphrasing and summarizing participants’ comments back to them and asking them to confirm that their positions had been understood correctly. Each interview was transcribed and a second phase of member checking was conducted by sending the transcripts to the participants for confirmation. Participants were invited to correct any transcription errors that they found and to make additional comments to further explain or add to their interview responses.

As a final validation strategy, all transcripts, notes, coding records, analyses, and findings were provided to an external auditor in order to determine whether or not the findings are
supported by the data (Creswell, 2007). The external auditor was not involved in the study in any way prior to the conduct of her audit, as recommended by the literature. She contributed very detailed and valuable analysis of the data, however, and invested a great deal more time and attention than either of us anticipated. As a result, she has been added as a second author and her voice is reflected in the findings and discussion below.

**Data Analysis**

As recommended by Seldaña (2009), the data were coded and analyzed in several iterations, or phases. In the pre-coding phase, the first author read all of the transcripts through twice, making initial jottings and familiarizing himself with the patterns in the participants’ responses. In order to analyze teacher candidates’ understandings of teacher effectiveness without forcing those understandings to fit descriptions given by the teacher educators, the first author conducted initial coding on the teacher candidates’ interview data before analyzing the teacher educators’ data. Data were then analyzed a second time to identify categories of codes. After the two phases of coding and analysis of teacher candidate data, the coding and categorizing steps were repeated with the teacher educator data. Data were then examined as a whole in order to identify qualitative themes.

Since this was an exploratory grounded theory study, relevant literature in the field did not guide the development of research questions or shape how data were collected or interpreted (Creswell, 2007; Creswell & Plano Clark, 2011). To properly address the third research question however, reviewing the literature in the field was an essential step in finalizing the analysis. Given the current public dialogue about teacher effectiveness as measured by student learning gains on standardized tests (Amrein-Beardsley & Collins, 2012; Haertel, 2013; Newton, Darling-Hammond, Haertel, & Thomas, 2010) and efforts by prominent educational philanthropists to investigate the attributes of teachers that predict such gains (Gates & Gates, 2011), our investigation began with the scholarly work that supports the Measures of Effective Teaching (MET) Project (2011, 2012).

This choice was made more relevant by one participant’s mention of the Gates and Gates (2011) article in the *Wall Street Journal*. Dr. Hartwig reported seeing the article while traveling and perceived that the authors believed that “nobody knows what effective teaching is,” a point to which she took some umbrage. The article that she cited does seem to support her interpretation when the authors write that, “It may surprise you—it was certainly surprising to us—but the field of education doesn't know very much at all about effective teaching” (Gates & Gates, 2011, para. 9). A closer examination of the body of work supporting the Bill and Melinda Gates Foundation’s MET Project (2011, 2012) indicates that the project is, in fact, built on a foundation of scholarly work that investigates teacher effectiveness. In an effort to reconcile this apparent disparity, we have attempted to align our participants’ responses with the same foundation of work.

The MET Project (2011, 2012) found that, next to the achievement gains of a teacher’s prior year’s students, student feedback on the Tripod Project’s surveys were the most reliable predictor of that teacher’s effectiveness this year as measured by student achievement gains. The
Tripod Project is built around the three themes of content, pedagogy, and relationships (The Tripod Project, 2011). The project’s student feedback surveys ask students to assess their teacher in the seven areas of captivate, care, challenge, clarify, confer, control, and consolidate (referred to as the Seven Cs), all of which correlate positively with student achievement gains, with challenge and control showing the strongest correlation (Measures of Effective Teaching Project, 2011, 2012).

The MET project (2011) also uses the Classroom Assessment Scoring System (CLASS) which attempts to standardize classroom observations under the domains of emotional support, classroom organization, and instructional support (La Paro, Pianta, & Stuhlman, 2004; Pianta, 2011). Danielson (2007) has organized her Framework for Teaching (FFT), which itself integrates prior literature on teacher effectiveness, into the four domains of Planning and Preparation, The Classroom Environment, Instruction, and Professional Responsibilities. The MET Project has found that both of these instruments correlate with student achievement and, when combined with student survey responses, are reliable predictors of teacher effectiveness (2012). As a result, we have used the domains and areas associated with the Tripod Project, the CLASS, and the FFT as sets of a priori codes (Saldaña, 2009) to see how consistently the participants of this study do or do not address the research on which the MET project is built. The Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards (Council of Chief State School Officers, 2011) were also used as a priori codes to see how well the participants’ understandings of effective teaching align with the expectations of this national group of leaders in education.

For all of the a priori codes, transcripts were carefully re-read, comparing each idea or element of meaning in the participants' responses to the ten codes associated with the MET Project and the ten codes associated with the InTASC standards. A participant's interview was coded as addressing the a priori code if they discussed the concepts related to that code in a manner consistent with the original literature from which the code was drawn. If the participant discussed the topic in a way that was not discussed in the original literature, or did not address the concepts related to the topic at all, the code was not applied. The external auditor took particular care in validating a priori coding, and discrepancies between raters were resolved through discussion.

Findings

Classroom teaching... is perhaps the most complex, most challenging, and most demanding, subtle, nuanced, and frightening activity that our species has ever invented. (Shulman & Wilson, 2004, p. 504)

Several phases of coding revealed four primary themes running through the participants’ descriptions of effective teaching. The participants in this study discussed the following themes:
1. **Effectiveness is Complex**: Effective teaching is complex and requires sufficient skill in several different essential capacities. No one area can make a teacher great by itself.

2. **Know Students**: Effective teachers know their students and their unique, individual situations, interests, and needs.

3. **Foster Learning**: Effective teachers foster learning in each student through individualized, relevant, and engaging instruction.

4. **Continually Improve**: Effective teachers continually improve through reflective practice, professional development, and collaboration.

In the sections that follow, each of these themes is discussed in more detail. Selected statements made by participants are included in each section to illustrate how they discuss the theme and to represent the participants’ voice (Bogdan & Biklen, 2007). Quotes have been selected that are as representative as possible of how all of the participants discuss these themes, while attempting to give voice to each participant.

**Effectiveness is Complex**

The conversation with each participant began in the same way; they were asked to describe what makes a teacher effective. While all of the participants discussed multiple elements of effectiveness, seven of them began their responses by mentioning more than one element, each of which they later discussed in greater detail. Natalie specifically discussed the complex nature of teaching by saying:

Well, I think there’s a lot of things that actually go into making a teacher effective; from time management skills, to knowing your students, and knowing what their skills are that can assist, their strengths as well as your own. So it is hard to narrow it down and make just one overall answer for it, because there is so much that goes into it.

Amelia also discussed the complexity of effective teaching, but went on to specifically point out that all elements are required to be effective. Most of the participants also discussed that these multiple elements were all necessary, later in the conversations. Amelia described it this way:

I think they have to care about their students first of all; like, you can know everything about a topic and if you don’t care about kids or enjoy teaching then you are not going to be an effective teacher. But then, with that also comes knowing what you are teaching; like, at the same time, you could love kids and really want to teach them, but not know anything to teach them, so it kind of goes hand in hand.

The multiple elements of effectiveness that our participants discuss align with the research of scholars associated with the MET Project (see Table 2), as well as the findings of the

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1 All participant names are pseudonyms chosen using a random name generator that selects relatively common names from US census data.
project itself (Measures of Effective Teaching Project, 2011, 2012). Participants’ comments in this theme fell into four categories: content knowledge, pedagogy, classroom management, and social and emotional support. Several participants specifically addressed that an effective teacher must possess content knowledge and then immediately went on to point out that knowledge of the content is not enough, by itself. Holly captured this when she described her naïve understanding of teaching before she began the profession:

I think really I had a big misconception going into teaching. Oh my god, I know science! I got this; I got an A in every science class I ever took and I thought that would be enough, that I would be effective, and then they would take the test, and they would pass the test, and they would have straight As and everything would be wonderful; and that was not the case at all. There are so many other things that go into it. I’m these kids' moms, baby sitters sometimes, nurse, counselor… everything. I mean, it’s so far beyond what I ever thought teaching would be.

Both teacher educators also spoke to the importance, but insufficiency of content knowledge, as well. Dr. Hartwig started her interview by saying:

Well, there are a couple of components that are key to success. Certainly, I think they need to know their content. If I don’t know my content it’s harder to help somebody else to discover it. But I think the biggest key that I see when teachers are ineffective has to do with classroom management.

**Know Students**

All participants spoke of the importance of getting to know students, both in the context of forming relationships with them, and to determine which instructional approaches are best suited for them. Kari describes the importance of knowing students to improve instruction:

You can look at them and observe them and see how they work, you just have to go based off that, to make yourself more effective, like figure out, “okay, what are they into? How can I incorporate this that they are into already into my lesson plan?”

Often, the participants spoke of knowing students as an aspect of caring about them. Dr. Ritchie expressed this as she discussed knowing students well enough to support motivation and academic engagement:

I think there is a certain level of trust and caring when you know your students well. I think that’s part of being an effective teacher; you know what motivates them and you know what makes them super nervous and shut down.

The educators that I spoke with in this study discussed care and relationships in a way that supported instruction and classroom management. As a result, many mentions of care, student relationships, or emotional support were coded and categorized into the themes of **know students** or foster learning. When we returned to the data with the *a priori* codes developed from
the researchers associated with the MET Project, the prominence of caring relationships in the data became clearer (see Table 2). Eight participants addressed one of the Tripod Project’s major themes, relationships (The Tripod Project, 2011). Eight participants also discussed emotional support in a manner consistent with the CLASS assessment (La Paro et al., 2004; Pianta, 2011). Dr. Hartwig shows the intersection of these two sets of a priori codes when she said:

That climate that you create of safety and caring; to be effective and efficient in the classroom you’ve got to have all the players working smoothly. If I don’t care about you as a person, it is going to be hard for me to provide opportunities for you to be a learner. So I have to understand you. I have to start off with that basic psychology; what is it that, in our role, we are capable of doing? What should they have as their kinds of experiences? So I need to understand you in that way. I need to care about you as a human being or I won’t be providing this emotional and social support.

Foster Learning

All of the participants in this study pointed to student learning as the desired outcome of effective teaching. The participants’ comments tended to focus on elements of effectiveness that help teachers foster student learning, or deepen student understanding, but student learning was clearly communicated as the end goal. Participants discussed individualized instruction, or tailoring teaching for the needs or interests of specific students, as one way that effective teachers support student learning. Alice described it this way:

I think effective teachers make a difference; as if they pay attention to the students and what the students enjoy doing, and then plan their lessons around that, I think it makes a big difference in whether those students learn or not.

Some participants also discussed making accommodations for students with disabilities. Joni gave this example:

You have to understand what exceptionality that the student has and being able to… maybe use concept mapping. So if you are going to take notes you’re like okay, in the first one you just need to write this and then those separate topics, so like they are guided through it, but they could still write their own notes, and but they are focused on those three points that you want them to write down.

According to participants, effective teachers plan instruction that is relevant and engaging for the students. Alice pointed out that relevant instruction is more inherently motivating and students are more likely to learn the material:

If you make it interesting to the students, pertaining to the students, getting them to, like see how it affects their lives eventually, and make a connection with their personal lives or whatever. As long as – like if you are connected to them I think they will understand more and be more interested to learn what you are talking about.
Many participants discussed the importance of using multiple methods of instruction. Most participants specifically described methods that were active, hands-on, and collaborative. Dr. Ritchie captured many of the other participants’ comments when she described some of her colleagues during her days as a middle school teacher. She described teachers who were experts in their content, but not in pedagogy:

They were trained in a way that, really it was more of a traditional lecture about the stuff, read the chapter, answer the questions. “You have to do your stuff. I shouldn’t have to work, kidos, at getting you excited about it. You should just [do it]. That’s your job as a student. My job is just to impart knowledge.” I think I see the role of any teacher as larger than that.

Continually Improve

All of the participants spoke of effective teachers striving to improve their instruction either through reflecting on their practice, through professional development, or through collaborating with other teachers. Both of the practicing teachers, Holly and Miranda, discussed how relatively ineffective they felt during their first year of teaching. Miranda described it this way:

When I first started it was all, oh this is how I used to learn when I was in high school, then this is how I’ll teach and students will just – they are supposed to get it. You know, especially since they are high school students they are mature enough, they are supposed to get it. I know it was very wrong, it is not supposed – it is not like that, you know.

Many participants described the importance of analyzing one’s own teaching to understand what was effective and ineffective about it, and reflecting on how to be more effective in the future. Many participants seemed to allude to the cliché that practice makes perfect, but Dr. Ritchie was not comfortable with the application of the saying to teaching when asked about it directly. She highlighted what she saw as the important difference when she said that “it isn’t that practice makes perfect, it’s that perfect practice makes perfect. I do think practice helps but I do think it has to be that kind of reflective practice.”

Joni discussed the improvement she has seen during her junior internship through reflective practice:

By just reflecting, myself, like how I presented the first class then and then how I presented, like the lab the next time, and the lesson the next time, and then the lab next time and, like I’ve learned that questioning is good… so even in those few times that I’ve done it, I’ve seen a difference in what I’ve taught, so I could only see it getting better, then, the more I practice it.

Several of the participants also spoke of collaboration with other teachers as an element of effective teaching. Both teacher educators also discussed the role of collaboration in working effectively within a school. Miranda mentioned that observing other teachers to get ideas and see effective instruction modeled can help a teacher be more effective:
During my planning I observed a couple of teachers who my administrators said were very effective, and it gave me a lot of ideas on how to reach out to kids and you know it was just helpful; or their ways of setting up the classroom, it makes a difference.

Participants also discussed the importance of ongoing professional development to expand effective teachers’ skills and knowledge of their craft. When asked how teachers can become more effective, Natalie quickly responded:

Learning their craft. So, basically, there are different ways to teach different students and if you know that you have students who have disabilities or who are, you know, ELL students or language deficient, then I believe in workshops and, you know, extra classes, taking the time out to build yourself in order to get to them more, to relate to them more… I think it comes from building yourself in other workshops and getting to know what is effective based on effective or research based type experiments or trials and things to that effect from those who have already known, who know what works and then, you know, making it your own.

Themes from the Literature

When we used *a priori* codes in the final stage of data analysis, it became clear that the participants’ understandings of effective teaching are consistent with the literature in the field. For each *a priori* code derived from the literature associated with the MET Project (2011), we determined how many of the nine participants discussed aspects of teacher effectiveness consistent with that theme. The results of this analysis are presented in Table 2.

The participants consistently addressed the general themes found in this literature. There was 97% agreement between participant responses and the four domains associated with Danielson’s framework, 93% agreement with the three themes of the Tripod Project, and 78% agreement with the three domains of the CLASS. For the purposes of this study, specific degrees of agreement were not calculated for each of the 22 components of the FFT (Danielson, 2007), the Seven Cs measured by the Tripod Surveys (Measures of Effective Teaching Project, 2011), or the ten dimensions of the CLASS (Pianta, 2011), but preliminary analysis indicates that participants did not discuss specific enough elements of effectiveness in a single interview to support such detailed analysis. Agreement remained relatively high (77%), however, when participants’ responses were analyzed according to the ten InTASC Model Core Teaching Standards (Council of Chief State School Officers, 2011), as shown in Table 3.

**Discussion**

The present study intended to explore the implicit beliefs of teacher candidates about effective teaching. By understanding how teacher candidates and early career teachers understand and think about effectiveness, teacher educators will be able to adjust their instruction
to capitalize on teacher candidates’ existing understandings and correct common misconceptions. In order to effectively inform such efforts, it may be helpful to revisit the research questions that guided this study.

**Consistent Understandings**

The first two research questions asked about the perceptions and understandings of specific groups about the qualities of effective teachers. These questions did not ask about how one group’s perceptions compare to another group’s perceptions, since a qualitative inquiry would not have a large enough sample to make such comparisons. The implicit wondering behind the first and second research questions is one of comparison, however. The first research question seems to wonder how teacher candidates’ understandings of effective teaching evolve throughout their teacher education program. With the inclusion of the early career inservice teacher participants, the present study offers even more opportunity to wonder about how such beliefs develop with experience.

Likewise, the second research question supports follow-on questions about how teacher candidates and early career teachers differ from teacher educators in their beliefs about effective teaching.

While the present study is unable to answer questions about group differences, the responses of each participant, considered individually, are still consistent with the findings overall. While not every participant spoke of the four major themes in the same way, all of the responses support the findings described in the previous section. None of the participants made any statements that contradict or would suggest disagreement with the statements of the other participants. Though no tests of significance can be run on this data, they seem to suggest that the beliefs of each member of this purposive sample are generally consistent with the beliefs of the others. The third research question also implies a comparison between the perceptions, understandings, and beliefs of the participants about effective teaching and the literature in the field. The participants in this study expressed an understanding of effective teaching that is consistent with the literature in the field, though no one participant discussed all of the major themes found in the literature reviewed.

**Limitations and Implications**

As mentioned earlier, the sample of participants in this study was relatively homogeneous. Though the sample may reflect the teaching workforce, which tends to be less diverse than the student population (Sawchuk, 2012; Snyder, 2014), the study may be limited by its inability to capture the diverse ways in which teachers can be effective, or the ways in which effective instruction may differ with various populations of students. Such research questions were beyond the scope of the present study, however. It may also be beneficial to compare the participants in this sample to identify differences between the subgroups that they represent. As with all qualitative inquiries, however, the present study is limited by its inability to generalize to the population. A much larger sample of participants and a valid and reliable instrument with which to measure them would be required to make such comparisons. The findings of the
present study could be used to inform the development of such a quantitative instrument as part of an exploratory or multiphase mixed methods research design (Creswell & Plano Clark, 2011). Future research could be pursued to develop and validate such an instrument.

Though limited by its small and relatively homogenous sample, the present study has implications for teacher educators and how they approach the development of teacher candidates. The findings of this study suggest that teacher candidates already understand the complex and subtle nature of teaching, even when they are not given the opportunity to reflect on and deeply consider teacher effectiveness. Teacher educators may find teacher candidates suspicious of oversimplifications of teaching and learning and may be able to capitalize on that suspicion to help aspiring teachers wrestle with the many complex and interrelated theories that inform our understanding of the field. The stated belief that effective teachers know their students and deliver instruction that is relevant and individualized also suggests that teacher candidates innately understand the complexity of students. These findings suggest that teacher educators may be able to capitalize on such an innate understanding to help teacher candidates see the importance of differentiated instruction and to learn about the learning needs of specific populations of students such as students with disabilities and English learners.

It is interesting to note that the MET Project (2011, 2012) found that student perceptions predict teacher effectiveness remarkably well. While teacher candidates and early career teachers may not have a great deal of experience teaching in the classroom, they do have a great deal of experience as students, and that experience may have helped inform their understandings of effectiveness. The task of the teacher educator might not be to inform teacher candidates about aspects of effectiveness so much as to give them the framework through which to critically analyze and formalize their existing understandings of effectiveness.
References


## Tables

### Study Participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Description</th>
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<tbody>
<tr>
<td>Kari</td>
<td>female teacher candidate who, at the time of the study was enrolled in her first lower-division education course, currently majoring in early childhood education but considering a change to secondary education in either social studies or English language arts, race/ethnicity not reported (<em>early program participant</em>)</td>
</tr>
<tr>
<td>Alice</td>
<td>female elementary education teacher candidate in her first semester of upper-division education courses, race/ethnicity not reported (<em>mid-program participant</em>)</td>
</tr>
<tr>
<td>Natalie</td>
<td>Hispanic female elementary education teacher candidate in her second semester of upper-division education coursework (<em>mid-program participant</em>)</td>
</tr>
<tr>
<td>Amelia</td>
<td>white, non-Hispanic female teacher candidate pursuing a bachelor’s degree in biology education in her last semester of courses before student teaching (<em>late program participant</em>)</td>
</tr>
<tr>
<td>Joni</td>
<td>white, non-Hispanic female teacher candidate in her final semester of education courses pursuing a bachelor’s degree in chemistry education with a minor in exceptional student education (<em>late program participant</em>)</td>
</tr>
<tr>
<td>Holly</td>
<td>white, non-Hispanic female in-service teacher in her final course to complete a master’s level program in science education for initial certification (<em>early career inservice teacher participant</em>)</td>
</tr>
<tr>
<td>Miranda</td>
<td>female in-service teacher in her final course to complete a master’s level program in science education for initial certification, race/ethnicity not reported (<em>early career inservice teacher participant</em>)</td>
</tr>
<tr>
<td>Dr. Hartwig</td>
<td>white, non-Hispanic female professor in the College of Education that teaches the Teaching Strategies and Classroom Management course, a Junior-level course required of all education majors and minors (<em>teacher educator participant</em>)</td>
</tr>
<tr>
<td>Dr. Ritchie</td>
<td>female professor of reading and literacy education who teaches courses taken by candidates in elementary education and English language arts programs and identifies her race/ethnicity as other (<em>teacher educator participant</em>)</td>
</tr>
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</table>

*Note.* All participant names are pseudonyms chosen using a random name generator that selects common names from US census data.
<table>
<thead>
<tr>
<th>A Priori Codes</th>
<th>Participants</th>
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<tbody>
<tr>
<td>Danielson’s Framework for Teaching</td>
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<tr>
<td>Planning and Preparation</td>
<td>9</td>
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<tr>
<td>The Classroom Environment</td>
<td>8</td>
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<tr>
<td>Instruction</td>
<td>9</td>
</tr>
<tr>
<td>Professional Responsibilities</td>
<td>9</td>
</tr>
<tr>
<td>The Tripod Project</td>
<td></td>
</tr>
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<td>Content</td>
<td>8</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>9</td>
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<tr>
<td>Relationships</td>
<td>8</td>
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<td>Classroom Organization</td>
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<td>8</td>
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<td>Instructional Support</td>
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Table 3
Number of Participants Mentioning Aspects of Effectiveness from the InTASC Model Core Teaching Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Participants</th>
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<td>InTASC 01 - Learner Development</td>
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<tr>
<td>InTASC 02 - Learning Differences</td>
<td>8</td>
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<tr>
<td>InTASC 03 - Learning Environments</td>
<td>9</td>
</tr>
<tr>
<td>InTASC 04 - Content Knowledge</td>
<td>8</td>
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<tr>
<td>InTASC 05 - Application of Content</td>
<td>6</td>
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<td>InTASC 06 - Assessment</td>
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<tr>
<td>InTASC 09 - Professional Learning and Ethical Practice</td>
<td>9</td>
</tr>
<tr>
<td>InTASC 10 - Leadership and Collaboration</td>
<td>5</td>
</tr>
</tbody>
</table>

Authors Note

Matthew R. Lavery taught at the middle level school for six years and is now a doctoral candidate in research methodology at the University of Central Florida.

Tiffany Treimanis recently graduated from the University of Central Florida with an education specialist degree in School Psychology.

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