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About the Journal

Founded in 2013, the Journal of Teacher Action Research (ISSN: 2332-2233) is a peer-reviewed online journal indexed with EBSCO that seeks practical research that can be implemented in Pre-Kindergarten through Post-Secondary classrooms. The primary function of this journal is to provide classroom teachers and researchers a means for sharing classroom practices.

The journal accepts articles for peer-review that describe classroom practice which positively impacts student learning. We define teacher action research as teachers (at all levels) studying their practice and/or their students' learning in a methodical way in order to inform classroom practice. Articles submitted to the journal should demonstrate an action research focus with intent to improve the author’s practice.

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TEACHING PRESERVICE TEACHERS ABOUT MICROAGGRESSION: KNOWING IT’S JUST A PENCIL

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Abstract Microaggressions are subtle yet impactful actions toward others that can hinder student learning and potentially lead to negative student behavior. Given the potential influence of microaggressions on student’s achievement, we exposed a group of pre-service teachers to content that enhanced their knowledge and perceptions of microaggressions. We developed and conducted a transformational learning action research project that included lessons focused on microaggressions and implicit bias with field experience. Our results indicate that the lesson increased the pre-service teachers’ knowledge and awareness of microaggressions and personal biases, which have implications for teacher preparation programs.

Keywords: Teacher Action Research, Microaggressions, Transformational Learning, Preservice Teachers, Implicit Bias, Equity

Introduction

Recently, one of our teacher candidate students shared an interaction she observed in a fifth-grade classroom in an urban school district. The candidate, notably disturbed, shared an observation describing an interaction between a fifth-grade African American male student and his White female classroom teacher. The teacher candidate stated she observed the fifth-grade teacher standing over the male student seated on the floor with his knees in his chest. He was the only child in the classroom because the teacher implemented the “room clear” method, and the other students were in the hallway. Room clear is when students have to leave the classroom when a teacher feels someone is out of control, leaving just the disruptive student and teacher alone in the classroom.

“I said, stand up!” The fifth-grade teacher yelled for the third time. The teacher candidate stood in astonishment, watching the interaction between the fifth-grade student and his classroom teacher. She was unable to take her eyes off the boy who appeared to be afraid.
Before the teacher could yell at the student for the fourth time, the school resource officer stepped into the classroom. The resource officer walked over to the boy and knelt before speaking.

“Let’s get out of this situation,” the officer said sympathetically. The fifth-grade boy looked up for the first time but still did not move.

“What’s your name?” the officer asked.

“David,” the fifth-grader whispered. The intern still watched in amazement as the little boy spoke his first words since he sat on the floor.

“David, let’s walk out of here and talk about what happened,” the officer stated as he held out his hand to David. David grabbed the officer’s hand and walked out of the room with him. The fifth-grade teacher watched David as he left the classroom.

"He should have been handcuffed out of here, instead of treated like a baby," the teacher expressed to the candidate. The teacher then walked out of the classroom into the hallway to usher the waiting children back into the classroom.

The situation started when David asked for a pencil, and the fifth-grade teacher questioned David about his school supplies. They had a few exchanges, and it escalated to David's scolding for disrespecting the teacher. As the teacher scolded David, he sat on the floor in the room and refused to move.

After the teacher candidate shared the story, we looked at each other for some time in silence. The pre-service teacher reflected on the class discussion that just occurred. In class, we discussed the subtle and detrimental ways that people can be bias and mistreat others – commonly referred to as microaggressions (Sue et al., 2007). The pre-service teacher believed that the fifth-grade teacher demonstrated someone having an implicit bias towards individual students and likely engaged in ongoing microaggressive behavior in the classroom that fostered a hostile environment for individual students, setting the stage for blatant aggression to occur later.

The teacher candidate could not comprehend how a simple request for a pencil turned into a discipline situation that required a room clear and a school resource officer to assist. As we continued the conversation, we noted a few critical points that generated multiple questions. Had the fifth-grade teacher expressed microaggression undertones (e.g., lower tolerance of behavior because he is Black) to David that made him feel like his worth was less than the other students? Would David’s response be considered disrespectful if he were a White male? Did the fact that the teacher was a White woman and David was a Black male contribute to the breakdown of effective communication between the two? Did microaggressions and implicit bias have a concealed script that created the foundation for this scene? The answers to these questions are critical to determining practices to alleviate interactions like the one between David and his teacher.
The question we attempted to answer in our research is the following: Can a combination of instruction and field experience designed for teacher candidates challenge and transform their understanding of their implicit bias and awareness of microaggressions?

**Literature Review**

*Implicit Bias*. Implicit bias refers to the unconscious and automatic attitudes or stereotypes that affect our understanding, actions, and decision-making in daily life (Carter et al. 2017). Everyone is vulnerable to making these biases or associations of others. These attitudes include both positive and negative assessments about people and are activated involuntarily without an individual's awareness or voluntary control (Rudman, 2004). These unconscious and automatic beliefs about individuals are associated with classroom disciplinary practices (Neitzel, 2018).

Nationally, Black students' suspension and expulsion rates from school are twice the rates of other students (Lipscomb et al., 2017). Lacoe and Manley (2019) reported discipline rates declined for all subgroups of students in Maryland over the past decade; however, Black students and students with disabilities continued to be suspended and expelled from school at more than twice the rates of other students. Even when involved in the same types of infractions, Black students were significantly more likely to receive out-of-school suspensions than other subgroups (Whitford & Emerson, 2019).

According to Gregory and Roberts (2017), educational leaders in school equity have long called for teachers to engage in personal reflection about how their beliefs may impact interactions with students and discipline. Developing a greater understanding of the root causes of discipline inequalities could lead to conditions that alleviate discipline disparities. Thus, there is a justification for examining pre-service teachers' awareness of their implicit personal bias and its potential influence on educational settings.

*Microaggressions*. Sue and colleagues (2007) state microaggressions are "brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative insults toward people of color" (p. 271). Sue, (2010) further clarifies microaggressions can be directed toward specific groups of individuals. Sue (2010) describes three types of microaggressions. One type of microaggression is “microinsult,” which is verbal and nonverbal communications that convey rudeness and insensitivity and demeans a person’s identity (e.g., ethnic, gender, religious). For example, a microinsult might be, “You don’t act like a normal Black person” or “You are pretty smart for an athlete.” The second type of microaggression is “microassault,” which is an explicit and intentional action or slur designed to hurt the intended victim through name-calling or avoidant behavior. For example, a microassault might be calling someone a racial slur or when passing out supplies intentionally making someone the last person to receive the supplies because of their identity. The third type of microaggression is “microinvalidation” which communicates subtle exclusion and negates the thoughts, attributes, or feelings of a person. The statement, “I don’t see color” in reference to people of color, is an example of microinvalidations. Although all three forms of microaggressions play out in everyday life, the
forms that occur mostly in the classroom are microinsult and microinvalidation (Sue et al., 2007).

Microaggressions have a harmful psychological influence on individuals who receive them (Sue, 2010), and the individuals may not be conscious of the negative influence. In the classroom, microaggressions may be unintentional, and teachers unaware when they engage in the behavior. The impact on students can be both recognizable and hidden (Darvin, 2018). Nadal et al. (2014) clarify that hidden damage from microaggressions refers to the unseen aspect to both physical and mental health and suggested that people who encounter more significant amounts of microaggressions are likely to exhibit many mental health issues, such as depression or negative self-esteem. In addition to hidden damages, recognizable physical health issues such as pain, hypervigilance, and fatigue also result from microaggressive behaviors (Nadal et al., 2014). According to Steele and Aronson (1995), when African American college students were prompted to indicate their race before taking a Graduate Record Examination (GRE), their test scores were significantly lower than when they were not prompted to identify their race. The results of the study suggest that students’ recognition of their race prompted perceptions of African American students as underperformers. The internalization of these perceptions may have resulted from multiple exposures to microaggressions. Thus, there is justification for raising awareness of microaggressive behaviors and the ramification among individuals who are preparing to become teachers.

Transformative Learning. We adopted transformative learning as a conceptual framework for our research. Mezirow (1997) defined transformative learning as an adult learning theory that utilizes dilemmas to challenge students’ thinking regarding a given topic. Students are encouraged to use critical thinking, reflection, and questioning to consider if their underlying assumptions and beliefs are accurate (Mezirow, 1997). We applied the transformative learning theory framework in our project development to challenge teaching candidates’ current beliefs regarding Black students. We wanted candidates to reflect on their perceptions and unknown biases by building awareness of microaggression and implicit bias. The transformative learning experience required pre-service teachers to understand the damage that microaggressive interactions can have on students, to deeply reflect on their personal beliefs about Black students, and share their understanding and experiences through discourse with other pre-service teachers. The experience challenged their perceptions – processes that are fundamental to transformative learning (Mezirow, 1997). We embrace the perspective of Mezirow (2000) as being critical to moving implicit bias to explicit. We understand that reflection can only occur when the bias is explicit and brought to one's awareness. Mezirow (2003, 2006) conjectures that for learners to gain a more in-depth understanding of the experiences of others, they need to engage in discourse to expose one's frames of reference and to gain an understanding of the frames of reference of others.

In consideration of the critical need to gain a more in-depth understanding of the frame of reference of others when learning about microaggressions, we took into consideration the perspective of Mezirow (2003, 2006). Thus, we maintain that when teaching about microaggressions, there is justification for engaging students in practices of transformative learning. We speculated that by engaging students in discourse about microaggressions
through discussion and reflection to raise their awareness of implicit bias, even if the experience was relatively brief, was likely to shift students’ awareness and understanding of how teacher’s behavior and bias influences the classroom environment.

The Need for Microaggression Awareness. The changing demographics of students and consistency in the demographics of teachers and administrators in American schools suggest there is a greater need for awareness of language and behaviors that may be microaggressive (Smith, 2014). Although students of color are projected to make up 56 percent of the student population by 2024, the elementary and secondary educator workforce is still overwhelmingly White. The most recent survey of public-school teacher demographics indicates that 82 percent of the teachers identified as White (U.S. Dept. of Education, 2016). Although the changing of demographics is occurring nationally, the contrast between the teaching staff and student population is most prevalent in urban school settings. Due to the disparities between the demographics of students and teachers, Black students are more likely to have a White teacher than a teacher of color.

The demographic of teachers and students influence culture or public schools. Thus, we maintain that both teachers and students benefit from understanding the range of potential implicit bias and microaggressions that may occur in schools. An example of potential bias is the difference in expectations of achievement of students of color by teachers who are of a different race. Solorzano and colleagues (2000) analyzed campus climates of four predominantly white universities to determine if microaggression was an element of the climate and culture of the campus. Solórzano et al. (2000) observed high levels of microaggression within classroom settings and reported that many teachers in their sample maintained low expectations of students of color. For example, one African American student interviewed in the project shared the experience of being accused of cheating by his instructor because of a high score on an exam and was required to retake the exam. The impact of teachers having low expectations for students of color influences the performance of students of color and contributes to the inequality of achievement between Black and White students (Solórzano et al., 2000).

When compared with their White peers, Black teachers are more likely to have higher expectations of students of color, confront issues of racism, serve as advocates, and develop more trusting relationships with students (U.S. Dept. of Education, 2016). Thus, one way to make schools more inclusive and equitable is to increase teacher diversity, which is one solution to minimize microaggression and implicit bias. Another solution is to alter teacher preparation programs and start preparing culturally competent teachers who can create positive learning environments for all children. Our work is an attempt to document a potential solution to altering teacher preparation programs through building awareness of perceptions, microaggressions, and implicit bias. We argue that the role of colleges of education is to prepare all teachers to have high expectations of students of color, confront issues of racism, serve as advocates and cultural brokers, and develop trusting relationships with students. Part of that preparation is to explicitly teach pre-service teachers about microaggressions and increase their understanding of the implicit personal bias that negatively impact students of color. In their research on teacher-to-student racial microaggressions, Solórzano et al. (2000)
found Black students feel invisible in the classroom and “their experiences as Black were omitted, distorted, and stereotyped in their course curriculum” (p 65). Because of the potential differences among teachers concerning their expectations, perceptions, and priorities, there is a benefit to include opportunities for teacher candidates to learn more about microaggressions and educational equity in teacher preparation programs. Thus, teacher candidates’ course work should include content that makes explicit the influence of teacher perceptions on the expectations of students.

Education about microaggressions is critical, given that the vast majority of education majors are White. Approximately 25 percent of individuals enrolled in teacher preparation programs were individuals of color. In comparison, 37 percent of all individuals in those same institutions were individuals of color (U.S. Dept. of Education, 2016). Thus, the proportion of students of color preparing to be teachers is lower than the national average of other fields of study, resulting in a higher proportion of White teachers. We argue that the low enrollment of Black students in teacher preparation programs and the importance of teachers being able to connect with their students create a need for teacher preparation programs to prepare White teachers to engage effectively with Black students intentionally.

Teaching in Urban Schools. The percentage of minority students in the United States continues to increase and now accounts for more than half of all students attending public school and makes up a higher proportion of the students attending urban schools (Musu-Gillette et. al, 2016). However, the percentage of minority teachers in the United States is far below the proportion of minority students, particularly in urban settings (Albert Shanker Institute, 2015). The Albert Shanker Institute (2015) reports that minority teachers tend to be concentrated in urban schools and that teachers in urban schools are more likely to report a deterioration of school facilities and a lack professional support; therefore, teachers in urban schools are likely to exit the profession due to working conditions. Because minority teachers tend to concentrate in urban settings, the exit from the profession has resulted in a more significant percentage of minority teachers leaving the profession than non-minority teachers.

Low numbers of minority teachers entering the profession combined with the increase of minority teachers leaving the classroom of urban schools results in a higher concentration of White teachers in urban schools. Due to the increase of White teachers working in urban schools with high numbers of students of color, there is a need to assure teachers are prepared to address issues of implicit bias and engagement in microaggressions before they enter the profession.

Methodology

Our desire for using evidence-based practices in our courses motivated us to engage in an action research project focused on the influence of an intervention we designed to increase our students’ knowledge of microaggressions and awareness of their implicit bias. Using an action research approach based on transformative learning, we created an intervention that included instructional activities and field experience. To determine the influence of the intervention, we gathered a mixture of qualitative and quantitative data. Our goal was to make the research seamless with the course, using standard instructional practices to assure the intervention and
data collection were replicable and meaningful for student assessment as well as evidence for our research.

Our design involved pre-testing the students, engaging the students in the intervention, and post-testing the students. We selected this design to be able to determine how the intervention influenced the students based on their prior knowledge and perceptions.

Research Question. Again, the question we used to guide our action research project was “Can a combination of instruction and field experience designed for teacher candidates challenge and transform their understanding of their implicit bias and awareness of microaggressions?”

Instrument. To assess the student before and after the intervention, we developed a survey that included a mixture of quantitative and qualitative items. We developed the items to assess the candidates’ knowledge, perceptions, and experiences with microaggressions and implicit bias. Our survey contained fifteen items with eleven items designed to assess implicit bias and microaggression and four demographic items.

Once we developed the survey items, we used peers to establish the item construct validity. Based on feedback, we made some minor edits and alterations to the survey items to increase clarity and focus on microaggressions or implicit bias. Our final survey included items such as, “Do you encounter everyday experiences that negatively influence your academic achievement?” and “Do public schools have problems due to microaggression” and “Are there problems of microaggression on your college campus” which the candidates responded to using a five-point Likert-like scale. Also included in the survey was an item asking the participants to rate their knowledge of microaggressions, which they did, on a 10-point sliding scale with “0” being “no knowledge” and “10” being “expert knowledge.” Our qualitative items included prompt such as “Define microaggression.” We distributed the survey online using Google Forms to host the survey.

Participants. The participants in our study were teacher candidates enrolled in a predominately-White student teacher preparation program at a regional university located in the south-central region of the United States. All candidates were in an education diversity class. Fifteen were males, and 13 were females. Ninety-two percent of the candidates ranged between the ages of 18-24, with 3.6 percent ranged between the ages of 25-30, and 4.4 percent identified themselves as over the age of 40. Eighty-nine percent identified as White, 3.6 as Black, 3.6 Arabic, and 3.8 as other. Forty-six percent described their community as suburban communities, 35.1 percent rural communities, and 18.9 urban communities. All students participated in the lesson. We provided consent to participate form to all candidates requesting to use their data for our research. Candidates had the option to share their data (as approved by the IRB). Twenty-eight teacher candidates participated in the program.

The Intervention. We developed a microaggression awareness intervention to engage students in transformative learning experiences to learn about microaggressions. The intervention for our research was a lesson that took place as part of a diversity course focused on cultural proficiency, social justice, and education equity. Part of the course curriculum included three sessions focused on microaggression and implicit bias. The length of the sessions varied.
The first session, divided into two parts, included an individual online assignment followed by a group discussion reflecting on the individual assignment. During the individual assignment, candidates took the Harvard Implicit Bias Association Test (Greenwald et al., 1998). Students received the assessment link and instructed to complete the test before the first face-to-face session. Students had one week to take the test before they discussed the outcomes and perspectives in a group setting. During the second part of the first session, the candidates took the pre-microaggression awareness survey, engaged in conversations about implicit bias, and had an opportunity to share their Harvard Implicit Bias Association Test results. The candidates discussed how a person’s environment can consciously or unconsciously influence his or her belief system. The candidates then learned the definition of microaggression and the three types of microaggressions. The session concluded with engagement in reflective dialogue regarding how implicit biases may foster or promote microaggressive behavior.

In the second session, we engaged the candidates in a field experience in an urban emergent school district, which is a school located in a metropolitan area, yet the city population was less than one million (Milner, 2012). The schools within the urban emergent school district have a high minority and immigrant student population. We tasked the candidates with observing classroom interactions and reflecting on their beliefs. Candidates were to intentionally engage with students with demographics that differed from their own. As the candidates engaged with the students in the urban emergent school district, they reflected on their interaction that challenged their assumptions and expectations regarding students and school settings. Candidates also noted interactions between teachers and students as they observed the classroom. We instructed the candidates to conduct observation in a minimum of three 50-minute classroom periods and record their observations and personal reflections.

The third session occurred after the field experiences. The teacher candidates reconvened as a group for an hour reflection session to discuss their observations, reflections, and take the post-microaggression survey. We tasked the candidates to reflect on their beliefs and their perceptions associated with their field experience. Through discussion and reflection, we wanted them to determine if their experience in the school experience aligned with their original beliefs about interactions and exchanges within Black students they encountered at urban schools.

**Analysis.** We analyzed the responses to the quantitative items using a paired sample t-test. We analyzed the participants’ responses to the qualitative items using content analysis.

**Results**

*Knowledge of Microaggressions.* We begin reporting our results with an examination of the changes in knowledge of microaggressions due to the lesson. We found the average pre-score to be 4.33 (SD = 2.15) and the average post-score to be 8.33 (SD = 1.96). Our analysis revealed a significant difference in the level of knowledge (t(26) = 7.31, p < .00), which indicates that the candidates’ self-perceived levels of knowledge of microaggressions increased with the lesson.

We continued our analysis by examining the candidates’ pre- and post-lesson responses to our item that asked candidates to define microaggressions. In Table 1, we present some example responses of the candidates’ definitions of microaggressions before and after the
microaggressions lesson. Our analysis revealed that before the lesson, the candidates struggled to define microaggression, but after the lesson, they provided more accurate and representative definitions.

Table 1: Example Pre- and Post-Lesson Responses to Defining Microaggression

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pre-Lesson Response</th>
<th>Post-Lesson Response</th>
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</thead>
<tbody>
<tr>
<td>Student A</td>
<td>Behavior that is not outright aggressive, but still displays intolerant and</td>
<td>Subtle words and actions that have a negative psychological impact on lower</td>
</tr>
<tr>
<td></td>
<td>oppressive words and actions.</td>
<td>represented groups.</td>
</tr>
<tr>
<td>Student B</td>
<td>You all look alike</td>
<td>Microaggression is a subtle jab at a specific group/minority, or someone is</td>
</tr>
<tr>
<td></td>
<td></td>
<td>singled out.</td>
</tr>
<tr>
<td>Student C</td>
<td>I'm not sure.</td>
<td>Microaggression is the implicit biases that we aren't aware of.</td>
</tr>
<tr>
<td>Student D</td>
<td>Statements people of minority find offensive</td>
<td>Everyday interaction that can come off negatively</td>
</tr>
<tr>
<td>Student E</td>
<td>Racism on an accident</td>
<td>Small unintentional things people may say that may show an unintentional bias.</td>
</tr>
</tbody>
</table>

Recognition of Microaggressions in Schools. We continued our analysis by examining the candidates’ recognition of microaggressions as an issue or occurring at the university and in public schools. For the public-school items, the candidates had an average pre-lesson response of 3.73 (S.D. = .96) and the post-lesson response of 4.12 (S.D. = .82) (based on a five-point scale). Our paired-samples t-test analysis of the means revealed a significant difference, t(27) = 3.08, p = .005, which indicates the recognition of microaggressions in public schools increased after the lesson.

Next, we analyzed the candidates’ responses to our item, asking the candidates if they thought microaggressions were occurring at the university. Their average pre-score was 3.00 (SD = .80) and the average post-score was 2.88 (SD = .91). Our paired-samples t-test revealed no significant difference in the responses and a near-neutral response for both pre and post-lesson.

Experience Microaggressions. To determine if the candidates felt that they or their friends experienced microaggressions, we examined their pre- and post-responses to the associated
survey items that the candidates answered using the same 5-point Likert scale. First, we determined if the candidates felt that they experienced microaggressions. Their average pre-score was 3.07 ($SD = 1.17$), and the post-score was 3.19 ($SD = 1.21$), with the t-test failing to detect a significant difference. The results indicate that the candidates were on average near-neutral about experiencing microaggressions, and the perception did not change with the lesson.

In our continued analysis, we examined the candidates’ responses to the item associated with perceptions that friends had experienced microaggressions. Their average pre-score was 3.26 ($SD = 1.02$), and the post-score was 3.33 (S.D. = .98), with the t-test failing to detect a significant difference. The results indicate that the candidates were, on average, neutral about friends experiencing microaggressions, and the perception did not change with the lesson. Our analysis of the associated qualitative data revealed that the candidates’ perceptions of experiences with microaggressions had shifted with the lesson (see Table 2).

Table 2: Example Pre- and Post-Lesson Responses to Experiences with Microaggressions

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pre-Lesson Response</th>
<th>Post-Lesson Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student F</td>
<td>I don’t know</td>
<td>As a manager of a fast-food place, I have to be alert for suspicious activities. I'm extra cautious when poorly dressed African Americans come in</td>
</tr>
<tr>
<td>Student G</td>
<td>I am unsure, perhaps when I was in high school, and I would say &quot;Hola&quot; to my Hispanic friend, even though he didn't know Spanish.</td>
<td>In high school, the math teacher would always call on and mostly talk to the boys. I felt that because I was a female, the teacher thought I wasn't as good at math.</td>
</tr>
<tr>
<td>Student H</td>
<td>In choir, I notice that Mr. Erwin continues to say men and women, and we have a member that identifies as neither.</td>
<td>At a middle school, a teacher did not have a good rapport with her African American students.</td>
</tr>
</tbody>
</table>

**Preventing Microaggressions.** The average for the pre-lesson responses to taking actions to minimize or prevent microaggressions was 3.22 ($SD = .97$) and the average for the post-lesson responses was 3.81 ($SD = .96$), and our paired-sample t-test revealed a significant difference, $t(26) = 2.41, p = .02$. Our results indicate that after the lesson, the candidates perceived that they are more in agreement with taking actions to prevent or minimize microaggressions. The responses to our open-response item asking candidates to describe how they took action to
minimize or prevent microaggressions revealed that the candidates had more conceptually aligned descriptions of potential ways in which microaggression interventions might take place (see Table 3).

Table 3: Examples of Pre and Post-Lesson Responses to Preventing or Minimizing Microaggressions

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pre-Lesson Response</th>
<th>Post-Lesson Response</th>
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</thead>
<tbody>
<tr>
<td>Student I</td>
<td>I am a substitute teacher. I came across some students who were picking at a student that was Hispanic and could not speak fluent English, and I advised them not to.</td>
<td>I subbed in a classroom where African Americans sat, separately, and Whites the same, but I changed the seating arrangement.</td>
</tr>
<tr>
<td>Student J</td>
<td>I always try to put the race card away - like let's not focus on that - let's focus on other difference.</td>
<td>Talking to people in organizations about making one person represent a group.</td>
</tr>
<tr>
<td>Student K</td>
<td>I try to keep students who may not understand how what they say can be offensive from saying certain words or phrases.</td>
<td>In intern, I try to keep students from acting or saying things toward other students that can offend them.</td>
</tr>
</tbody>
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Overall Lesson Influence. To determine the overall lesson influence, we examined the candidates’ responses to our item, asking the candidates to share what they learned from the lesson. Our analysis reveals that the candidates developed a new perspective through the experience, as indicated by this response. “For the most part, I see a new point of view. I witnessed a teacher who is not comfortable with minorities. I know that as an educator, I need to put all bias aside and just teach my subject.” We found the teacher candidates gained a deeper appreciation for the influence microaggressions have on their role as teachers. One of the candidates made the following statement, “We as educators should make a change. Moreover, [we] should not have microaggression ourselves.” Most of the responses revealed that the candidates gained a greater appreciation for both the role of the teacher in preventing or minimizing microaggressions.

Discussion and Implications
Using the lens of transformative learning (Mezirow, 2000), we developed and investigated a rather brief but focused intervention designed to increase pre-service teachers' knowledge and awareness of microaggressions and their implicit bias. For people to become aware of their implicit bias and microaggressions, they need to challenge their personal beliefs and become more self-aware (Whitford & Emerson, 2019). The process requires exposing at an explicit level the conditions and thoughts at the implicit level (Greenwald et al., 1998).

Our analysis indicates that our lesson increased the teacher candidates’ knowledge of personal bias and awareness of microaggressions. We speculate the combination of reflection, discourse, and field experiences enhanced the opportunities for the candidates to reflect and apply their knowledge of microaggressions and implicit bias. We posit that the field experience had an impact because the candidates were in schools different from their school experiences and were in a school setting where microaggressions were likely to happen. Students were to reflect on their assumptions and perspectives as they interacted with students within the school community. The candidates were able to challenge personal beliefs and witness situations of microaggressive interactions in a setting they are preparing to work in, which made the concept and conditions for microaggressions more salient and notable. Our results suggest that the intervention was effective at catalyzing a transformation in the students through the reflection, discourse, identification, and documentation of microaggressions and implicit bias.

Perhaps one of the most curious aspects of our study is concerning the pre-lesson survey responses in which the candidates answered the items with little to no knowledge of microaggressions. Thus, the candidates were responding to conditions and perceptions regarding microaggressions without an accurate working knowledge of the phenomena. As a result, their pre-lesson scores should be considered tentatively with a few exceptions, such as their ability to define microaggressions. This is a limitation of our study.

While some of the pre-lesson scores should be considered tentatively, the candidates did answer the items post-lesson with knowledge of microaggressions. The lack of change in the scores from pre- to post-lesson and the nearly neutral responses to several items (pre- to post-lesson) suggest that the candidates may think some microaggressive conditions and interactions are taking place, but they are challenging to identify. Our speculation of the neutral responses is in alignment with the potentially hidden nature of microaggressions and the impact of the interactions. The results also suggest that additional attention may need to be placed on supporting student knowledge of how to notice or recognize microaggressions. As we move forward with our research, we plan to delve deeper into teaching using a transformative learning approach and investigate the effect on student identification and recognition of microaggressions.

Perhaps the most prominent implication of our research is the general lack of knowledge regarding microaggressions can be alleviated with a rather brief, but appropriately focused lesson designed in alignment with transformative learning. Consequently, our research indicates that to increase teaching candidates’ awareness and knowledge of microaggressions does not have to be a long process if the approach is appropriately structured. However, there is also likely a need for additional follow-up lessons to increase the abilities of teacher candidates to recognize and identify more subtle forms of microaggressive activities. Further, ongoing
discourse, reflection, observation, and documentation would likely increase the candidates’ internalization of recognizing and addressing the occurrences of microaggressions.

Conclusion

Reflecting on the interaction between David and his fifth-grade teacher, we wondered what role microaggressions and implicit bias might play in fostering an environment in which a pencil became the catalyst to a very unfortunate and highly emotional interaction. The reality is that we all have implicit biases. However, unless we make our implicit biases explicit to our awareness through reflection and discussion of our belief systems, we may unknowingly engage in or accept microaggressive behavior. We took a step toward increasing pre-service teachers’ knowledge and awareness of microaggressions and empirically documented the outcome. We found that a reasonably brief but focused lesson had a significant influence on the candidates’ ability to reflect on beliefs that support behaviors in the classroom. We are encouraged by our results. We recommend others to consider similar lessons and expand on our research to address teachers’ behavior in the classroom and to provide further evidence-based practices for addressing the negative impact implicit bias and microaggression has on the classroom.

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