

## CAN MATH TEACHING CHALLENGE INSTITUTIONAL RACISM?

*O ENSINO DE MATEMÁTICA PODE DESAFIAR O RACISMO INSTITUCIONAL?*

*¿PUEDE LA ENSEÑANZA DE MATEMÁTICAS DESAFIAR EL RACISMO INSTITUCIONAL?*

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Recibido: 11/07/2022

Aprobado: 11/07/2022

### ABSTRACT

This paper is part of a larger study that contributes to theory and method related to the study of how racism permeates teaching practice. I combine concepts from critical realism and critical race theory to develop a theory to better describe how local social interactions that occur in a mathematics classroom can disrupt common patterns of interactions that lead to the reproduction of the racial structure that permeates contemporary U. S. society. Drawing primarily on the concept of norm circles, I discuss how specific mathematical teaching practices supported the creation of a conflictive normative space inside of a classroom in which local disruption of racism is more likely to occur. With data collected from an elementary mathematics laboratory classroom, I refine and improve the theory. I also discuss some methodological considerations that include the need to capture unexpected disruption of (racist) patterns and confirmation of such a disruption being normative in the classroom. I illustrate such work by reporting on how keeping the focus on mathematics supported the creation of intersectional normative spaces in which Black children were more likely to engage in doing mathematics and to expect and be expected to do so. In these spaces, they were also less likely to be disciplined or have their thinking immediately evaluated and corrected.

Keywords: critical race theory. institutional racism. intersectional normative spaces.

### RESUMO

Este artigo é parte de um estudo mais amplo que contribui para teoria e metodologia relacionada ao estudo de como o racismo permeia as práticas docentes. Eu combino conceitos do Realismo Crítico e da Teoria Crítica de Raça para desenvolver uma teoria que descreve melhor como interações locais que ocorrem em uma sala de aula de matemática podem romper padrões de interações que levam a reprodução da estrutura racial que permeia a sociedade estadunidense contemporânea. A partir do conceito de círculos normativos, eu discuto como certas práticas docentes de matemáticas apoiam a criação de um espaço normativo conflitivo em sala de aula na qual a desestabilização local do racismo é mais provável de ocorrer. Com dados coletados em uma aula de matemática laboratório, pude refinar e aprimorar a teoria. Também discuto algumas considerações metodológicas que incluem a necessidade de capturar desestabilização inesperada de padrões (racistas) e a confirmação de que tais desestabilizações são normativas nesta sala de aula. Eu ilustro tal

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trabalho reportando em como manter o foco na matemática pode apoiar a criação de espaços normativos interseccionais nos quais crianças pretas estiveram mais predispostas a se engajar em fazer matemática e em esperar e serem esperadas a fazer isso. Nesses espaços, elas também foram menos predispostas a serem disciplinadas ou terem seu pensamento imediatamente avaliado e corrigido.

Palavras-chave: teoria crítica de raça. racismo institucional. espaços normativos interseccionais.

## RESUMEN

Este artículo es parte de un estudio más amplio que contribuye a la teoría y la metodología relacionadas con el estudio de cómo el racismo permea las prácticas docentes. Combino conceptos del Realismo Crítico y la Teoría Crítica de la Raza para desarrollar una teoría que describa mejor cómo las interacciones sociales locales que ocurren en un aula de matemáticas pueden alterar los patrones comunes de interacciones que conducen a la reproducción de la estructura racial que impregna la sociedad estadounidense contemporánea. Basándome principalmente en el concepto de círculos normativos, discuto cómo las prácticas específicas de enseñanza de las matemáticas apoyaron la creación de un espacio normativo conflictivo dentro de un aula en el que es más probable que ocurra una desestabilización local del racismo. También discuto algunas consideraciones metodológicas que incluyen la necesidad de capturar la interrupción inesperada de los patrones (racistas) y la confirmación de que tal interrupción es normativa en el aula. Ilustro dicho trabajo informando sobre cómo el enfoque en las matemáticas puede apoyar la creación de espacios normativos interseccionales en los que los niños negros tenían más probabilidades a participar en las matemáticas. En estos espacios, también era menos probable que fueran disciplinados o que su pensamiento fuera evaluado y corregido inmediatamente.

Palabras clave: teoría crítica de la raza. racismo institucional. espacios normativos interseccionales.

## Introduction

Issues of power and oppression have been studied and theorized for a long time in social sciences and a variety of theories have been developed to both understand how oppression is perpetuated in society and explore avenues for change. Different forms of oppression may require different theoretical approaches to capture particular nuances. Racial inequality in the United States is a perennial problem that is currently perpetuated in complex and covert ways (Bonilla-Silva, 2018). Critical race theory (CRT) is the more prominent theory to capture the specificities of how race operates in current U. S. society, but still portrays a stationary picture of racism in society and does not explicitly unpack mechanisms of reproduction of racism between individual actions and social structure, or, in other words, how microlevel interactions can shape social structure and how macro-structures influence human behavior.

Moreover, the interactions that occur inside classrooms are still not well explored with lenses that foreground race and that view classroom interactions as mediated by racialized dispositions and practices. Thus, I develop and test the construct of norm circles as a tool to investigate classroom interactions with respect to race and racist norms. I use data collected from an elementary mathematics laboratory to test and refine the theory; the question that guides my work is: *What considerations are there in operationalizing the concept of norm circles methodologically to better understand the relationship between microinteractions that occur in a classroom and the institutional racism in which they are situated?*

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Furthermore, my main goal of this paper is to understand the theory as a framework to better understand racism inside mathematical classrooms. As such, it is important to emphasize that while the question may not be mathematically specific, the whole study was mathematically oriented. Additionally, I also present excerpts of analysis to illustrate how the theory can be applied and used to interpret classroom interactions.

### **(Critically) studying mathematics instruction**

Assuming that the field of mathematics education has paid more attention to how power dynamics significantly mediate human interaction (Valero, 2004; Gutiérrez, 2013), within the study of mathematics instruction, the incorporation of sociopolitical frameworks have suggested definitions for equitable instruction (e.g., Hand, 2012), as well as alternative definitions to equity (Boaler, 2008), but it has also brought up how power dynamics may (re)create unequal participation in mathematics classrooms (Lubienski, 2000). However, few studies focused on what teachers actually do when they teach and how this impacts student learning (Ball, 2017), explicating power dynamics or not.

In contrast, the particular area of critical mathematics has embraced sociopolitical positions for a longer time, and recently, critical mathematics scholars have broadened their initial conception of critical mathematics to include a variety of perspectives that acknowledge the sociopolitical role of mathematics education in contemporary society (Powell & Brantlinger, 2008). I position this work in this pluralistic view of critical mathematics, in which Powell and Brantlinger (2008) argue that

an objective of critical mathematics ought to be to engage students, socially marginalized in their societies, in cognitively demanding mathematics in ways that help them succeed in learning that which dominant ideology and schooling practices position them to believe they are incapable. (pp. 1–2)

This objective parallels Gutstein’s classical knowledge (Gutstein, 2005) and Ladson-Billings’ academic competence (Ladson-Billings, 1995). Nevertheless, both Gutstein’s and Ladson-Billings’ perspectives envision a whole program for teaching mathematics, suggesting curriculum and activities to do with students, but are not focused specifically on the teaching practices. So, for example, Gutstein discusses one activity he did with his students from the curriculum they were using about wealth distribution; he details what students learned during their work with the activity but not what he (i.e., the teacher) actually did. The work presented here is about what teachers do within a perspective of teaching cognitively demanding mathematics as means to empower marginalized students.

### **Studying race and education**

Educational research has documented that Black children, especially boys, are over-punished in schools, being referred to the office, suspended, and expelled in higher rates than any other group (Monroe, 2005; Gregory, Skiba, & Noguera, 2010). The review conducted by Gregory, Skiba, and Noguera (2010) shows that race is a predictor for the discipline gap, with the major factor accounting for the difference in discipline rates between Blacks and Whites being biased differential selection originated primarily at the classroom level (Skiba et al., 2002). Black children are referred to discipline for reasons that Whites are not, and reasons that are more subjective in comparison to Whites, meaning that Whites are punished for reasons that are more objectively observable, such as smoking and vandalism, but Blacks are punished for disrespect, for example. Additionally, the majority of schools’ authorities are White who frequently fail to acknowledge Black ways of participation in schools, deeming Black children’s behavior as inappropriate even when they are not (Monroe, 2005). Finally, it is important to notice that most research about racial disparity in school discipline is about Black boys, but results are similar in a few studies focusing on Black girls: they too are suspended and expelled in higher rates in comparison with White girls (Crenshaw, Ocen, & Nanda, 2014). Furthermore, Black girls may also experience complex and subtle positioning in classroom interaction (Grant, 1994; Morris, 2007) that classify them as “loud” or aggressive, socially skilled, but never smart or academically competent. Here, I look to

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mathematics teaching practices that might challenge such patterns of inequal disciplining while teaching cognitively demanding mathematics and legitimating alternative ways of doing mathematics.

### **The theory: norm circles**

In previous works (Salazar, 2019), I describe in detail my critical realist perspective view of the world, summarized as “the belief that there are features of the world that are the way they are independent of how we think about them” (Elder-Vass, 2012, p. 6). Moreover, the “real things” that make the world are viewed as structures and mechanisms, or, in other words, causal laws that are better described as tendencies rather than determination (Bhaskar, 2008). Additionally, the real things in the world can be combined in a way that, because of their structure and not only their individual properties put together, a new thing emerges in the world. Elder-Vass (2010) also refers to this new thing as an “entity” or whole, arguing that it possesses “properties or capabilities that are not possessed by its parts.” (p. 4)

In this conception, I am viewing an individual in the lowest level of the social world, the whole society as the highest level, with many intermediate levels in between, such as social institutions. The immediate higher level to an individual is, according to Elder-Vass’s (2010) definition, a *norm circle*. The norm circle is defined by the group of individuals who hold a normative belief of *endorsing* a social norm or, in other words, each individual in the norm circle acts to reinforce the norm and discourage behavior that does not conform to the norm. Elder-Vass argues that the norm circle is an emergent structure rather than only a group of people because it has a new causal power: to increase conformity to the norm.

### **The theory: a critical realist take on critical race theory**

In this work, I am foregrounding race, racism, and racialized experiences. I am viewing race as a complex social construct that goes beyond the color of skin and citizenship (Ladson-Billings, 1999), which brings real consequences to people once they are identified as member of a particular racial group (Bonilla-Silva, 2018). In a critical realist frame, from this assumption, the only conclusion is that there should be a set of racist norms being reinforced by norm circles. These sets of norms would constitute an institutional reality with respect to race that “it is so enmeshed in the fabric of our social order, it appears both normal and natural to people in this culture” (Ladson-Billings, 1999, p. 12). Racial structure, as defined by Bonilla-Silva (2018), is “the totality of the social relations and practices that reinforce white privilege” (p. 9). This racial structure can be seen as the complete set of social norms endorsed by circles committed in sustaining white privilege. These circles, through their members, have the causal power to increase conformity with such norms. Such causal power indicates the reality of racial structure in an emergentist critical realist sense.

In this work, I am particularly focusing on how Whiteness, here viewed as a set of social (privileged) possessions that can operate similarly as property in a capitalist society, and liberal framings of the world give shape and form to racist norm circles that inform social interaction. In light of the construct of norm circles, these ideas speak about the materialization of institutional racism in daily social interactions among people: abstract liberal ideas fuel discursive norm circles to sustain White privilege (Salazar, 2019). While racist norms are pervasive throughout society, thus, throughout education and schooling, I am particularly interested in how they unfold within teacher and student interactions. I am looking to the materiality of institutional racism framed as the protection of Whiteness as property under abstract liberal ideas plays out in the context of interactions among students and teacher in mathematics instruction.

### **The theory: framing instruction and instructional practices**

I draw on the work of Cohen, Raudenbush, and Ball (2003) to view instruction as complex relationships among teacher, students, and content within contexts. What I am particularly looking at are contexts as

social institutions that are often oppressive. Moreover, I look to the work a teacher does as professional practice as Lampert (2001) does. Finally, I am looking with a critical realist lens, and seeing normative practices in this picture. I am using the concept of norm circles to better articulate how the social contexts serve as resources and/or constraints for teaching and/or learning; I am looking to classroom interaction as individual actions in light of norms enforced by norm circles (Salazar, 2019). Figure 1 illustrates how I frame instruction.

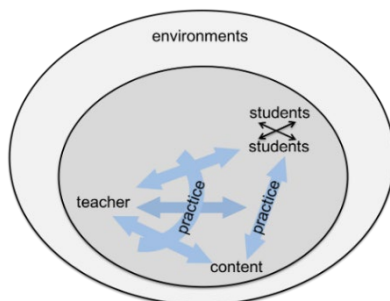


Figure 1: Representation of instruction (Salazar, 2019).

### The laboratory setting and data collection

In this study, I analyzed episodes of instruction from a mathematics elementary laboratory classroom. This classroom is the main part of a summer program held each summer at a large research university in the United States. In this program, an experienced White teacher teaches lessons to a group of students who will attend fifth-grade at public schools in the fall, while over 70 other educators observe. Because this summer program is a site of research for student learning and teaching practices, different types of data are collected by the research team. The data set includes video records of instruction, video records of pre-brief and de-brief meetings with learning teachers, copies of students' notebooks, pictures of classroom records such as charts, lesson plans, class materials, etc. The majority of the students are African American and most come from low-income households. Only a few of them are White. Many students are multilingual and have varying levels of English proficiency and their mathematical performance in school is homogenously low.

### The train problem

The students worked on collectively solving the train problem (Figure 2) over the entire two weeks of the program among other mathematical problems. Here, I focus on data related with students working on this problem, so video records of the classroom, detailed lesson plans for each class, copies of student work (e.g., notebooks, homework, and assessments), photos of every collective record produced in the classroom (such as charts and white board records). I am focusing on this problem because it is unusual to work on problems of this kind at this level, but some of its characteristics are very common in the field of mathematics, which makes the problem interesting to investigate practices of doing mathematics in a community. The solution of Part 1 is that the SP company can build trains that hold 1 to 15 passengers. Part 2 actually does not have a solution and, in this case, solving the problem means mathematically explaining why it is not possible to find a train that meet all the conditions of the problem.

<p><b>The Train Problem</b></p> <p>The SP Train Company has five different-sized train cars: a 1-passenger car, a 2-passenger car, a 3-passenger car, a 4-passenger car, and a 5-passenger car. These cars can be connected to form trains that hold different numbers of people.</p>	<p>□ 1-passenger car  <span style="color: red;">■</span> 2-passenger car  <span style="color: green;">■</span> 3-passenger car  <span style="color: purple;">■</span> 4-passenger car  <span style="color: yellow;">■</span> 5-passenger car</p>	<p><b>Part 1</b></p> <p>You can use <u>only</u> these five types of cars to build trains, and you can use <u>at most one</u> of each type of car in each train. What are the different numbers of people that the SP Train Company can build trains to hold?</p>	<p><b>Part 2</b></p> <p>Ms. McDuff wants to order a special 5-car train that uses exactly one of each of the different-sized cars. Ms. McDuff wants to be able to break apart the 5-car train to form smaller trains that hold exactly each number of people from 1 to 15. The customer wants to be able to build these smaller trains using cars that are next to each other in the 5-car train. Can the SP Train Company build Ms. McDuff's order? Explain how you know.</p>
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Figure 2: Summer program train problem.



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## Analysis

I watched and wrote fieldnotes from all video records. From the fieldnotes, I focused on identifying consistent instructional practices that could signal norms created in the context of this classroom. Guided by the literature on disciplining Black children and positioning Black girls in classrooms, I initially described in the fieldnotes situations in which I expected a particular teaching move to occur, but the teacher did something else instead. So, for example, when I expected the teacher would reprimand a Black student because they were laughing, rolling their eyes, or acting in a way that is often considered disrespectful by typical White teachers (Skiba et al., 2002; Monroe, 2005), the teacher instead seriously asked a mathematical question. Instructional episodes were then selected to analyze such practice in more detail to refine the initial analysis. By looking across the episodes, I was able to identify how frequently and consistently an instructional move or tool was enacted by the teacher, which indicates a normative aspect of the practice, thus the existence of the respective norm circle.

### Illustrating the theory: keeping the focus on math

Frequently in a classroom, during individual or small group work time, students are not focused or do not seem to be focused, on the content work they should be doing. In these cases, teachers often reprimand students for not doing the work they were supposed to, or for not “trying,” and even if teachers do not explicitly reprimand, the focus of the conversation with the students can still be on their behavior rather than the content they should be working on. In the laboratory classroom, the teacher often keeps the focus of the conversation on math. This focus means that, when the teacher is talking with a student or small group of students and they seem to be behaving in ways that would likely to be reprimanded in many classrooms, the teacher of this laboratory class consistently continued the mathematical talk and not reprimanded any student.

The following example comes from Day 6 when the teacher was talking to the pair Ryan and Deonté. While Ryan seems more focused in the conversation with the teacher, Deonté, a dark-skinned Black boy, does not stop playfully laughing. The teacher never asks him to stop laughing or to focus on the work. Instead, she keeps asking mathematical questions and inviting Deonté to answer. Ryan answers all the teacher’s questions, but Deonté makes a comment at the end of the interaction that shows he is following the conversation all along and may have learned from it.

Teacher: So what number are you up to with that train?

Deonté is laughing, Ryan answers but it is inaudible.

Teacher: You can make seven? How did you make seven?

Ryan: Yellow and orange.

Teacher: I don’t see how you made seven.

Deonté keeps laughing, Ryan and the teacher are looking to their work.

Teacher: I don’t think you’re being careful right now boys. How can you make seven with this train?

Deonté: *I make it. (laughs again)*

Teacher: Deonté, do you see how to make seven?

Deonté: No.

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Teacher: I see a way but it's not yellow plus red. Why would yellow plus red not work?

Deonté now laughs harder. Ryan says in the midst of Deonté's laugh:

Ryan: I told you (inaudible – pointing to their work)

Teacher insists:

Teacher: Why couldn't that work though?

Ryan: Because they are not right by each other.

Teacher: Exactly. But I see a way to make seven. Do you see it Deonté?

Ryan: Oh, right here. (pointing to their train)

Teacher: What is it?

Ryan: uh... four plus three.

Deonté: Oh, here? (seriously asking and pointing to their train)

Teacher: Good. So, record that one.

In this sample interaction, the teacher never stopped the focus on mathematics to ask Deonté to stop laughing, even though he laughed almost the entire conversation. In a typical classroom, in which research shows how Black boys are systematically over disciplined (Skiba et al., 2002; Monroe, 2005), it is reasonable to expect that the teacher could have, at least, stopped asking mathematics questions to request Deonté to stop laughing and sit quietly in his seat. In this laboratory classroom, however, the teacher kept seriously asking questions about the mathematics they were doing, even when Deonté emphasized a seemingly deliberate wrong answer in form of a joke (“I make it”). In the end of the conversation, it is possible to notice that Deonté is engaged in the conversation when he points to the rods saying “Oh, here?” In this case, the simple persistence with the mathematics supported Deonté in doing mathematics with Ryan, no form of disciplining was required so he engaged in doing mathematics.

In another episode, that occurred on Day 9 when they were working on the red and white clue (which helps to solve Part 2 by putting the red and the white on both ends), the teacher approached Dior, who was working by himself at her desk beside Jeremiah, with the teacher chair between them. Dior was seating with his chair backwards.

Teacher: What is the train you're trying right now, Dior? Can you make it?

Dior hums a “no” musically.

Teacher: Can you build it?

Dior does not answer.

Teacher: Where's the train? Can you build me a train so I can see the train you're trying?

Dior start moving cars.

Teacher: Remember white on one end and red on the other. No-

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Teacher interrupts Dior putting a hand over his.

Dior then answers looking away:

Dior: What was that for?

Teacher: Because we are trying the ones that have the white and the red at the ends.

Dior balances on his chair and turns his head up, facing the ceiling with his mouth open.

Dior: [sigh]

Then, Dior comes back to his original position, looking to the desk, and says to himself:

Dior: You messed up.

Teacher: Can you build it so it has white on one end and red in the other, okay?

They continue their discussion, with Dior implying he wanted to test a different train, and the teacher insisting he tried one to test the red and white clue. Dior ended up doing the train he wanted, which seems to be white-green-purple-yellow-red, but data is not conclusive. Teacher and Dior were occasionally interrupted by Jeremiah in their conversation, and the teacher asked him to stop interrupting them and focusing on his work. At one point, Jeremiah sat back in his seat and Dior said to him:

Dior: You disgust me.

The teacher immediately said to Dior, but then continued talking with Dior about his work:

Teacher: That's not okay.

[Both boys smile. It is hard to tell if this interaction between the boys were just playful as the smile has implied, or if it was something more serious.]

Dior stands up.

Teacher: Now start with the big numbers, okay?

Dior seems to be thinking while standing up, seating, and looking to his train and charts on the wall. Teacher waits a little, then asks:

Teacher: Dior, can you make fifteen with this one?

He vigorously, balances on his chair, holding its back with one hand and counting fingers with the other. He is looking away, possibly to the chart at the wall containing the number of passengers each car holds.

Hamza approaches the teacher to show his work. They briefly talk while Dior is looking away balancing on his chair. Then, Dior speaks while standing:

Dior: No. No, you cannot.

Teacher: How– Why not? How much is that right here? [pointing to the whole train]



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They continue for a little while, but do not reach a conclusion. The teacher decides to interrupt the small group work to call a class discussion.

In this episode, the teacher could have reprimanded Dior on multiple occasions for different motives: seating backwards, not answering when she asked a question, or inappropriately responding (“What was that for?”), balancing on the chair, looking away and sighing. Every time she kept the focus on math, and so did Dior in response. Even when she said what he did was not okay (“You disgust me.”), she did not fully stop the mathematical interaction. As with the other episode, at the end of the interaction, Dior is engaged in the mathematics the teacher is talking about, even if he is still moving in his chair, which reinforces the instructional move, or, in other words, because Dior appropriately responded to a mathematical question the teacher asked, the teacher will be inclined to enact the practice again. In both episodes, the boys engaged in doing mathematics as a consequence of the instructional practice which functions as an endorsement of the norm.

Even though the typical interaction described here does not capture the full range of interactions in this class, it illustrates the instructional move of keeping the focus on math, which is something the teacher in this classroom does often in many different situations. The teacher also engaged in more “traditional” instructional moves, explicitly requesting students to focus on the work, such as the one she did with Jeremiah when he interrupted her interaction with Dior. But keeping the focus on math was a move the teacher used often and consistently enough to be considered normative in this classroom. By doing that, the teacher shifts students’ topic of conversation toward mathematics, and supports students engaging in challenging mathematics. Moreover, whenever she focuses on the math rather than reprimanding the student, the teacher refrains from using discourse moves that could reinforce the positioning of students as troublemakers. This instructional move also cast doubt on the need to discipline Black children so they can learn. The existence of a norm in which students do not need to be disciplined so they can learn creates an intersectional normative space in which Black children are, at least locally, less likely to be disciplined in classroom. Furthermore, these sample interactions challenge not only ideas about who can know and do mathematics, but also about *how* one can know and do mathematics. Deonté was playfully laughing during the entire interaction with the teacher, but the seriousness and accuracy of his last commentary indicates he was actually following the talk between Ryan and the teacher and was participating in it somehow. Dior was also seating differently, balancing on his chair, standing up, but doing mathematics with the teacher, nevertheless. So, in the intersectional space created by this instructional move, Black children are not only less likely to be disciplined, but they are more likely to be allowed to do mathematics their own ways.

## **Discussion and final remarks**

To operationalize the theoretical construct of norm circles methodologically with respect to racialized patterns that emerged in the context of this laboratory classroom, and guided by literature on race in classrooms, I had to first notice teaching practices that did not followed an expected (racist and biased) norm. Then it required checking whether the teacher’s action could be characterized as normative or not, by looking across episodes for frequency and consistency of the practice, by checking the members of the circle, and how the norm was reinforced by them. In this case of looking to teacher’s practices, it is relevant that, although teacher and students are the typical members of the circle in a classroom and act to reinforce the norm, ultimately only students’ actions endorse teacher’s actions. The teacher initiates the action in the form of a practice, which already reinforces the norm if the teacher does that often and consistently enough, but students’ responses to teacher actions also function as reinforcements for the teacher’s actions. Whenever students engage in doing mathematics as a consequence of the teacher’s actions, the teacher is more likely to reenact it in a similar situation. Conversely, if the students did not engage in doing mathematics, the teacher would likely rethink her teaching strategies and whether they were supporting student learning. So, when students responded to a mathematical question the teacher posed when keeping the focus on math, the teacher might interpret this, consciously or not, as a successful or effective teaching move and become inclined to reenact it. Moreover, the fact that the

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teacher actually reenacted it consistently over the course of this laboratory classroom, shows the teacher had not revised her disposition to act in such way.

This process revealed that the rigor of the framework rests on normativity, so examining snip shots of particular social interactions is not sufficient to account for norms, given the necessity of regularity and consistency for something to be accounted as normative. The observation of recurrent patterns over time, or across multiple episodes, supported a more accurate description of local norms of interactions. Moreover, the confirmation of the norm is also significant by looking to the members of the circle and how their actions reinforced the norms.

A limitation from this method is that all reported teaching practices were initially captured because they did not follow an expected norm. That means that there are still questions about how to capture teaching actions that follow expected normative behavior, i.e., practices that end up reproducing racism. Another limitation of the method is the need to extensively observe the interaction that occurs inside of the classroom. In this study, this was made possible only because of the substantial documentation of the laboratory classroom, therefore, the normativity could be investigated by carefully reviewing the video records multiple times and checking other documents when necessary.

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