

An “Ideology in Pieces” Approach to Studying Change in Teachers’ Sensemaking About Race, Racism, and Racial Justice

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This article makes a unique contribution to the literature on teachers’ racialized sensemaking by proposing a framework of “ideology in pieces” that synthesizes Hall’s (1982, 1996) theory of ideology and diSessa’s (1993) theory of conceptual change. Hall’s theory of ideology enables an examination of teachers’ sensemaking as situated within a structured society and diSessa’s research on conceptual change provides an analytical lens to understand the elements of ideological sensemaking and the processes of ideological transformation. I use the framework of ideology in pieces to analyze and interpret the ideological sensemaking and transformation of a teacher engaged in a collaborative teacher research group in which participants explored issues of social justice in their high school math and science classrooms. The framework and analysis presented in the article offer a more comprehensive theory of teachers’ ideological sensemaking and transformation that includes their cognitive, social, and structural dimensions.

Many prominent scholars in teacher education have argued that effective teachers, particularly teachers of urban students of color, must understand their work within the larger context of a racially stratified and structured society (Cochran-Smith, 1997, 2005; Gay & Kirkland, 2003; Hollins, 1997; Sleeter, 2001; Villegas and Lucas, 2002). Drawing from Danielewicz (2001), Gay (2000), Ladson-Billings (2001), Palmer (1998), Schön (1983), Valli (1992), and Zeichner and Liston (1996), Gay and Kirkland (2003) go so far as to argue that “teachers knowing who they are, understanding the contexts in which they teach, and questioning their knowledge and assumptions are as important as the mastery of techniques for instructional effectiveness” (p. 181). Such arguments are based, in part, on a large body of research that has documented the deleterious consequences when educators fail to engage in such critical self-examination and instead assume that students and their families and communities are deficient in some way (Gay, 2000; Kozol, 1991; Olmedo, 1997; Sleeter, 2001; Valencia & Solórzano, 1997). Like others, teachers are prone to “attribute the causes of [educational disparities] to the effects of poverty and the unfortunate influences of family background,” which are “eminently more palatable than ascribing the cause

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to some form of discrimination or racial injustice” (Noguera & Wing, 2006, p. 6). There is an increasing recognition among teacher educators that it is essential to engage teachers in not only questioning deficit framings of students, parents, and communities, but to have them examine the purpose and nature of their work within their larger social context. In this light, Cochran-Smith (2005) argues that teacher education for social change must “conceptualize fundamental questions about the knowledge, interpretations and political commitments that guide teachers’ [. . .] actions, social relationships, and questions” (p. 250). A significant strand of research in this field pays particular attention to teachers’ sensemaking about race and racism¹ (Case & Hemmings, 2005; Haviland, 2008; Leonardo, 2004; Levine-Rasky, 2000; Marx, 2004; Marx & Pennington, 2003; Mazzei, 2008; McIntyre, 1997; Milner, 2006; Mueller & O’Connor, 2007; Picower, 2009; Riviere, 2008; Sleeter, 1993). Largely building on sociological approaches, these studies² have highlighted the importance of addressing race and racism in teacher education, disrupting notions that they can be understood simply as individual biases and stereotypes. These approaches emphasize the constructs of power and privilege and highlight the role of racism in organizing, controlling, and distributing resources and access in society. Sociological approaches have also been instrumental in demonstrating how teachers’ actions and inactions are shaped by and in turn often reproduce racialized patterns of inequity and injustice both in the classroom and society at large. A contrasting teacher-as-learner framework, elaborated by Lowenstein (2009) in her extensive review, emphasizes constructivist theories of learning and sees teachers as “competent learners who bring rich resources to their learning” about issues of race, racial justice, and equity (p. 187). There are commonalities between the sociological approach and the teacher-as-learner approach, and each has made significant contributions to teacher education. Due to differences in theoretical orientations, however, these perspectives have become increasingly oppositional. Sociological approaches critique teacher-as-learner perspectives for underplaying the causes and effects of racism; and teacher-as-learner approaches critique sociological perspectives for seeing teachers too monolithically and without the potential for constructing new understandings. Table 1 summarizes the key characteristics and corresponding responses and critiques by each approach. The oppositional nature of these frameworks has made it difficult to develop an empirically grounded theoretical framework that embeds teachers’ sensemaking and actions within a racially structured society while recognizing their agency. In this article, I contribute to such a framework, which I term *ideology in pieces* that synthesizes Hall’s (1982, 1996) theory of ideology and diSessa’s (1993) theory of conceptual change. I use this framework to analyze and interpret the ideological sensemaking and transformation of a teacher engaged in a collaborative teacher research group in which the participants explored issues of social justice in their high-school math and science classrooms.

Ideology in pieces works at the intersection of sociological and teacher-as-learner approaches by enabling an analysis of individual teachers’ learning and transformation while situating such sensemaking in practices and discourses that stabilize or challenge structures of power in society. Drawing from Hall (1982, 1996), the theory of ideology in pieces emphasizes that teachers’ taken-for-granted assumptions are socially shared and are reflexively related to a racially stratified

¹I use the terms race and racism in this article as described by Omi and Winant (1994).

²For the sake of brevity, I refer to these approaches as “sociological approaches,” acknowledging the important theoretical and methodological differences in the work of these scholars.

TABLE 1
Defining Characteristics and Critiques of Sociological and Teacher-As-Learner Approaches

<i>Defining Characteristics of the Sociological Approach</i>	<i>Critiques and Responses by a Teacher-as-Learner Approach</i>
<ul style="list-style-type: none"> • The majority of teachers in the United States are White and middle class. They often have little understanding of classism and racism (see Sleeter, 2008, pp. 559–561 for an extensive review). • White, middle-class teachers often view low-income students and students of color through a deficit lens. • White, middle-class teachers often resist and subvert attempts to address racism in classrooms through a host of active and passive strategies (Haviland, 2008; Leonardo, 2004; Mueller & O'Connor, 2007; Picower, 2009). • Teachers' denial, ignorance, oversight, or active resistance to addressing issues of racism, regardless of their motivation or intent, have the same systemic outcome of reproducing racialized patterns of inequity and injustice. • Teachers must engage in a critical examination of their work within a larger historical, social, political, and economic context. 	<ul style="list-style-type: none"> • Teachers' sense-making and actions are viewed too monolithically through the lens of race. • Teachers' rich resources for learning and change, based on constructivist theories, are overlooked in teacher education programs. • White teachers in particular are seen as "deficient learners who lack resources for learning about diversity" (Lowenstein, 2004, p. 163). • Teacher educators attempt to be "heroes to the rescue" (Lowenstein, 2004, p. 187) who enlighten White teacher candidates about issues of race. This creates, in Lowenstein's usage of McDermott and Varenne's (1995) terminology, a context where teacher candidates become a "display board for the problems of a system" (p. 341).
<i>Defining Characteristics of the Teacher-as-Learner Approach</i>	<i>Critiques and Responses by a Sociological Approach</i>
<ul style="list-style-type: none"> • Teachers, including White, middle-class teachers, bring rich resources to understanding issues of diversity. These resources are rarely acknowledged or built upon by teacher educators. • Teachers have multiple identities, but teacher education programs often focus excessively on race. • From a constructivist perspective, teachers can build on their experiences and resources to become effective teachers for all students. • The overwhelming literature on White, middle-class teachers' resistance to addressing racism is largely due to teacher educators' deficit framing of these teachers. The focus on these teachers' deficits obscures the need for teacher educators to more closely examine their own practice. 	<ul style="list-style-type: none"> • The emphasis on individual resources and change obscures how teachers' actions and inactions are embedded in and reproduce highly oppressive practices and discourses that disproportionately affect poor children of color. • Teachers' meaning making is understood outside of structural constraints and affordances. • It is misleading to say that teacher educators view prospective teachers through a deficit lens and to equate it to prospective teachers' views of their students. Such a usage of the term is superficial, ahistorical, and devoid of an analysis of power. • A focus on individual resources and change reduces racism to a mental construct and obscures the need to fundamentally transform inequitable social, political, and economic structures and institutions.

society. As with other theorists of ideology, Hall glosses over the nuances of individuals' sense-making and their ideological transformation, largely because of his focus on units of analyses such as the media and governmental policy. This limits the value of his framework for teacher educators interested in how teachers' understandings of race, racism, and racial justice transform. Along with van Dijk (1998), I argue that ignoring or underplaying the "crucial cognitive dimension of language use and social practice" associated with racial ideology is an "unwarranted reduction" (p. 10). The use of diSessa's (1993) empirically well-validated theory of conceptual change and its remarkable parallels to Hall's theory of ideology enables an analysis of the elements and processes of ideological sensemaking at the level of individuals. It also provides a lens to understand the gradual, intermittent, and sometimes regressive process of ideological change, while emphasizing the possibility of ideological transformation. Parallel to Hall's inattention to the individual, theories of conceptual change have offered limited possibilities in understanding people's sensemaking about their social world because the scholarship has focused largely on science and mathematics learning in quasi-experimental conditions. By synthesizing a theory of conceptual change with a theory of ideology, conceptual change research is pushed to contend with social sensemaking as embedded in history and reflexively related to a political and economic system. Thus, the framework of ideology in pieces attempts to offer a more comprehensive theory of teachers' ideological sensemaking and transformation that includes their cognitive, social, and structural dimensions, which are not adequately explicated by either sociological or teacher-as-learner approaches.

THEORETICAL FRAMEWORK

Ideology

In Hall's (1996) usage, ideology refers to the "mental frameworks—the languages, the concepts, the categories, imagery of thought, and the systems of representations—which different classes and social groups deploy in order to make sense of, define, figure out and render intelligible the way society works" (p. 26). Ideology is socially shared and exists in a reflexive relationship with the social systems or structures of which it is a part. That is, ideology has especially to do with "the concepts and the languages of practical thought which stabilize a particular form of power and domination," and "reconcile and accommodate the mass of the people to their subordinate place in the social formation" (p. 27). It can also refer to socially shared mental frameworks that challenge the prevailing system. A distinguishing feature of Hall's theory of ideology builds on Gramsci (1971). Hall argues that ideology is comprised of practical, taken-for-granted, commonsensical ways of sensemaking in addition to "well-elaborated and internally consistent 'systems of thought'" (p. 27). Hall further argues that people's commonsense is inherently "fragmentary, disjointed and episodic" (p. 43). That is, people are not compelled to reconcile their sensemaking across contexts, and they may make sense in seemingly contradictory ways without being troubled by it.

Hall (1996) suggests that individuals' understandings, explanations, or interpretations of contexts may vary depending on how they are socially positioned. For example, a teacher's response to the presence of police on a school campus or to a school's accommodation of child's learning needs is likely to be different if he or she interprets the context through the perspective of a teacher,

a parent, a taxpayer, a unionized employee, an anti-militarization activist, or some combination of such perspectives. The salience of a particular perspective is not necessarily consistent across contexts or within similar contexts at different times. It depends on what one sees as relevant. I use the construct of a *stance* to describe people's verbalized sensemaking of their social context and to emphasize that the contextual meaning of the verbalization is dependent on the positionality of the speaker.

Hall (1996) points out that while one's practical knowledge is "real," as it is based on a set of lived experiences, it is also partial and incomplete because it does not allow one to grasp other aspects of the larger system. The relationship between such sensemaking and systems of power is evident in the salience of certain everyday assumptions and their tendency to legitimate or challenge the status quo. For instance, the assumptions that "the harder you work the more likely you are to succeed," and that "intelligence is innate," tend to legitimate wealth and income inequality at a systemic level, while assumptions that "all labor is of equal value" and that "intelligence is malleable and socially constructed" might challenge the same. From this perspective, as people "make sense of, define, figure out and render intelligible" the way race and racism operate in society, they largely rely on their practical, taken-for-granted, commonsensical knowledge. For one to interpret or explain society through a "well-elaborated and internally consistent 'system of thought,'" or theory, requires what Hall refers to as the *rearticulation* of meanings. Hall's term emphasizes a collective contestation of critical meanings and the less common connotation of articulation as the "state of being joint or interrelated" (Merriam-Webster Online Dictionary). In the process of rearticulation, many of the commonsensical meanings and associations of words, concepts, images, anecdotes, and so on are broken, and an association of new meanings is established.

Hall's focus on the social and structural nature of ideology and his lack of attention to how individuals learn ideologies evade some of the most pressing concerns for teacher educators who engage teachers in learning about the intersections between racism, social justice, schooling, and their classrooms. Hall glosses over important questions regarding the nature of commonsense and the process of rearticulation, providing little specificity as to what changes in individuals and how such change occurs. Leveraging the work of scholars such as diSessa (1993) is particularly promising in understanding such individual change. It is important while making this bridge to be cautious of simplistically equating Hall's construct of rearticulation with individual change. Rearticulation involves changes in collective meaning that challenge social forms of power. Collectively rearticulated meanings shape how individuals make sense of their social world. In turn, it is from changes in individuals' sensemaking that collectively rearticulated meanings emerge. The nuances, challenges, and barriers to how people appropriate and further transform rearticulated meanings are largely ignored in theories of ideology, but they are surfaced when put in dialogue with a theory of conceptual change.

Commonsense

Ideology in pieces draws from a line of conceptual change research commonly referred to as a theory of *knowledge in pieces* (diSessa, 1993, 2002; diSessa, Elby, & Hammer, 2002; diSessa & Sherin, 1998; diSessa & Wagner, 2005; Wagner, 2006). As commonsense has many connotations, I use diSessa's (1993) description to refer strictly to elements of sensemaking that people use

as self-evident, or, as unnecessary or difficult to further justify. This is in contrast to familiar definitions of commonsense as “sound and prudent judgment based on a simple perception of the situation or facts” (Merriam-Webster Online Dictionary). As used in this article, commonsense is based on a “simple perception of the situation or facts,” but it is only “sound” contextually and often in partial and incomplete ways that obscure other analyses.

DiSessa’s (1993) findings support the position that people make sense of the world largely through cognitive elements of commonsense, which he calls phenomenological primitives or p-prims. A commonly cited p-prim is the intuitive sense that “the harder you push something, the farther it will go.” P-prims originate in superficial interpretations of experienced reality, and constitute a rich vocabulary through which one remembers and interprets his or her experience. They are cued in specific contexts, applied locally, and do not require global consistency. A critical aspect that is missing when extrapolating a strict p-prim perspective to sensemaking about the social world is that in addition to the experiential basis for commonsense, there is a need to consider elements of commonsense that originate through social interactions. While p-prims are based on one’s own experience with the physical world, commonsense about the social world is often based on taking socially communicated assumptions or experiences of others for granted. Families, schools, religious institutions, civic organizations, and so on can be sites where these elements of commonsense are reproduced. Hall (1982) argues that there is a structural and institutional basis for dominant commonsense as it gains validity “by repetition and by the weight and credibility of those who propose or subscribe to it” (p. 81). From this perspective, one may embrace reported indirect experiences with a degree of validity similar to his or her own experience. For example, commonsense about violence in communities of color or the lack of educational support provided by parents of color are rarely based on people’s patterned experience in the world, but these assumptions often gain validity similar to one’s own experience because of the reinforcement of such assumptions in the media and in daily interactions. I term the category of cognitive elements of commonsense that people use in their social sensemaking as *naturalized axioms*. The term “axiom” connotes that these elements, as with p-prims, are taken to be true and self-evident in particular contexts. I use the term “naturalized” to indicate that these axioms are socially constructed. That is, there is often nothing inherently natural about them, but they gain the warrant of commonsense within particular historical, cultural, and social contexts and are used as if they were natural, inevitable, universal, and ahistorical. Contemporary examples of naturalized axioms that are used when making sense of schooling include, “the harder you try, the more likely you are to succeed,” “some kids are just smart,” “inequality will always exist,” or “competition is good.” Others include, “if a teacher doesn’t care for her students, it’s more difficult for them to learn,” or “it’s difficult for students to learn if their basic needs aren’t met.” As Wagner (2006) argues about p-prims, the context specificity and lack of systematicity of naturalized axioms can prevent people from seeing contradictions or similarities across contexts. Therefore, one’s interpretations of a context can shift to an interpretation with distinct ideological meaning without apparent notice or unease. I term this phenomenon *shifting salience*.

Naturalized axioms partially constitute what one verbalizes, but what is said cannot be reduced to naturalized axioms. Extrapolating from diSessa (1993), naturalized axioms are cognitive elements that account for the salience and “sense of satisfaction or unease” (p. 119) that one experiences with an explanation or interpretation of a context. As Hall (1982) proposes, the meanings of words and phrases exist in articulation (i.e., interconnectedness) with other images, stories, conversations, anecdotes, and concepts, into a “distinctive set or chain of meanings”

(p. 81). For instance, within contemporary free market arguments about education in the United States, “competition is good,” is arguably articulated in a chain of meaning with notions of privatizing public institutions, greater parental choice in where children go to school, the reduction of taxes, merit pay for teachers, testing of students, and so on. Words and phrases, such as “competition is good,” are also articulated with meanings from “all phases of histories” (Gramsci, 1971, p. 324). Therefore, when one makes sense about an issue at hand, words and phrases that are used may vacillate between meanings that are differently nuanced or significantly different in ideological positioning. I refer to the varied ideological meanings a word or a phrase might take as its *multiplicity of meanings*.

Conceptual Change

DiSessa and Sherin’s (1998) work on conceptual change parallels, in many ways, Hall’s (1982, 1996) description of rearticulation and ideological change. They argue that p-prims are reorganized and change in their salience as people develop expertise. DiSessa and Sherin propose a class of concepts, which they term coordination classes, as a construct to characterize expertise. Similar to Hall’s understanding of ideological change, diSessa (1993) argues that as people develop coordination classes, p-prims change in their salience and no longer function as explanatory primitives. P-prims “become subordinated to more core concepts and principles, yet some selected ones are preserved as legitimate” so that one does not always have to carry out “all the situation-specific reasoning necessary actually to establish an explicit explanation” (p. 145).

Coordination classes are distinguished from other types of concepts in that they are “systematically connected ways of getting information from the world” (diSessa & Sherin, 1998, p. 1170). This is in contrast to category-like concepts, whose prototypical task is to determine whether something is a member of the category. I argue that a construct of a concept similar to a coordination class is particularly promising when considering race, racism, and racial justice. For example, concepts such as blame, responsibility, or fault, as in “one shouldn’t blame poor people for their situation,” involve determining the amount of fault, or comparing responsibility, rather than just recognizing that something is an example of blaming. One component of such a concept is the ability to “penetrate the diversity and richness of varied situations” (p. 1171) and “pick out features in the context that relate to the critical information required” (p. 1172). This ability to see relevant factors involves explicit strategies and extended sensemaking. The other component of a coordination class is “the set of inferences that lead from observable information to the determination of things that may not be directly or easily observable” (p. 1174).

One’s ability to use a concept proficiently in one context does not imply that they have gained the ability to use the concept more generally across contexts. Instead, from a knowledge in pieces perspective, learning a concept requires an “expansive set of underlying, context-dependent knowledge resources and coordination knowledge that [permits one] to understand how the [concept] can be recognized as useful and sensibly applied in varying circumstances” (Wagner, 2006, p. 10). The ability to use a concept is context dependent and people employ a “specific combination of knowledge resources and cognitive strategies . . . to identify and make use of a concept under particular contextual conditions” (Wagner, 2006, p. 10).

Extending diSessa and Sherin (1998), I argue that concepts central to teachers’ ideological sensemaking are socially shared ways of gaining information about the world. DiSessa and Sherin

do not address the socially shared nature of coordination classes as they primarily consider elementary physics concepts, which have relatively normative meanings within the scientific community. Unlike such elementary scientific concepts, concepts such as blame, responsibility, or fault, do not have explicit normative meanings, but develop in communities as shared ways of seeing and systematically determining information.

Examples of the Concept “Teachers Blaming Students”

The concept of “teachers blaming students” is useful as an example of a coordination class that is pertinent to teacher education. In the community of teachers who participated in this study, this concept gained a particular meaning that can be characterized by the following statement: “Society and its political and economic systems are inequitable and require stratified labor. Different groups and individuals have inequitable access to resources. At the micro-level, one way systemic inequity is reproduced is when people attribute disparities to the choices of poor students, students of color, and their families. Teachers need to guard against and counter this tendency to blame students.” A brief analysis of the following statements³ shows the variety of context-specific inferences and ways of seeing relevant factors that are required for the concept of “teachers blaming students,” as described earlier, to be identified and useful:

1. *“Their parents don’t care. They don’t buy them books or take them to the library, let alone read to them”*: To see “teachers blaming students” in this context, it is important to recognize people’s differential access to resources, time, and information, including the teachers’ implicit expectations about reading at home. However, recognizing these factors is not sufficient. For instance, one might conclude that such differences are natural and that if people do not have the same access to resources, they simply have to work harder. Or else, one might see differential access to resources as pertinent in other contexts, but not salient in this context because “parents and students just need to do whatever it takes to succeed.” For one to use the concept, “teachers blaming students” as described earlier, the recognition of these factors must be accompanied by the following inference: When teachers attribute the causes of failure to parents not caring for their children, without taking into account the differential access and resources they have, such as the availability of library facilities, transportation, work hours, and childcare, and without attempting to address these differences in access and resources through changes in institutional and classroom practices, they are obscuring the systemic processes of inequity and focusing on individual choices, thus blaming students and their families.
2. *“These students just don’t care about school”*: The recognition of relevant factors might include seeing students demonstrate care and motivation in other school or non-school contexts, or seeing students demonstrate care and motivation when certain structures and practices are introduced, modified, or removed in classrooms. The set of inferences that comprise “teachers blaming students” would enable one to determine that care and motivation are dynamic and constructed within the context of the classroom, school, and

³These are paraphrased statements that I often hear in my work with teachers. I use them here for illustrative purposes.

society; and thus, if teachers ascribe static characteristics to students and do not examine their own practice, they are “blaming their students.”

3. *“My Asians kids do so well! They are here for less than a year and they end up being at the top of my class. Amazing!”*: Recognizing relevant factors might include seeing the diversity of experiences of students categorized as Asian. Rather than simply examining what is said, recognizing relevant factors might also include consideration of what is implicitly alluded to in the statement. For instance, are Asian students spoken of in contrast to other immigrant groups? The set of inferences associated with “teachers blaming students” would enable one to determine that when teachers ascribe static racial categories to students and attribute success and failure to these static qualities without considering how immigration histories and racial positionings shape learning opportunities, and when they do not work to change associated institutional and classroom practices, they are “blaming students.”

While a person might have the necessary context-specific ways of seeing the concept of “teachers blaming students” in one of these contexts, it does not necessarily mean they will be able to invoke it in another. The analyses below further support the perspective that acquiring a concept requires the development of context-specific ways of seeing and using the concept across a variety of situations. In this light, it is not appropriate simply to state that one has or does not have a concept. For teacher educators, a more accurate description of teachers’ conceptual understandings would include the contexts in which they can adequately see and use the concept.

Summary of the Framework of Ideology in Pieces

In summary, the primary features of the framework of ideology in pieces are:

1. When making sense about implicitly or explicitly racialized contexts, people tend to rely heavily on taken-for-granted assumptions termed naturalized axioms.
2. As they are socially shared and systemically situated, naturalized axioms often “stabilize a particular form of power and domination” (Hall, 1996, p. 27).
3. Naturalized axioms are cued to specific contexts, applied locally and do not require global consistency (diSessa, 1993).
4. Since people interpret different contexts, or different aspects of the same context through a different set of naturalized axioms, “their lack of systematicity can prevent people from noticing contradictions, and their context sensitivity can prevent people from seeing similarities” (Wagner, 2006, p. 7).
5. Developing a well-elaborated and internally consistent system of thought involves learning to see key pivotal concepts in particular contexts and for these concepts to become mutually articulated. This is in contrast to perspectives that see learning as being able to see past the particularities of a context in order to identify abstracted principles.
6. Learning a concept requires an “expansive set of underlying, context-dependent knowledge resources and coordination knowledge that [permits one] to understand how the [concept] can be recognized as useful and sensibly applied in varying circumstances” (Wagner, 2006, p. 10). Even if someone can meaningfully use a concept in one context, it does not imply he or she can use it in another. Learning to use a concept in a particular

context entails recognizing relevant features and making meaningful inferences in that context.

METHODS

The framework of ideology in pieces is employed in the sections below to suggest plausible theoretical interpretations of a teacher's ideological sensemaking and transformation that are not adequately explained through sociological or teacher-as-learner approaches.

Site and Context

The data analyzed in this article comes from a yearlong teacher research group that I facilitated. The group consisted of one first-year and four second-year high-school teachers of math and science. They had applied to be part of a university-based teacher research group and were focused on incorporating issues of social justice in their classes. The participants met every two weeks from October to May to develop research projects on issues, questions, concerns, or challenges that were pressing to them as teachers and dealt broadly with social justice. They conducted research in their own classrooms and shared their progress with the group through structured protocols termed *consultations*. The protocol also provided a format for each teacher to receive feedback from the other participants. The group meetings typically consisted of a discussion on a particular topic and one or two consultations. As a facilitator, I was instrumental in selecting themes and topics for discussion, particularly at the beginning of the year. During the first few meetings, I introduced theories of hegemony and ideas concerning power and social justice through readings (e.g., Bell, 1997) and through short presentations that explored key ideas from research that were relevant to the participants' inquiries. From January, the participants took a greater role in selecting group discussion topics that related to their research projects.

The data analyzed here focus on one second-year math teacher, whom I will refer to as Alan. Alan was a White male and came from an upper-middle-class, suburban background. He taught math with another participant teacher, Julia, in a small school program within the larger school. Alan and Julia had a strong personal and professional relationship. Julia was a White woman who came from a family with a history in labor organizing and was very involved in political activism herself. The other three participants were science teachers who taught in other small schools on the same campus. Alan taught both introductory integrated math courses for ninth graders and advanced integrated math courses for eleventh graders. These courses were untracked due to the efforts of these two math teachers who argued that tracking was antithetical to their vision of equitable schooling and socially just math education. While the small schools were largely untracked, the Academic Choice Program in the larger school offered de-facto tracked courses and honors and Advanced Placement courses. Since many college-bound students and their parents questioned the rigor of untracked courses and integrated math courses, the Academic Choice Program disproportionately enrolled many of the high achieving White and Asian students who often went on to elite colleges and universities. The small schools, in turn, disproportionately enrolled African American and Latino students. Alan and Julia made a conscious choice to work within a small school for these reasons.

All the teachers in the teacher research group had graduated from the same masters and credential program, which had a stated programmatic emphasis on social justice. These teachers felt the program did not adequately prepare them as social justice educators and applied to the teacher research program with the intention of deepening their understanding of social justice in math and science teaching. As a facilitator, I was particularly interested in infusing a structural and historical analysis, both in the group I led and the teacher research program at large. I attempted to promote a discussion of the historical, social, political, and economic contexts of schooling, while maintaining a focus on the teachers' practice. These efforts and framing, and both their affordances and inadequacies, are reflected in the data below.

Data

Of the participants, Alan was chosen for a focused analysis because his research question showed the greatest change in emphasis from a systemic focus, to a deficit-framing of students, to an emphasis on classroom and school practices. Three of the other teachers had an emphasis on classroom practices from the onset, and the last participant did not develop a focused and consistent research question over the course of the year. As described below, Alan recognized many aspects of race and racism, but soon settled on a research question that emphasized students' deficiencies. However, he demonstrated a willingness to re-examine his question based on the suggestions provided primarily by Julia and me. These characteristics of Alan and his pronounced change in comparison to the other teachers are emphasized to remind the reader that the analysis below is dependent on a range of contextual factors. The processes of change will very likely be different for teachers who believe that contemporary racism does not exist, or that its effects are minimal. The intention of this analysis is not to make generalizations about teachers' trajectories of change, but to understand more closely the processes involved in Alan's change and how such an understanding might inform work with teachers in similar and dissimilar contexts.

The primary data sources were my fieldnotes and audiotape transcripts of each meeting. As a facilitator in the university-based program, I was required to submit these fieldnotes to the director of the program within a week of the meeting. Each meeting besides the first was audiorecorded and then transcribed (the first meeting was not audiotaped due to the need to obtain informed consent from the participants). The data analyzed below also includes one e-mail exchange between Alan and myself in which we discussed his research question. All other e-mail exchanges dealt only with logistical details and did not discuss matters substantive to their research process. The final data source was an exit interview that I conducted with Alan at the end of the school year, in which he reflected on his research process and his participation in the research group.

Analysis

The transcripts were analyzed line by line for stances where the speaker interpreted or explained student behaviors and success through:

1. individual choices or values of students or those of their families and communities;
2. systemic or institutional processes, such as inequitable resources, school policies, or classroom practices.

All instances where participants' salience shifted between these framings were noted.

Based on and extending empirical examples from others (diSessa, 1993, 2002; diSessa et al., 2002; diSessa & Sherin, 1998; diSessa & Wagner, 2005; Wagner, 2006), naturalized axioms were inferred from stances in which participants proposed explanations or interpretations that were treated as obvious or self-evident. Assumptions, as elaborated by Fairclough (2003) were also indicators of naturalized axioms. These assumptions include:

1. existential assumptions, or "assumptions about what exists";
2. propositional assumptions, or "assumptions about what is or can be or will be the case";
3. value assumptions, or "assumptions about what is good or desirable" (p. 55).

In the preliminary analysis, "teachers blaming students" emerged as an important way of sense-making and was therefore analyzed for its multiplicity of meanings. The usage of "teachers blaming students" by all the participants, including myself, was traced throughout the data and the meaning of each usage was inferred based on the context. Each instance was examined for how it was used to explain or interpret the context, and for its usage in conjunction with other concepts and naturalized axioms.

As the title of the article suggests and as indicated in the sections above, I am primarily concerned with teachers' ideological sensemaking and transformations regarding race, racism, and racial justice. However, these terms are often not explicitly used in the data excerpts examined. My rationale for still focusing on teachers' racialized sensemaking is that race is implicitly a part of any conversation regarding student success and failure in urban U.S. schools. As Bonilla-Silva (2003) argues, race and racism are often not explicit in conversations because the "normative climate in the post-Civil Rights era has made illegitimate the public expression of racially based feelings and viewpoints" (p. 11). Racial processes mostly operate as "applications of commonsense" that are often not racialized on the surface (Omi & Winant, 1994). Racialized meanings are similarly "articulated in chains of meaning" (Hall, 1982) with seemingly non-racialized elements. The theory of ideology in pieces, to be significant in the post-Civil Rights era, must therefore elucidate how race and racism operate in superficially non-racialized practices and discourses as well as those that are explicitly racialized.

FINDINGS

The findings from this study are represented through four episodes. My intention in highlighting these episodes is to demonstrate the alternative explanations, possibilities, and opportunities that arise when Alan's experiences are analyzed through the ideology in pieces framework, particularly in contrast to sociological and teacher-as-learner approaches. Through these episodes, I offer an ideology in pieces analysis of the shifts in Alan's ideological framing of his students. Specifically, Alan's ideological shifts are apparent in how he begins to grapple with what he terms "big picture" issues of race, racism, and racial justice within the context of his research question.

Episode 1

At the first meeting of the research group, Alan stated that he intended to develop and implement a math curriculum incorporating social, political, and economic issues, particularly with an

emphasis on racial inequality. His research would focus on how students engaged with such curricula. A few topics he considered exploring included the cost of the Iraq War, particularly in terms of its differential impact on people of color in the United States and on Iraqis; comparing the educational achievement and rates of incarceration among youth of color and its racialized nature; and examining the racialized patterns of wealth and income distributions in the United States. These initial topics of research indicate that Alan recognized the racialized nature of inequity and injustice in the United States and the importance for his students to learn about these issues within the context of his math classroom. Also at the first meeting, Alan demonstrated an awareness of his positionality as a White male and the complexities that arise when addressing particular issues with his largely Latino and African-American introductory math classes. For instance, when debriefing an article (Bell, 1997) that I had selected, Alan indicated that while he felt comfortable addressing the operation of hegemony, social reproduction, and power with his students, he was concerned about addressing internalized oppression because of his positionality.

At least in particular contexts, Alan questioned schooling’s stated purpose of learning, the institutional support that exists for meaningful learning, and the usefulness of homework. For instance, during the January meeting, the group discussed an article entitled, “From Degrading to De-grading” (Kohn, 1999). Alan questioned the degree to which schools truly attempt to promote genuine learning:

A1	There’s a line in here that says, “whether this is a legitimate goal, and whether schools exist for the purpose of competitive credentialing or for the purpose of helping everyone to learn.” And you know, I think they intend that to be an obvious question that. . . . When we have, when I was reading this, I really kind of felt that we were trying to, you know, fit the round peg into the square hole thing. I don’t know, I can see at least the way [this school] is set up, it’s very much competitive, focused on the college entrance thing. I don’t think that, I think we say that the purpose is learning, but I don’t think we have that infrastructure in place. Like you said, what can we do in that system that we’re in. I could imagine if I didn’t put any numbers on any papers for the whole semester and threw a kid a B, there would be some issues.
A2	
A3	
A4	
A5	
A6	
A7	
A8	
A9	
A10	
A11	

Alan, similarly, questioned the usefulness of certain practices, such as homework, particularly if they are not meaningful to a student’s learning. The topic of discussion, from which this excerpt was taken, was introduced by Alan in conjunction with his consultation in February and focused on how homework affected students whom he termed “successful” and “unsuccessful.”

B1	I wanted to just throw it out there that we give homework as a given because that’s the system we’ve been in, but I wonder, really what is really the benefit of homework. It doesn’t seem like, I feel like, could be able to, you can cover a lot in 55 minutes a day. Why that? Why is homework, why is homework so important? Is it really . . . what drives us to really make such a big deal about it?
B2	
B3	
B4	
B5	

He related the lack of learning purpose in homework assignments to the disengagement of students:

C1	I just wonder, because it's on those days, where the curriculum doesn't have any assignments and you're struggling to come up with something just so you can give them, assign homework, I just, I wonder how much kids catch on to that. And how many times they've had a homework assignment just to have a homework assignment. And it really feeds into the idea, why do I really care about this. This doesn't. I'm not. You know, I think of the homework I'm assigning, a good portion of it is not crucial to the, their learning, so um, I don't know. I think they, I think they pick up on a lot of that than we think they do.
C2	
C3	
C4	
C5	
C6	
C7	
C8	

Considering that Alan had initiated and led the conversation in C1–C8, it is striking that, within a few minutes, Alan framed his research question as follows:

D1	So, my question as I come to get it, is, kind of, um, pretty big, but I think it is what I want to ask, and that is, why do students fail at being students. So, that is, why are they always behind? Why are they always behind? Why are they always struggling within the school system? Um, not necessarily looking at their understanding of the content, but why do they, why can they not turn in work, why can they not have a pencil, why are they always one step behind? So, in terms of what I've done. I gave an initial survey, I've talked to some kids informally. And, um, so I gave the survey kind of seeing how kids rank where their priorities were.
D2	
D3	
D4	
D5	
D6	
D7	
D8	

The survey, which Alan had his students complete, catalogued how they spent their time after school. Alan had divided the surveys into stacks of kids who are “roughly good at being students” and “kids that are not good at being students.” Given the many possible directions of inquiry, it is noteworthy that Alan addressed his “pretty big” question of “why do students fail at being students” by examining how they spend their time at home, the context over which teachers have the least amount of influence. He does not explore other perspectives that address his practice more directly, such as when students “pick up” that Alan assigns homework, “a good portion” of which is “not crucial to their learning” (lines C6–C8).

In response to another participant who asked, after the group had looked at the data, whether there was any significant difference in how the two groups of students spent their time after school, Alan responded:

E1	I expected to find, like a really big difference, and I haven't looked at it incredibly closely in terms of counting the hours that they are saying they are doing homework, but, ah, it wasn't a striking difference, you know. And the pile, with Anthony at the top are kids that really struggle to get to school, rarely are turning in work, but a lot of them have homework on there, or had some type of afterschool program, obviously some of them don't, but it's not a big striking difference between the two of them. One thing I might want to look at is, you know, is how many, you know, maybe three categories of pleasure activities, school work, school related, and other commitments they seem to have, like helping your moms, with their families, they have a lot of stuff like that. But I didn't notice a big difference.
E2	
E3	
E4	
E5	
E6	
E7	
E8	
E9	
E10	
E11	

In sociological approaches, Alan's commitment to developing math curriculum that focused on issues of racial justice, his acknowledgment and struggle with his positionality as a White male, and his questioning of the school's purpose in promoting real learning are often depicted as having reached a "level of awareness" (e.g., Milner, 2006, p. 354). Sociological approaches would argue that Alan's formulation of his question is a patterned example of how when "discussions move beyond general awareness toward specific instructional actions that challenge prevailing conventions, resistance is increasingly apparent" (Gay, 2003, p. 184). From this perspective, it is questionable whether teachers, such as Alan, were genuine from the start. "They may profess commitment to promoting educational equity based on their newly found awareness, but they do not think deeply about the implications and consequences of this knowledge for changing their personal and professional behaviors" (Gay, 2003, p. 184). These interpretations are commonly reflected in research on teacher education (Haviland, 2008; Leonardo, 2004; Mueller and O'Connor, 2007; Picower, 2009).

From a teacher-as-learner perspective, Alan has and employs important resources for equitable teaching, such as his emphasis on learning rather than on grades and his deep desire to understand how to support his students. However, the teacher-as-learner perspective does not adequately address the systemic context that promotes teachers, particularly White teachers, to see their students through a lens of deficit even after they consider a wide range of important factors that affect students' academic achievement. By focusing on the resources that particular teachers bring, there is a tendency for the teacher-as-learner perspective to obscure teachers' deficit framings of their students and thereby minimize the material, social, and emotional consequences that such framings have on students, particularly students of color.

The framework of ideology in pieces builds on the insights of sociological approaches by recognizing that Alan's formulation of his question and his focus on students' deficits are yet another way in which racialized practices, discourses, and structures of oppression are reproduced. It departs from sociological approaches in questioning intentional resistance or ill-defined processes of "unconscious" resistance as the explanation for Alan's formulation of his question. The framework of ideology in pieces is in agreement with teacher-as-learner approaches with respect to the need to build on teachers' resources and insights. It diverges from the teacher-as-learner approach by emphasizing the ideological nature of aspects of teachers' sensemaking and the need to embed it in an analysis of power, access to resources, and consequences to students.

From the ideology in pieces perspective, Alan's initial framing of his question can be depicted as in Figure 1. As evidenced earlier, Alan can recognize racism at the systemic level and can make sense about students' non-engagement in school in terms of institutional practices. While these important and potentially relevant stances are salient to Alan in other contexts, they are not salient to Alan as he frames his research question. As inferred from lines E7 to E11, the reasons that students are unsuccessful are explained through dominant naturalized axioms such as "kids would rather play than work" and that students from poor families do not do well because "it's hard to do as well when you do not have as much time." The research question at this point might be racialized for Alan in that a disproportionate number of his unsuccessful students are poor students of color, but he does not see deeper connections in how the stances shown in the unconnected boxes in Figure 1 are relevant to his research question. From an ideology in pieces perspective, Alan must develop context-dependent ways of seeing relevant concepts for his analyses of race, positionality, and the purpose of learning to be relevant to his research question. (The legend at the bottom of Figure 1 applies to Figures 1, 2, 4 and 5.)

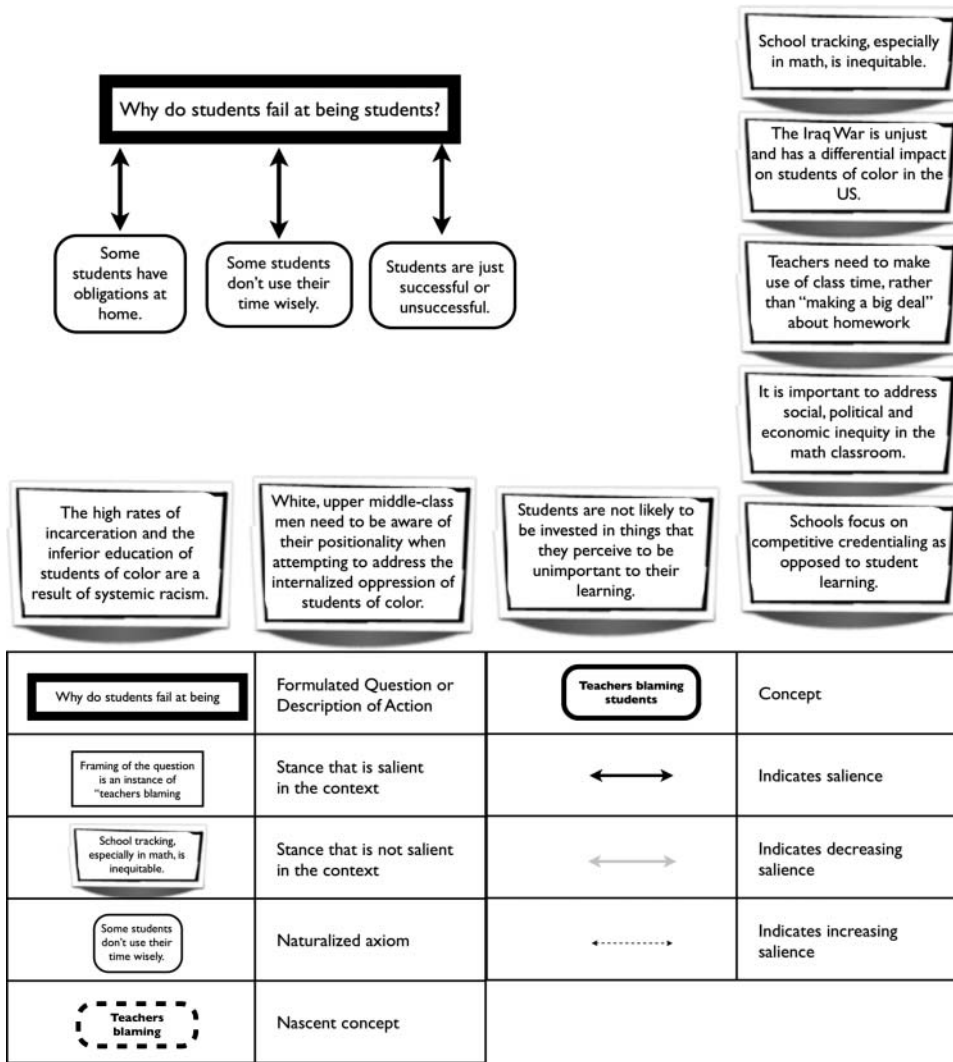


FIGURE 1 Alan's initial formulation of his research question.

The context-specific nature of Alan's sensemaking and his shifting salience toward dominant deficit naturalized axioms is further exemplified in lines E6–E11. Alan acknowledged that there was not much difference between the time spent on homework by successful and unsuccessful students. While one might respond to this finding in a number of ways, each takes a particular meaning and has particular implications. For instance, this finding may reveal that what a student does at home is not important and therefore the teacher needs to focus on what is done within the classroom. Or else, as Julia later suggested, one might argue that students spend similar amounts of time on homework, but successful students either use their time more efficiently or have a

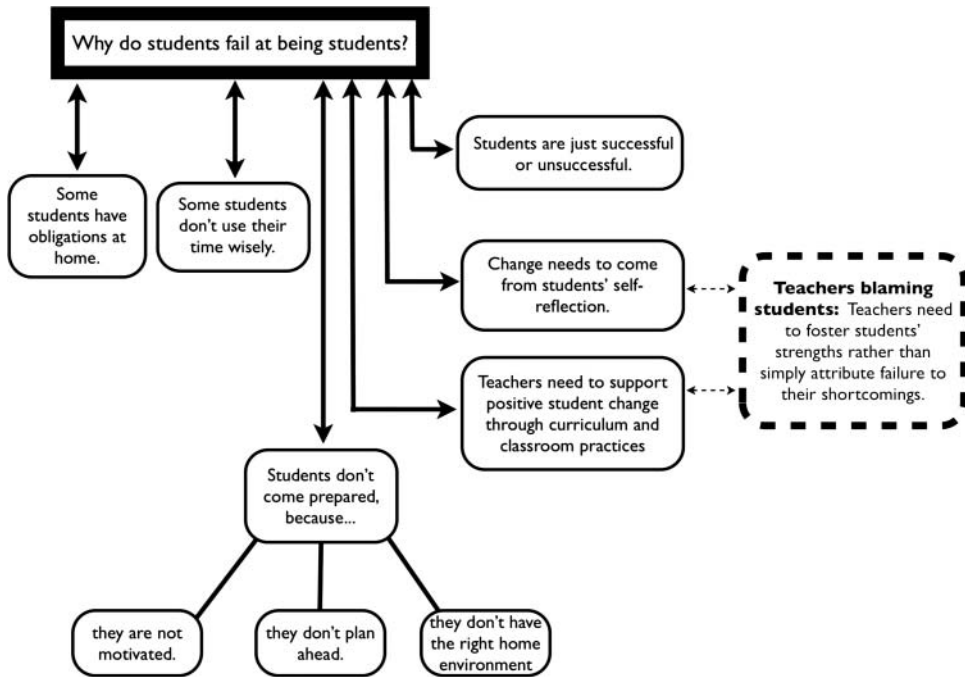


FIGURE 2 Alan's re-formulation of his research question.

set of strategies that make a significant difference. Based on such a position, a teacher might focus on teaching study skills and time management skills. Alan in this instance, did not take either approach, but distinguished between the types of activities on which students spend their time. Such an explanation is significant because Alan's focus shifted from his own observation that there are no differences between the two groups, to naturalized axioms that the unsuccessful students were wasting their time on pleasure activities or were obligated to help their families. To elaborate, since Alan's question related to how much time students spent on homework, and since he observed no differences, whether they spend the remainder of their time on pleasure activities or on home-chores is not pertinent to his question. Despite the lack of direct pertinence to his line of inquiry, the salience shifts for Alan to a focus on the home lives of his students.

Even with compelling evidence that challenged Alan's deficit notions of his students' use of time, the salience shifted for him to these interpretations. As with other forms of ideological sensemaking, Alan demonstrated the tendency to move "within a closed circle, producing not knowledge, but a recognition of the things [one] already knows" (Hall, 1982, p. 75). It is worth noting, however, that Alan "picked out features in the context that relate to critical information required" (diSessa & Sherin, 1998, p. 1172) about the obligations some students have at home, which are relevant to the concept of "teachers blaming students." However, at this point, he does not have the necessary "set of inferences" (diSessa & Sherin, 1998, p. 1174) to see how the framing of his question is an example of "teachers blaming students." Rather than leading Alan to address the classroom or institutional practices that further accentuate the difficulties that

arise from students' home obligations, his recognition about students' responsibilities at home heightens his feeling that other students are not using their time effectively and are wasting their time on pleasure activities. As described below, these naturalized axioms concerning the fairness of students' obligations at home later change in their contextual salience and become important for Alan's understanding of "teachers blaming students" as they highlight inequity at the societal level.

Episode 2

After the consultation described in episode 1, I was concerned about Alan's deficit framing. I sent Alan an e-mail with an excerpt from Lipman (1997) about teacher research that I thought was applicable to Alan's framing of his question. The quote, based on Lipman's work with a group of teachers who were participating in the restructuring of a school, observed that teachers "directed their attention to those aspects of students' lives over which they had the least control rather than to educational experiences which were within their power to change" (p. 18). After sharing this quote, I further indicated that "while there might be a host of reasons for students not completing their homework, both within and outside of our control, I think it's our responsibility to assume the best intention on the part of the student and their families, and examine our practice most closely. Otherwise, I think there is a tendency for us to focus on the externals and lose sight of what we can do." Alan responded to this e-mail, "I think focusing on homework will work well for my project (as that affects the students' grade and understanding most directly)." Concerned that Alan did not respond more explicitly to how his line of inquiry "directed [its] attention to those aspects of students' lives over which [he] had the least control rather than to educational experiences which were within his power to change," I followed up with an additional correspondence to address this issue more specifically:

I think the hardest part about questions like yours is that they can easily be framed into something that blames students or their families rather than focusing on our practices as teachers. I think this is just something we have to be hyper-vigilant about. I want to reiterate that I think you've got a great question, but you might want to frame it in a way that focuses on what about the school structure makes students not do homework.

Alan responded stating, "I totally agree that I need to be very aware of blaming either the student or the family."

Approximately three weeks after this correspondence, Alan returned to the group for his next consultation:

F1	So, where I am, my question is, why do students fail at being students, and that has
F2	been kind of honed into, looking at homework, or school buy in and more specifically
F3	what are students doing with their time outside of the class period related to school.
F4	Um, and so, before I just had students fill out what they did the day before. They came
F5	into class and they listed for me what did they do the day before and I looked at
F6	students who were successful and students who were unsuccessful and tried to
F7	compare those looking for differences in the day to day activities and really didn't find
F8	striking differences in terms of what the successful

F9	students were doing and the non-successful students were doing. Um, so, taking
F10	the advice that you guys had last time, I am going to next week, start this, where I
F11	am going to ask students to plan ahead. And kind of see, um, ask them, what are
F12	they going to do, what do they plan on doing, um, for that day and see how they
F13	are going to follow up. And the reason I want to do this is two fold. To see, you
F14	know, does everybody leave at 3:15 with these great intentions of doing their
F15	homework and all this stuff and if this doesn't happen, because they don't have the
F16	right home environment, they don't have support to do that, or are they really
F17	cognizant of what is really going to happen, and is it that kind of the issue to get
F18	them motivated to change, and plan for their activities after school. And I really
F19	want to get a sense of how they, I kind of have a sense how they are using the time,
F20	but will having them plan for homework, help them do their homework. Or, the
F21	other question is, are they planning and they just can't follow through.
F22	Like where is that bridge being broken? [I'm] really trying to get the students to
F23	get kind of the essence of what the successful student does and what the
F24	unsuccessful student does, and getting it from them, instead of me trying to
F25	interpret for, so really having them brainstorm ideas about, why do you think that,
F26	is there something that people are doing that I'm doing, and then, after that, have
F27	them kind of journal about it and reflect on how did the activity from the week
F28	before tracking their time and trying to think of what would it look like to really be
F29	a successful student, or non successful student, how has that affected them, has
F30	that affected them in terms of their own class, their own school perception and
F31	what they are going to try to do. What I'd like to do after that, and this is where
F32	I'm stuck, I don't want to just leave it at that, do all this reflection and do
F33	everything else the same, is really, what, what can I do curriculum wise or team
F34	wise, what can I do to really keep this going, keep reiterating, these
F35	ideas. Let's say students bring out these activities they feel are vital for successful
F36	students, how can I build that into the curriculum? So, I really kind of just
F37	want to have, at that point, is a brainstorming session with you guys of what
F38	curriculum could I put in or what could I do to really help bolster this idea of,
F39	keeping in mind how am I managing my time so I can be a more successful
F40	student.

The analyses of episodes 2, 3, and 4 from sociological and teacher-as-learner approaches would remain similar to the analysis of episode 1. From a sociological perspective, these interactions are again examples of resistance on Alan's part to examining dynamics of race and racism in his own practice while he claims to espouse them at an abstract level. His stated desire to support students might be further considered an example of resistance, since he positions himself as a teacher who can help students fix their problems with time management, obscuring his role in the systemic and institutional factors that reproduce inequity. Teacher-as-learner approaches, on the other hand, would continue to see Alan as a teacher who is attempting to build on his resources and construct an analysis that will help him to teach his students equitably.

The shifts in Alan's framing of his research question are shown in Figure 2. Naturalized axioms regarding students' obligations at home, their misuse of time and the categorization of students

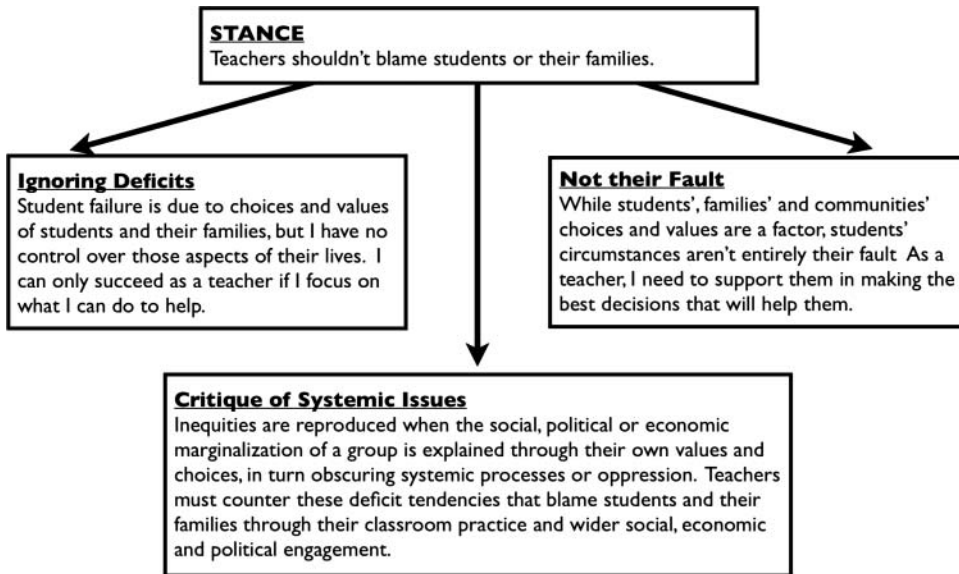


FIGURE 3 Multiplicity of meanings for “teachers shouldn’t blame students.”

as successful and unsuccessful are still salient to Alan. He takes these labels as natural and valid. Some of the reasons why students do not come prepared to school that are salient to Alan are the lack of the “right home environment,” inadequate planning, or not having the motivation to change (F15–F18). Two additional stances become relevant to Alan’s research question. One is the need for students to interpret their own situation and to engage in self-reflection about what defines successful and unsuccessful students (lines F23–F31). Second, as a teacher, he needs to support students’ positive changes through curriculum and classroom practice (lines F32–F40). These stances are associated with naturalized axioms such as “support helps when people are trying to change” and “people need to want to change for themselves.” These are not necessarily new stances for Alan, but Alan is articulating them in the context of his research question for the first time. What Alan is able to see and infer through these stances contribute to a nascent concept of “teachers blaming students.” Similar to the “Ignoring Deficits” and “Not their Fault” positions in Figure 3, at this stage, Alan’s nascent concept might be summarized as, “Given the right contexts, students have the ability to understand their situation and make appropriate decisions for themselves. Instead of placing blame on students, teachers need to value, provide spaces for, and foster these abilities.” While Alan acknowledges students’ potential, his question is still largely framed through a deficit lens as it is articulated with naturalized axioms that students do not often make the right decisions due to personal shortcomings or circumstances at home.

From the ideology in pieces framework, it is inaccurate to claim that Alan was being resistant or hypocritical by not admitting to “blaming his students.” Instead, Alan’s continued focus on “why students fail to be students” must be examined within the multiplicity of meanings of “teachers blaming students.” From my perspective, which was aligned more closely to the “Critique of Systemic Issues” position, Alan’s formulation of his question was a clear example of

“teachers blaming students.” But from his own perspective, Alan was working to value students’ contributions and provide a space for them to grow, and therefore, was not “blaming students.” Seeing the formulation of his question as an instance of “teachers blaming students” would require Alan to develop a “Critique of Systemic Issues” meaning of the concept.

Episode 3

In an immediate response to Alan’s framing of his research question in episode 2, I made the following comments with the intention of encouraging him to consider the political and social consequences of the framing of his question:

G1	Can I just span out for a second? Um, I think I just want to remind us, in terms of,
G2	I really like how you’ve structured this, in terms of the information you want to
G3	get. A couple of things is, remember how the type of questions we ask can be very
G4	political. So, for instance, a question such as, “why do students fail at being
G5	students” can also be framed as “why do schools fail students at being students?”
G6	But, I think that makes us focus in on a certain way of looking at things. And it
G7	obscures other ways of viewing things. So, I think it’s important in some sense to
G8	be aware, or conscious of both, and it’s just a reminder that this might put us in a
G9	position where we end up focusing on particular deficits. Particularly if we are
G10	thinking about, going back to what you were saying earlier that if there isn’t a
G11	huge difference between successful and unsuccessful students, could we
G12	accidentally end up focusing in on what we see as deficits in families and home
G13	environments? It’s kind of projecting our own views. And that is. Is it so
G14	much . . . time management, I think is important. And I think that’s where what
G15	you’re doing is really helpful in terms of thinking about how you can plan out for
G16	yourself. But I think also in terms of if there are issues that are much deeper, in
G17	terms of people feeling alienated from schools, are we missing that information in
G18	some form? I think in addition to this, I would really push you to think about
G19	something more open ended in terms of how students, how they feel about school,
G20	how their process of interaction. If it is a place that makes you feel very
G21	unwelcome, regardless of how you manage your time, you might not be getting
G22	those results.

Alan’s response indicated implicit agreement, but there was no clear verbalization to indicate his understanding of the ideas presented: “That’s, that’s awe . . . that’s good. So, yeah, I guess, then on that note as well, how can this be changed or added to bring that aspect into the thing.”

After a brief discussion of his project, Alan concluded his consultation by thanking the group for the suggestions and saying that he will “drop the idea of a successful and unsuccessful student and will go back to the big picture to see what the teacher can do.” This concluding line is significant because Alan had, as described in episode 1, demonstrated an understanding of students’ dynamic personalities (such as how students perceive the purpose of learning) and an understanding of big picture issues (such as examining issues of racism through curriculum). But,

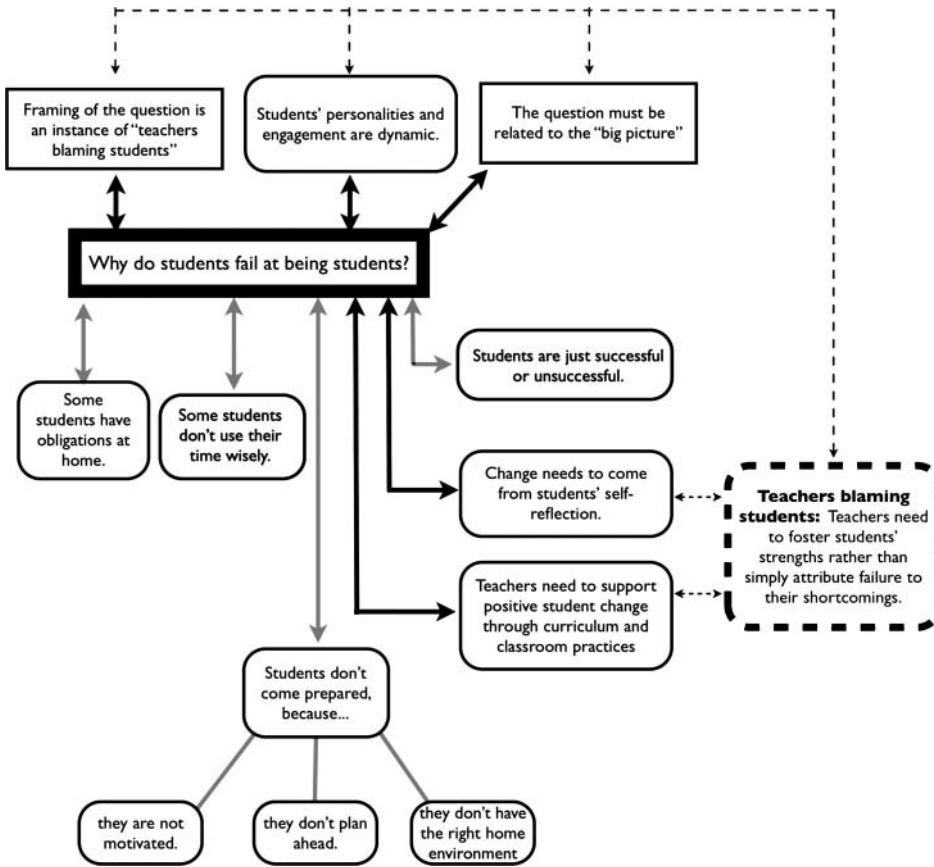


FIGURE 4 Alan’s re-formulation of his question at the end of “episode 3.”

such understandings were considered *in isolation of his research question*. This is the first time Alan articulated these ideas in relationship to his research question and demonstrated an implicit understanding that it essentialized students and did not see them in their dynamic complexity. As suggested by Alan’s concluding line above, and more explicitly evidenced in episode 4, Alan recognized that the very framing of his question is an example of “teachers blaming students” from a “Critique of Systemic Issues” position (Figure 3). These shifts are depicted in Figure 4. The context-specific ways of seeing these stances as pertinent to his question constitute his nascent concept of “teachers blaming students.” There is a decrease in the salience of naturalized axioms that explain success and failure through students’ use of time and the naturalized axioms about students as statically successful or unsuccessful.

Episode 4

A dramatic shift was evidenced in Alan approximately two weeks after the consultation described in episode 3. At this point in April, I presented the group with information from Lipsitz (1998) that

described the making of urban spaces, White flight, and policies that disproportionately favored Whites in the United States. The presentation concluded with:

H1	I feel a lot of times when we talk about schooling, what our role as teachers is, it's very hard for us to hold these big pictures in mind as well. What does it mean to be teaching in a system where it is not accidental that poverty exists, it's not accidental that there is this huge disparity in wealth. I think it's very easy for us to fall back on, it's the family for example, or, it's the lack of opportunities, but to what extent are those lack of opportunities built very much within a larger system?
H2	
H3	
H4	
H5	
H6	

Alan was the first participant to respond. He took a statement from the presentation that addressed systemic issues and directly related it to his research question. In addition, he used it to analyze an experience outside of the immediate conversation.

J1	I found that really interesting, I had somewhat of the same, it just reminded me that, the talk reminded me of, this weekend I was watching my cousins and had to take one of them to a basketball practice. At Crest High School in Newberry, that is like, it's right next to the Newberry Country Club, it looks like a liberal arts college. You know, it's got housing on campus for teachers, its totally, you know everything, whatever, it's very nice and I was walking around there, it's incredible, just the difference of the starting points, you know, exactly what you were saying that it's easy for us to think back to, or just to blame the students, oh you don't have a place to do your homework, your family is not supporting you, that sense in just how different those realities are for certain kinds of students. Just in terms of the physical structure they are in that has nothing to do with their family backgrounds, or choices their families are making, but it's just that inequity at that level is so big.
J2	
J3	
J4	
J5	
J6	
J7	
J8	
J9	
J10	
J11	
J12	
J13	

Alan's use of the word "blame" without my explicit invocation of it in this context supports the position that the concept of "teachers blaming students" had become an important lens through which Alan interpreted student success and failure. He drew attention to the problems with the very examples he used in previous consultations (about families' lack of support and claims about students not having the home environment that is necessary to complete homework). The connection between the examples and systemic issues were explicitly made when he acknowledged, "just in terms of the physical structure they are in that has nothing to do with their family backgrounds, or choices their families are making, but it's just that inequity at that level is so big."

Alan's comments that follow within a few minutes support the position that relevant naturalized axioms changed in their contextual salience. Naturalized axioms that one should be prepared with their materials, and that there are appropriate times to be quiet and obedient, are rearticulated within an understanding of Whiteness and systemic educational exclusion. In these contexts, they no longer function to explain success and failure. While they might be preserved as "legitimate" in other contexts, they are "subordinated to more core concepts" in this context (diSessa, 1993,

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p. 145). As can be expected with his new usage of these ideas, terms such as “White culture” were used very generally.

K1	Yeah, I agree, for me what stands out the most is the grading system, you know, how we, if you don't fit that standard student profile, which is traditionally about White culture, coming in having materials, sitting quietly, being obedient, you are punished with your grade, it just seems like we're not flexible in that sense. We don't have, sort of as much as we try to, I just wonder what that is going to look like in thirty years with our grading system. Will it be seen as archaic, unfair, system, that you know, systematically kept a whole group of people out of being college eligible, you know.
K2	
K3	
K4	
K5	
K6	
K7	
K8	

Following the discussion, the group proceeded to the consultation of the participant who did not develop a focused question over the course of the year. Here Alan encouraged the other participant to frame his inquiry differently, seeding many of the same questions that he himself had been encouraged to examine:

L1	I think it would be interesting to, I think it is more interesting to, like, this second page when students are talking about their best class, like really asking them, how do they perform, like is their performance different in their best class than in your class? What is, what are they doing, why are they better in that class than in your . . . I'm trying to get at the why, as opposed to, you know, getting the description of what that class is, how much homework there is in that class. You know, trying to elicit, what are you doing differently, that we can try to incorporate somehow into biology. You can even ask them, what do you do differently, do you do this in all your classes, why and why not? Trying to get at . . . I'm quiet when the teacher talks in my science class, but not in my other classes. And this is the reason why. Because I feel like students are really different in different periods of the day. [Unintell] They don't act the same way. [Unintell] Trying to get at the why. And I find kids pretty insightful . . . because, I don't talk in that class because, this [reason or the other].
L2	
L3	
L4	
L5	
L6	
L7	
L8	
L9	
L10	
L11	
L12	
L13	
L14	
L15	

From the ideology in pieces perspective, it is significant that Alan stressed the contextual nature of students' effort and interest in contrast to his earlier inquiry goal of getting to the “essence” of successful and unsuccessful students (F23–F24). This lends further support to the claim that rearticulation entails a change in the salience of naturalized axioms as it becomes “common-sense” for Alan to think about the dynamic personalities of students, within the context of student success and failure, rather than assuming that students have static personalities. Also, he stressed that kids are “pretty insightful,” suggesting that it is important for teachers to listen to students' interpretations of their own situations, rather than simply use student reflection as a tool for students to arrive at the teachers' predetermined understandings. As naturalized axioms concerning students' insightfulness and their dynamic personalities become articulated with the concept of

“teachers blaming students,” their salience increases in contexts where Alan makes sense of why students succeed and fail.

Numerous segments of the June interview also support the interpretation that the salience of naturalized axioms changed over the course of the year and were gradually subordinated to newly developed core concepts. For instance, Alan described that he was initially “really looking for kids that come to school and try to do [their work].” Coming to school with materials and prepared for homework was something that was “very reasonable” and it was not like he was “asking [them] to be able to derive the quadratic formula.” Such stances indicate that to Alan, he was only placing simple commonsensical expectations on his students. Alan’s initial focus was to counteract individual choices on the part of the student or family, again largely based on commonsensical notions of “fixing” others. Conceptualizing the issue differently led Alan to reconsider his role as a teacher. He began “looking at it and thinking about it, really starting to look at it from the other side, in terms of, what is the school system doing itself.” Such an analysis shifted his focus from what he can do for the students or how he can counteract their shortcomings, to what he can do in the classroom and in terms of institutional change to counteract the political, social, and economic contexts that produce inequity. In segments such as the one below, Alan clearly articulated the connections between the economic system’s inherent need for certain students to fail, school and classroom practices, and his role as a teacher. As he explained, it was “really useful” to recognize

M1	how [schools] perpetuate, you know, the whole thing about the stratified labor
M2	force, and not every kid can go to college in our current system. That, if the
M3	system works perfectly, you know you have a lot of kids who aren’t doing well.
M4	And so, that for me really helped as well. You know, okay if the system is in its
M5	perfect, whatever is working really well, I still have got all these kids failing, so I
M6	have to make, you know do things to counteract that. I can’t just try to do the
M7	system as well as I can since that’s just going to lead to the same thing. So that’s
M8	where I kind of started thinking how can I tweak things, how can I do things
M9	myself, um, to change that.

Since the last meeting of the group was soon approaching, Alan did not have time to revise his research project and collect new data. Rather than continuing with his initial research design, he focused on implementing a number of changes to his practice, such as working with students on their homework during the last few minutes of class, giving daily assignments to promote attendance, and changing his grading policy to increase participation. For his culminating assignment, which was supposed to summarize his research process and findings, Alan wrote a reflective piece that traced aspects of his shifts in sensemaking and emphasized what he, as a teacher, could do to promote student engagement and achievement. In the June interview, Alan also reflected on institutional practices such as the school’s tardy and grading policies that were not transparent to students. He emphasized changes that he had made and changes the administration could make to help the students engage more in school. His efforts to structure classes to address the inequitable conditions that students face, rather than “copping out on students,” indicate Alan’s developing ability to see societal inequity and the consequences of deficit framing within his school and classroom practice.

In Alan’s June interview, he explained how he often found himself “kind of checking [himself] if [he’s] having a reaction to a kid, and just taking a second back, to step back and not automatically putting that blame on them.” He recounted a number of specific examples in which he mentioned students by name and explained how “stepping back” and “not blaming the student” had enabled him to stop himself from assuming that students were not trying. “Checking himself” helped him to think about how his practice and the school contexts were making it difficult for the students to succeed. According to Alan, this process of self-checking allowed him to work with students to address their challenges, rather than “writing off” their apparent disengagement. From the ideology in pieces perspective “checking himself” is a meta-strategy that Alan employs. He recognizes that the concept of “teachers blaming students” is applicable and useful when he feels he is having a “reaction to a kid.” Alan will continue to have moments when he might find himself starting to blame a student, but he is aware that when he recognizes this feeling, he needs to “pick out features” and engage in “the set of inferences” (diSessa & Sherin, 1998) that are necessary to make use of the concept of “teachers blaming students.”

The change in Alan’s meaning of “teachers blaming students” is depicted in Figure 5. “Teachers blaming students” was at this point more closely articulated with wealth, income and resource inequality, teacher expectations, schools as a site of social reproduction, and students’ dynamic personalities. As evident in Alan’s June interview, the concept of “teachers blaming students”

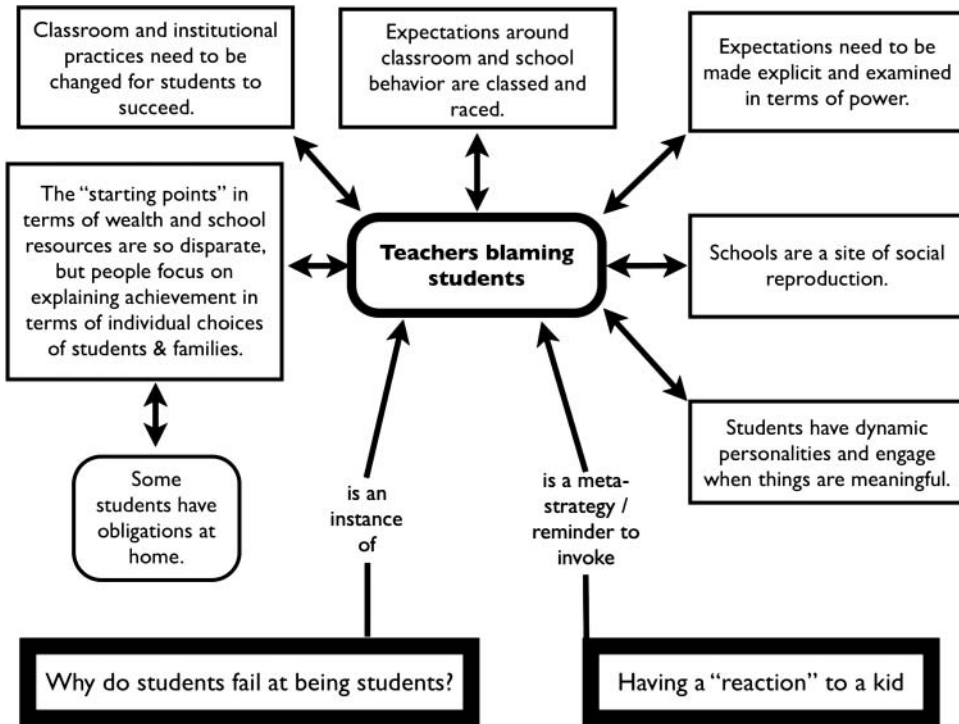


FIGURE 5 Alan’s concept of “teachers blaming students.”

provided a systematic way in which Alan gained information from his contexts. Naturalized axioms about students' responsibilities at home, which were originally used with deficit meanings, are now rearticulated with the concept of "teachers blaming students" to emphasize systemic inequities. From the ideology in pieces perspective, the development of the concept of "teachers blaming students" was essential for Alan to see the relevance of race and racism in his research question and similar contexts.

DISCUSSION

Characterizing Alan's Change

The ideology in pieces perspective cautions against interpreting Alan's ideological transformation as a static and decontextualized change in sensemaking, where he looks past the particularities of a context and sees an abstracted principle. Instead, Alan's process of change is characterized by his ability to increasingly see the "big picture" of racial and class inequity in the context of his research question through the development of the concept of "teachers blaming students." Conceptual development and change are in this sense "incremental growth, systematization, and organization of knowledge resources that only gradually extend the span of situations in which a concept is perceived as applicable" (Wagner, 2006, p. 10).

A number of experiences contributed to Alan's process of change including:

1. exploring the idea that schools often do not promote the learning of students;
2. findings in the survey that indicated that there were no significant differences in how students spent their time after school;
3. his visit to Newberry, in which he recognized that systemic inequities place people at a much greater advantage or disadvantage in comparison to issues of individual choice;
4. changes in Alan's classroom practice that greatly influenced students' success at home-work; and
5. participating in the group discussions, where particular ways of making sense of inequity and student success and failure were highlighted for Alan.

It is an oversimplification to argue that one experience directly led Alan to another. While a developing concept of "teachers blaming students" might have enabled him to see his Newberry experience in a new light on the particular visit described earlier, as opposed to similar experiences he had before, it is not possible to ascribe direct causality. The ability to see factors as relevant, Alan's changing set of inferences, the changing salience of naturalized axioms, and his experiences at Newberry and in the group all played a role in scaffolding each other over time.

It is also important to consider that any of the factors outlined above as consequential could have played out differently in Alan's process of change. For instance, his realization that it is impossible for everyone to succeed by the system's own standards and that a large proportion of his students must work low-wage jobs could be positioned very differently as shown in Figure 6. Alan's articulation of this position as something closer to "Strategic Transformation" (M1-M9) as opposed to another meaning, depended partially on how the factors listed above became articulated.

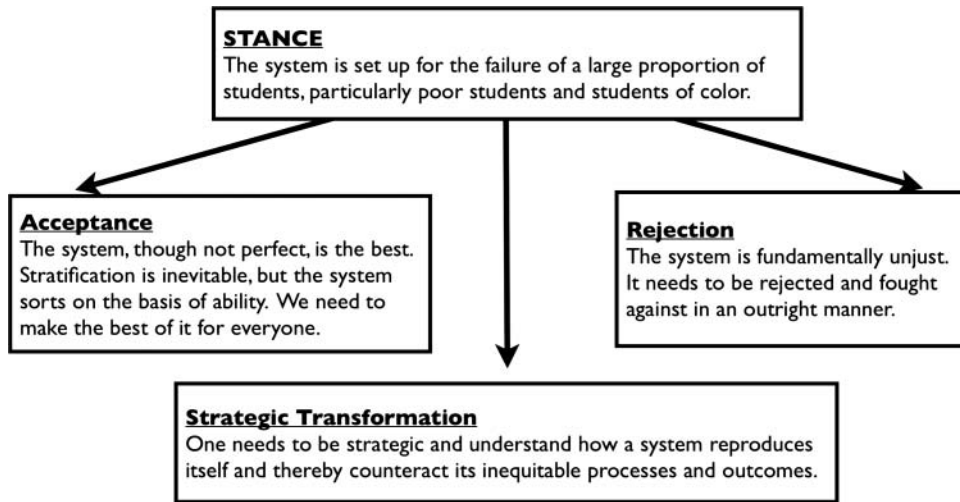


FIGURE 6 Multiplicity of meanings for “the system is set up for the failure of certain students.”

School, Classroom, and Group Dynamics in Alan’s Change

The framework of ideology in pieces attempts to preserve the strengths of sociological and teacher-as-learner approaches to understanding teachers’ racialized sensemaking while addressing their respective limitations. There is an inherent tension, however, when attempting to bridge perspectives that emphasize individuals, interactions, culture, or society. On one hand, as Erickson (2004) argues, “because of the divisions of intellectual labor and interest in academia,” scholarship in certain fields focus on specific features of individuals and “overlook the global aspects” (p. 108). On the other hand, scholars who focus on the global workings of society develop “theories of how change and stasis happen across times in large social aggregations,” but are likely to “ignore, and thus undertheorize, the bottom-up influences of local social practices” (p. 108). Similar to my objective of studying individuals within their systemic contexts, scholars such as Erickson (2004), Holland, Lachicotte, Skinner, and Cain (2003), and Varenne and McDermott (1998) have proposed ways to bridge the local and the global. Their work focuses, for the most part, on social interaction, what Vaughan (2002) would term a meso-level analysis. Along with researchers from a range of disciplinary backgrounds (Diamond, Randolph, & Spillane, 2004; Horn, 2008; Nasir, McLaughlin & Jones, 2009) meso-level theories have been instrumental in productively complicating theories of learning, identity, and interaction. They have also offered valuable critiques of theories of ideology and hegemony, highlighting how their explanations of the relationship between the micro- and macro-levels are often overly deterministic and do not account for those aspects that are “messier” and “more contradictory” (Erickson, 2004, p. 116). These meso-level theories have stressed people’s agency and have argued that “social agents are not passive bearers of ideology, but active appropriators who reproduce existing structures only through struggle, contestation and a partial penetration of those structures” (Willis, 1977, p. 175 as cited in Erickson, pp. 135–136). Given the constraints of the format of this

paper, I did not focus extensively on meso-level contexts such as school and classroom culture, or the dynamics of this group of teachers within that culture. Nor, did I engage deeply with contributions of meso-level theories in furthering an ideology in pieces perspective. I recognize the importance of these dimensions, and in my future work, I hope to link, more deeply, the school and classroom contexts that afford and constrain the types of change evidenced in Alan. Frameworks for documenting learning in teacher groups, such as Cobb, Zhao, and Dean (2009), which stress the importance of examining the development of groups' norms of general practice, pedagogical reasoning, and content-specific reasoning in relation to their norms of institutional reasoning, provide ways in which the ideology in pieces framework can be extended to attend more closely to teachers' institutional contexts. With that acknowledgment, I believe that ideology in pieces can also make a critical contribution to meso-level theories as it highlights aspects of structure, ideology, and cognition that are glossed over in these analyses. Such gaps in meso-level theories are apparent in how they evade examination of the role that structures and processes such as the media, religion, law, and racial projects⁴ play in shaping people's explanations and interpretations of their social world. Particularly in an era of growing intersections between globalization, neo-liberalism, militarism, corporatization, labor, racism, and teaching and learning (Lipman, 2004), educational research that claims to work toward equity must be cautious of a restrictive focus on the meso-level without adequate attention to its relationship to the macro- and micro-levels. As Hill Collins (1998) argues, "theories that reduce hierarchical power relations to the level of representation, performance, or constructed phenomena" "reinforce perceptions that local, individualized micropolitics constitutes the most effective terrain of struggle," undermining the importance of changing "bureaucratic structures" (p. 136). Ideology in pieces can contribute to work on teachers' learning as its synthesis of theories of ideology and conceptual change elucidate both the structural and cognitive aspects of ideological sensemaking and change that are not adequately accounted for by meso-level theories. In this manner, along with meso-level theories, ideology in pieces can contribute to a more comprehensive perspective that links the macro-, meso-, and micro-levels in meaningful ways to address equity and justice in contexts of school-based learning and beyond.

CONCLUSIONS

When teachers are asked to examine their classroom practice and school policies through a lens of race and racism, it is very likely that as teacher educators, we might find resistance on their part "as discussions move beyond general awareness toward specific instructional actions that challenge prevailing conventions" (Gay, 2003, p. 184). The relative ease with which teachers profess commitments to racial equity and justice at the level of general awareness, when contrasted to their lack of recognition of these factors in practices closest to them, is understandably interpreted as resistance, contradiction, or hypocrisy. The analysis of Alan's ideological commitments and transformations challenges teacher educators to delve deeper. From the ideology in pieces interpretation, terms such as ignoring, resisting, denying, contradiction, or hypocrisy are not adequate descriptors of processes such as Alan's. For Alan to see how his question viewed students through

⁴A racial project is "simultaneously an interpretation, representation, or explanation of racial dynamics, and an effort to reorganize and redistribute resources along particular racial lines" (Omi & Winant, 1994, p. 56).

a lens of deficit and how it reproduced racially inequitable and unjust practices, he needed to develop the concept of “teachers blaming students.” Without the concept of “teachers blaming students,” Alan was making sense of the situation through naturalized axioms concerning success and failure and, to him, it was largely unconnected to what he knows about race and racism in the United States.

Alan’s individual change must be understood within the context of collective rearticulation within a social space where ideology is constantly contested. As discussed earlier, Hall’s (1996) theory does not account for the complex and nuanced ways through which critical meanings are rearticulated in particular contexts and by particular people. While Alan’s changes have important implications for his students, it is important not to romanticize Alan’s rearticulated understanding of success and failure in relationship to collective rearticulation on a social scale. However, when these localized instances of rearticulation are not recognized as a part of the constantly contested equilibrium that characterizes social structures and ideology, work such as Hall’s (1996) becomes prone to critiques of determinism. It is essential to recognize this reflexive relationship between the multitude of localized rearticulations such as that seen in Alan, and collective rearticulation on a social scale.

The ideology in pieces analysis presented in this article highlights the importance of more closely addressing teachers’ commonsense and the need to explore critical concepts that enable teachers to see the relevance of race and racism in their practice. Alan’s initial formulation of his question and his shifting salience to dominant commonsense explanations and interpretations emphasize, unlike teacher-as-learner perspectives, that these formulations and moves by teachers are embedded in a racially stratified and structured society and operate to reproduce racist outcomes. However, an ideology in pieces framework also challenges sociological approaches to understand the cognitive dimension of ideology and the difficulties teachers face in rearticulating their understandings. By tracing Alan’s transformation through the development of the concept of “teachers blaming students,” the findings from this article have implications for teacher education that highlight the importance of further identifying and understanding similar *pivotal concepts*. Pivotal concepts are likely to be important in enabling teachers to develop well-elaborated and internally consistent systems of thought, such as understanding the relationship between classroom practice, school policies, and race and racism at the systemic level.

In addition to pushing sociological approaches to appreciate the cognitive dimensions of ideological change, an ideology in pieces framework has further implications for teacher education as it also raises questions about the feasibility of programs rooted in a teacher-as-learner perspective to meet the needs of urban students of color. As emphasized throughout, Alan had strong commitments to racial justice from the start of the teacher research group. He demonstrated initiative in applying for the teacher research group with his colleagues and he consistently showed a desire to improve as a teacher and meet the needs of his students. He had excellent professional and personal relationships with his colleagues in the group. In my estimation, Alan and I had a strong collaborative relationship and he had a great deal of respect for my research, my prior work as a high school teacher, and my work at the time as a teacher educator. Despite this list of factors that were very likely central and critical in facilitating Alan’s transformation, the transformation extended over months of small group meetings with a close examination of student data in a trusting community. As scholars such as Sleeter (2001) and Haberman (1996) suggest, given the limited time teacher educators have with prospective teachers and the extensive skills and knowledge that must be addressed within this short span, these findings question whether it better serves the needs of urban students of color to recruit and prepare prospective teachers who

have certain ways of sensemaking and practice that Alan is only beginning to demonstrate after graduating from a two-year social justice teacher education program and then participating in the continued professional development described above. While such recruitment might not be a feasible option for some teacher education programs, it pushes such programs to articulate what continued support they can (and should) provide for teachers like Alan or others who might not even have the same commitments or community that Alan had.

In terms of pedagogical implications for teacher education, the ideology in pieces framework reminds us that “deep learning requires learning in many contexts” and that rearticulated and coordinated understandings of race, racism, and racial justice “unifies contexts that are ‘plainly’ (in naïve eyes) different” (diSessa, 2008, p. 45). This was the case with Alan’s transformation. As diSessa argues, from a “pieces” perspective, learning must occur over time and across many contexts, particularly contexts that are initially seen as different by the learner. As teacher educators who focus on understandings of race, racism, and racial justice, the ideology in pieces perspective encourages us to be particularly attentive to the tendency in our students and ourselves to shift our salience to dominant deficit framings. We must be aware that even with well-articulated analyses of race and racism, there is a propensity, given the stratified society in which we live, to rely on dominant commonsensical ways of sensemaking. This necessitates that we particularly attend to the multiplicity of meanings with which we make sense of society. First, we must be cautious in assuming agreement as we develop shared language in the classroom, such as “teachers blaming students” or “holding high expectations.” While there might be similarity in what we verbalize, such phrases have the potential to hide deep ideological differences in meaning. Learning and use across many contexts are essential in order to develop shared understandings, and to highlight possible differences in meaning. Second, attending to the multiplicity of meaning enables us to rethink resistance on the part of teachers. It highlights how differing meanings of concepts such as “teachers blaming students” result in people seeing different features of a context and making sense of them differently. As teacher educators, it is important for us to analyze the meanings of such multiple usages to understand their conceptual affordances and constraints, thereby working toward shared understandings rather than assuming resistance on the part of others.

There is more at stake with ideology in pieces, sociological, or teacher-as-learner frameworks than interpretations about the processes of change in teachers such as Alan. Such frameworks, whether implicit or explicit, frame our pedagogical approaches as teacher educators. As argued earlier, sociological approaches highlight the racialized nature of teachers’ sensemaking and actions, while teacher-as-learner approaches highlight teachers’ resources, agency, and ability to change. Teacher education that works for a racially equitable and just society must address these two dimensions. The ideology in pieces framework enables a pedagogical approach that recognizes and nurtures the varied experiences and resources that teachers, such as Alan, bring to their analysis of race and racism. While emphasizing the possibility of ideological transformation, the framework also links teacher education to its larger context by addressing teachers’ insights, resources, and agency as partially enabled and limited by social structures that can reproduce or challenge inequity and injustice.

REFERENCES

- Bell, L. (1997). Theoretical foundations for social justice education. In M. Adams, L. Bell & P. Griffin (Eds.), *Teaching for diversity and social justice: A sourcebook* (pp. 3–15). New York, NY: Routledge.

- Bonilla-Silva, E. (2003). *Racism without racists: Color-blind racism and the persistence of racial inequality in the United States*. New York, NY: Rowman and Littlefield Publications.
- Case, K. A., & Hemmings, A. (2005). Distancing strategies: White women preservice teachers and antiracist curriculum. *Urban Education, 40*(6), 606–626.
- Cobb, P., Zhao, Q., & Dean, C. (2009). Conducting design experiments to support teachers' learning: A reflection from the field. *Journal of the Learning Sciences, 18*(2), 165–199.
- Cochran-Smith, M. (1997). Knowledge, skills, and experiences for teaching culturally diverse learners: A perspective for practicing teachers. In J. Irvine (Ed.), *Critical knowledge for diverse learners and teachers* (pp. 27–88). Washington, DC: AACTE.
- Cochran-Smith, M. (2005). Teacher development and educational reform. In M. Fullan (Ed.), *Fundamental change: International handbook of educational change* (pp. 27–88). Dordrecht, the Netherlands: Springer.
- Danielewicz, J. (2001). *Teaching selves: Identity, pedagogy, and teacher education*. Albany, NY: SUNY Press.
- Diamond, J., Randolph, A., & Spillane, J. (2004). Teachers' expectations and sense of responsibility for student learning: The importance of race, class, and organizational habitus. *Anthropology & Education Quarterly, 35*(1), 75–98.
- diSessa, A. (1993). Toward an epistemology of physics. *Cognition and Instruction, 10*(2&3), 105–225.
- diSessa, A. (2002). Why “conceptual ecology” is a good idea. In M. Limon & L. Mason (Eds.), *Reconsidering conceptual change: Issues in theory and practice* (pp. 28–60). Boston, MA: Kluwer Academic.
- diSessa, A. (2008). A bird's eye view of the “pieces” vs. “coherence” controversy. In S. Vosniadou (Ed.), *Handbook of conceptual change research* (pp. 35–60). Mahwah, NJ: Erlbaum.
- diSessa, A., Elby, A., & Hammer, D. (2002). J's epistemological stance and strategies. In G. M. Sinatra & P. R. Pintrich (Eds.), *Intentional conceptual change* (pp. 237–290). Mahwah, NJ: Erlbaum.
- diSessa, A., & Sherin, B. (1998). What changes in conceptual change? *International Journal of Science Education, 20*(1), 1155–1191.
- diSessa, A., & Wagner, J. (2005). What coordination has to say about transfer. In J. Mestre (Ed.), *Transfer of learning from a modern multi-disciplinary perspective* (pp. 121–154). Greenwich, CT: Information Age Publishing.
- Erickson, F. (2004). *Talk and social theory: Ecologies of speaking and listening in everyday life*. Cambridge, UK: Polity Press.
- Fairclough, N. (2003). *Analyzing discourse: Textual analysis for social research*. New York, NY: Routledge.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research and practice*. New York, NY: Teachers College Press.
- Gay, G., & Kirkland, K. (2003). Developing cultural critical consciousness and self-reflection in preservice teacher education. *Theory into Practice, 42*(3), 181–187.
- Gramsci, A. (1971). *Prison notebooks*. New York, NY: International Publishers.
- Haberman, M. (1996). Selecting and preparing culturally competent teachers for urban schools. In J. Sikula, T. Buttery, & E. Guyton (Eds.), *Handbook of research on teacher education* (2nd ed., pp. 403–422). New York, NY: Macmillan.
- Hall, S. (1982). The rediscovery of “ideology”: Return of the repressed in media studies. In M. Gurevitch, T. Bennet, J. Curran, & J. Wollacott (Eds.), *Culture, society and the media* (pp. 56–90). London, UK: Methuen.
- Hall, S. (1996). The problem of ideology: Marxism without guarantees. In D. Morley & K. Chen (Eds.), *Stuart Hall: Critical dialogues in cultural studies* (pp. 25–46). London, UK: Routledge.
- Haviland, V. (2008). Things get glossed over: Rearticulating the silencing power of Whiteness in education. *Journal of Teacher Education, 59*(1), 40–54.
- Hill Collins, P. (1998). *Fighting words: Black women and the search for justice*. Minneapolis, MN: University of Minnesota Press.
- Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (2001). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.
- Hollins, E. (1997). Directed inquiry in preservice teacher education: A developmental process model. In J. King, E. Hollins, & W. Hayman (Eds.), *Preparing teachers for cultural diversity*. New York, NY: Teachers College Press.
- Horn, I. S. (2008). Turnaround students in high school mathematics: Constructing identities of competence through mathematical worlds. *Mathematical Thinking and Learning, 10*(3), 201–239.
- Kohn, A. (1993). From degrading to de-grading. *High School Journal, 6*(5), 38–43.
- Kozol, J. (1991). *Savage inequalities: Children in America's schools*. New York, NY: Crown.
- Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco, CA: Jossey-Bass.
- Leonardo, Z. (2004). The color of supremacy: Beyond the discourse of “White privilege.” *Educational Philosophy and Theory, 36*(2), 137–152.

- Levine-Rasky, C. (2000). Framing Whiteness: Working through tensions in introducing Whiteness to educators. *Race, Ethnicity and Education*, 3(3), 271–292.
- Lipman, P. (1997). Restructuring in context: A case study of teacher participation and the dynamics of ideology, race, and power. *American Educational Research Journal*, 34(1), 3–37.
- Lipman, P. (2004). *High stakes education: Inequality, globalization, and urban school reform*. New York, NY: Routledge Falmer.
- Lipsitz, G. (1998). *The possessive investment in Whiteness: How White people profit from identity politics*. Philadelphia, PA: Temple University Press.
- Lowenstein, K. (2009). The work of multicultural teacher education: Reconceptualizing White teacher candidates as learners. *Review of Educational Research*, 79(1), 163–196.
- Marx, S. (2004). Regarding Whiteness: Exploring and intervening in the effects of White racism in teacher education. *Equity & Excellence in Education*, 37(1), 31–43.
- Marx, S., & Pennington, J. (2003). Pedagogies of critical race theory: Experimentations with White preservice teachers. *International Journal of Qualitative Studies in Education*, 16(1), 91–110.
- Mazzei, L. A. (2008). Silence speaks: Whiteness revealed in the absence of voice. *Teaching and Teacher Education*, 24(5), 1125–1136.
- McIntyre, A. (1997). *Making meaning of Whiteness*. Albany, NY: State University of New York Press.
- Milner, R. (2006). Preservice teachers' learning about cultural and racial diversity: Implications for urban education. *Urban Education*, 41(4), 343–275.
- Mueller, J., & O'Connor, C. (2007). Telling and retelling about self and "others": How pre-service teachers (re)interpret privilege and disadvantage in one college classroom. *Teaching and Teacher Education*, 23(6), 840–856.
- Nasir, N., McLaughlin, M., & Jones, A. (2009). What does it mean to be African American? Constructions of race and academic identity in an urban public high school. *American Educational Research Journal*, 46(1), 73–114.
- Noguera, P. A., & Wing, J. Y. (2006). Introduction: Unfinished business: Closing the achievement gap at Berkeley High School. In P. A. Noguera & J. Y. Wing (Eds.), *Unfinished business: Closing the racial achievement gap in our schools*. San Francisco, CA: Jossey-Bass.
- Olmedo, I. (1997). Challenging old assumptions: Preparing teachers for inner city schools. *Journal of Teaching and Teacher Education*, 13(3), 245–258.
- Omi, M., & Winant, H. (1994). *Racial formation in the United States: From the 1960s to the 1990s*. New York, NY: Routledge.
- Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco, CA: Jossey-Bass.
- Picower, B. (2009). The unexamined Whiteness of teaching: How White teachers maintain and enact dominant racial ideologies. *Race Ethnicity and Education*, 12(2), 197–215.
- Riviere, D. (2008). Whiteness in/and education. *Race, Ethnicity and Education*, 11(4), 355–368.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York, NY: Basic Books.
- Sleeter, C. (1993). How White teachers construct race. In C. McCarthy & W. Crichlow (Eds.), *Race, identity and representation in education* (pp. 157–171). New York, NY: Routledge.
- Sleeter, C. (2001). Preparing teachers for culturally diverse schools: Research and the overwhelming presence of Whiteness. *Journal of Teacher Education*, 52(2), 94–106.
- Valencia, R., & Solórzano, D. (1997). Contemporary deficit thinking. In R. Valencia (Ed.), *The evolution of deficit thinking: Educational thought and practice*. Washington, DC: The Falmer Press.
- Valli, L. (1992). *Reflective teacher education: Cases and critiques*. Albany, NY: SUNY Press.
- van Dijk, T. A. (1998). *Ideology: A multidisciplinary approach*. Thousand Oaks, CA: Sage.
- Varenne, H., & McDermott, R. (1998). *Successful failure*. Boulder, CO: Westview.
- Vaughan, D. (2002). Signals and interpretative work: The role of culture in a theory of practical action. In K. Cerulo (Ed.), *Culture in mind: Toward a sociology of culture and cognition* (pp. 28–54). New York, NY: Routledge.
- Villegas, A. M., & Lucas, T. (2002). *Educating culturally responsive teachers*. Albany, NY: SUNY Press.
- Wagner, J. (2006). Transfer in pieces. *Cognition and Instruction*, 24(1), 1–71.
- Zeichner, K. M., & Liston, D. P. (1996). *Reflective teaching: An introduction*. Mahwah, NJ: Erlbaum.