Critical Autoethnography: A Korean Science Teacher's Consciousness Analysis

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Abstract: This critical autoethnographic study looks back my own twelve years of science teaching in South Korea (SK). I identified my classroom vignettes by taking multiple consciousness as a Critical Race Theory (CRT)-informed conceptual framework. The vignettes illustrate two main ways I unknowingly but explicitly exhibited White consciousness through my teaching discourse and practices, while marginalizing other valuable parts of students' consciousness: 1) normalizing modern eurocentrism embedded in school science, and 2) framing capacity in English as evidence of excellence. While feeling regretful with the emerged findings, I muster up courage to report and discuss them as examples that can reoccur to those who are situated in the particularities of sociocultural and historical structures. In the end, my hope is to add an example of critical autoethnographic study to support and encourage teachers' self-examination of their own teaching discourse, practices, and consciousness.

Keywords: Critical autoethnography, Multiple Consciousness, Critical Race Theory

Purpose and research questions

Critical Race Theory (CRT) seeks to expose, problematize, and disrupt racism that functions as an organizing principle to privileges whiteness (Delgado & Stefancic, 2017). Whiteness as property (Harris, 1995) has expanded over time beyond phenotype to social products such as behavior, capacity, and language. The colonial and imperial legacy rooted in White supremacist ideologies have created unequal geopolitical power dynamics globally (Weiner, 2012). Western ideology of whiteness has been exported transnationally to shape the logic of eurocentricity that privileges whiteness even in the minds and practices of those who are in historically non-White homogeneous contexts outside of the US. The 'exported' white privilege may operate to marginalize non-White/Eurocentric/US ideologies, cultures, and practices. In this sense, I was prompted to examine which forms of racism, if any, may operate in the contexts historically assumed as non-White and homogeneous contexts, particularly in educational space. The first step of this CRT-informed examination was to look into my stories as a Korean science teacher and use this critical ethnographic examination as an entry point to articulate a larger sociocultural and historical backdrop in which the stories have been shaped. I seek to articulate how I may have highlighted White consciousness through my teaching discourses and practices. Two research questions guide this study; 1) Which vignettes emerged from CRT-informed autoethnographic examination of my experience as a Korean science teacher?; and 2) What themes are identifiable across the vignettes? What are the sociocultural structural features that may have enabled the vignettes to emerge?

Conceptual framework: Multiple consciousness

I take multiple consciousness as a conceptual framework. Multiple consciousness as one of CRT-informed constructs, explains the sense of self-contradiction, feeling of ambiguity, or frustration, stemming from containing an array of different consciousness as both oppressor and oppressed together within oneself (Wing, 2003). The multiplicity of consciousness does not mean "a mystery" but a "well-defined and acknowledged tool of analysis" of one's being, knowing, and doing (Matsuda, 1989, p. 8).

This construct connects the multiplicity and conflict of one's consciousness to that of one's socially-constructed and intersectional identity. Crenshaw (1991) introduces intersectionality attending to the multiple dimensions of identity that intersect one another to constitute individuals' respective and unique consciousness and realities. While Crenshaw's (1991) work focused on the intersections of race and gender, we could expand the dimensions (Crump, 2014) to include, for example, nationality, ethnicity, socioeconomic status, age, religion, and language. The intersections of different social identities inform unique realities individuals encounter as a holistic self. The dynamics of multiplicative parts of a holistic one give rise to form one's multiple consciousness (Matsuda, 1989). Multiple consciousness is often formed in ways to celebrate some parts of one's intersectional identities while marginalizing others, which may cause complicated and shifted presentation and representation of the self. In particular, one may form and exhibit White consciousness, which involves the thoughts that grant privileges to Whiteness (e.g., Matsuda, 1989).

I call attention to the consciousness teachers exhibit through their teaching practices and discourse. Teachers' consciousness exhibited in the classroom may play a pivotal role in the formation of students'

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consciousness. Chubbuck (2004) describes how White teachers' deficit view on students of Color may lead to Color-blind pedagogical practices and curriculum, and create obstacles to their students' academic achievement. Likewise, Ullucci and Battey (2011) argue the need for Color conscious teacher education, being concerned about how teachers with little awareness of Whiteness may participate in silencing the values, stories, and potential their students of Color bring to the classroom. Consciousness promoted by teachers' discourse and practices may influence the ways in which students develop their own consciousness.

Methodology: Critical autoethnography

Critical autoethnography has been promoted as an investigative tool to explore the topics of educational (in)equity. It adds the dimension of criticality to the autoethnography. Autoethnography considers the author's stories as a site of inquiry in ways to articulate the context in which the self is situated. In so doing, others can gain understanding and resonance with the narrated self and the context (e.g., Adams, Jones, & Ellis, 2014). Critical autoethnography attend to the narratives that illustrate issues of privilege and marginalization related to the author's social existence such as race, gender, class, sexual orientation, culture, and language (Boylorn & Orbe, 2014). Thus, critical autoethnography is proper for this study as I attempt to identify the vignettes that highlight any forms of racism in the contexts of my teaching and underlying sociocultural structures.

Positionality

As a public-school science teacher, I taught in varying contexts: schools located in economically diverse backgrounds, summer camps for youth from neighboring districts, advanced science education programs for youth recruited from one of the metropolitan cities in SK. My teaching goal mainly focused on ensuring more students' academic achievement, college/career readiness, and living the scientifically literate lives as contributing citizens. Then, now, as a graduate student having learned multiple critical perspectives that examine educational structures and practices, I reflect that my enthusiasm and care for students were true, but were posed without critical lenses. One of the compelling perspectives grounds in CRT. By bringing the CRT perspective, I examined my teaching in Korean education contexts where were physically non-White and homogeneous but semiotically fraught with White ideologies. Since SK is rapidly becoming a multicultural and multi-racial country, my past stories five to fifteen years ago may not fairly reflect the current educational contexts. However, the education system in SK (e.g., policy, curriculum, and schooling) still centers on the homogeneous majority of Koreans. Thus, my narratives may offer the entry points to some pervasive systemic issues of privilege and marginalization.

Autoethnographic data and analysis

Data source includes: 1) autoethnographic account drawing on my teaching years (2004-2015), including my vision of teaching and the moments of teaching that invoke an array of impressions (e.g., pride, regret, and question), 2) teaching artifacts, 3) visuals of moments, and 4) account for pre-teacher experiences regarding teaching. Comprehensively referring to the data, I undertook three processes of constant comparative analysis in a grounded-theory tradition (Straus & Corbin, 1998). I first conducted open-coding analysis to extract critical vignettes that invoke CRT-related ideas. Second, I identified constructs that can explain the extracted vignettes. This second phase was iterative as I tried different constructs to explain the vignettes. After taking multiple rounds, I figured out multiple consciousness as a construct that effectively explains the vignettes. Third, I analyzed three connected vignettes and relevant sociocultural and historical structure drawing on the conceptual framework.

Context of vignettes

For this short paper, I used the first vignette. The other two are related to and originated from the first vignette, and will be reported in the full paper. The first vignette describes a moment in 2009 when I was teaching my eighth-grade students in a classroom of a public middle school located in a newly developed city in SK. The population of the city was increasing, and economic status was diverse. One class had up to thirty-five students. In the captured moment, students were learning the concept of DNA and cell structures. The contents were included to the final exam that would happen in two weeks. We use Korean in our daily communication, thus below vignette was translated in English. English is only a language mandatorily taught in elementary/secondary schools in SK.

Findings

The vignette below illustrates two ways I unknowingly but explicitly emphasized White consciousness: 1) normalizing modern eurocentrism embedded in school science, and 2) framing capacity in English as evidence of excellence.

White consciousness in the Korean science textbook

Writing Deoxyribonucleic Acid (DNA) on the whiteboard, I asked my students to read the word out loud. Only one read it, and the others "wowed" their surprise. Then, one student asked, "what is "Deoxyribonucleic Acid" in Korean, you know, just Korean word?" Feeling embarrassed, I answered, "as far as I know, we seem not to have pure Korean words that mean Deoxyribonucleic Acid." Another student shouted, "Science has too many English!" Browsing his textbook, he began to look for more examples, and others joined the impromptu investigation. "all these formulas next to 수산화나트륨 (NaOH), 아세트산 (CH3COOH) are English. Oh, I know this CO2!" Other kids exclaimed, "I see…V=IR… and units," "볼트 (Volt), 암페어 (Ampere), and 옴(Ohm)!?" "I am afraid. This is the next chapter we learn??" I smiled, "you previewed! I know it looks like a lot. Then, as you noted, the units…, they are the names of scientists who dedicated their lives to science and help us learn Ohm's law! Instead of being afraid, I hope you see the science as stories of somebody who loved science."

I appreciated my students' spontaneous research of English in science textbooks and reengaged with them on the term DNA. I thought it was a good segue to come back to the lesson I had planned. I was in a bit of a hurry because there were many things I had to cover with the students before an upcoming mid-term exam.

The ways I exhibited White consciousness

Until I brought a CRT lens, I remembered this moment with pride. Students undertook an impromptu investigation of their textbooks. I acknowledged and leveraged their instantiated investigation to appreciate the lifelong efforts of scientists. I thought, by doing so, I supported youth to be connected more closely with their science textbooks as stories of somebody who strived to seek truth in nature. Now, though, I would like to discuss this moment with a CRT lens, describing the two ways I exhibited White consciousness in this moment.

First, aided by the science textbook, I might have implied as if Western modern science is just the one viable epistemological culture that students need to appreciate. In this moment, while students instantiated an impromptu investigation of English prevalence in their science textbook, I ended up reorienting their investigation to appreciate White scientists' contributions to developing humans' knowledge of nature. However, my 'admiration' of scientists was not based on a critical examination of how textbook frames science. This does not mean that science teachers should keep their classroom discussion from appreciating scientists' rigorous pursuit of the truth. I believe that the good qualities of scientists such as creativity, perseverance, and the effort to generate trustworthy knowledge of nature should be respected. However, I may have normalized eurocentrism of science discipline. I introduced scientists who were mostly Western, White, and male, but I did so without engaging students in critical reflection on the sociocultural and historical inequality implied in the issue of who represents science. Furthermore, while I frequently highlighted only the pros of science represented by White scientists, I barely mentioned that there are "different accounts of the world which are also powerful in their own ways" (El-Hani and de Ferreira Bandeira 2008, p. 756). I was ignorant about multiple epistemologies that were used in different cultures and communities across the globe and history. Thus, my regrets (also the source for change) are: What if I asked about the historical implication of White and Western dominant representation of scientists? What if I could have told them there are other ways of knowing nature in the world, which we should understand and respect as much as we should the science we learn in school? That way, I might have been able to differently contribute to my students' consciousness development.

Second, I implicitly framed capacity in English as evidence of excellence. I let my students try to read 'Deoxyribonucleic Acid.' I intended to attract students' attention to the topic of the day -DNA, not to test students' English-readability. However, students at the moment may have felt like a light English-reading test. To most students whose daily language is Korean, 'DNA' would sound familiar since they easily heard the term frequently from media. However, it is highly likely they were unfamiliar with the full name of DNA. Thus, when one student could pronounce it, even though I did not make any comments on the student who pronounced it, already students in the classroom gave the peer judgment viewing him as excelled at English. Perhaps, the fact that I did not make any response may have reinforced the shared view on the student.

However, another student, by asking me what the Korean translation of Deoxyribonucleic Acid was, may have been critiquing the way I implicitly highlighted English as a tool to prove excellence. If this complicated word in English was translated to Korean, reading Korean letters was an easy task to any student in the room. Students critically recognized that scientific jargon/terminology is English and that even some English-originated words do not have corresponding Korean translation. They also exhibit their awareness of implicit language hierarchy in science textbooks by pointing out that many Koreanized scientific terms are from English or Chinese. Here, I am not arguing that science words in English should be translatable to any other languages, or Korean science textbooks should use only terms translated to Korean. I am highlighting that students were noticing that lots of scientific words are rooted in English. Scientific words in English may work as doubled barriers, not only linguistic (e.g., to be able to read the word Deoxyribonucleic Acid) but also epistemic (e.g., to be able to

understand what it means by Deoxyribonucleic Acid). The doubled barriers may limit the extent to which students could express and enhance their academic excellence.

Undergirding sociocultural structure

The above vignette became a seed of the following two vignettes that I would describe in the presentation. When collectively considering the connected vignettes, I figured out the features of sociocultural and historical structure undergirded the vignettes, which explains why my personal vignettes are not just unique to myself.

Social narratives and educational system has developed to view the excellence in English and science as success in ways to emphasize White consciousness while marginalizing other valuable parts constituting their consciousness and identity. Regarding the finding of 'English as evidence for excellence', I note that English in South Korea has become the prerequisite subject while other second languages are electives. The educational goal of the global mobility of SK and the social mobility of individuals gave English privilege as a tool for national/individual mobility. Regardless of the fields of major or profession, students are required to submit English scores during the selection process of college entrance, employment, and job promotion. English symbolizes the readiness and potential to enter the workforce. Since English has been systematically promoted as a tool for excellence, students may grow to shape their consciousness in ways to value English as a symbol of success while normalizing the valuable part of being able to have and use Korean as their independent language. Science, together with math, is similarly viewed as a subject that may better guarantee students' college and career readiness when compared to other humanities subjects. This trend already positions science as a subject for excellent students. When combined, it is likely for students to view English and science as legacy of *better others* (i.e., White) while situating their own non-White being/knowing as legacy of *second-class citizen* (Wing, 2003).

This analysis of sociocultural and historical structure has an implication for teacher education. My findings suggest teachers learn to have awareness of how their discourse and practices can exhibit White consciousness and participate in students' struggles to disrupt such consciousness. Further, my hope is to add an example of critical autoethnographic study to support and encourage teachers' self-examination of their own teaching discourse, practices, and consciousness.

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Acknowledgement

This work was funded by Delia Koo student award, Asian Studies Center, Michigan State University.