REWRITING CRITICAL PEDAGOGY FOR PUBLIC SCHOOLS:

TECHNOLOGICAL POSSIBILITIES

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Abstract

Critical pedagogy has been a powerful and persistent force in academia, informing dissertations, courses, and research. Despite this impact on higher education, critical pedagogy has not had similar success in public schools, even though these institutions host large numbers of marginalized students. One reason for this lack of influence in public schools is that the space of schooling is not particularly receptive to the ambitions and priorities of critical pedagogy. In this article, we build on the claim that there is a poor fit between public schools and critical pedagogy by laying out an argument for improving this fit by extending critical pedagogy. This extension can lead to the creation of new school spaces—spaces of difference—that will provide a more conducive environment to use critical pedagogy. To do this, we take the unconventional position that critical pedagogy be used with technology to create spaces of difference that will further opportunities for marginalized students and their ability to "name the world." An in-depth consideration of these spaces of difference and their relation to critical pedagogy is presented to reveal how it can lead to forms of critical learning to address the needs of all students, including those most marginalized as they move through public schools.

Keywords: critical pedagogy, spaces of difference, technology

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Over the past five decades, critical pedagogy (Freire, 2000) has become a mainstay within academic culture (McLaren & Kincheloe, 2007). Schools of education as well as language, English, and sociology departments consistently familiarize students with aspects of critical pedagogy (Darder, Baltodano, & Torres, 2003; Kincheloe, 2007). For example, schools of education often incorporate critical pedagogy as part of a social justice orientation to teaching. Sociology and English departments use critical pedagogy as part of the need to teach about critical theory or, more specifically, critical literacy. Language departments often focus on critical pedagogy as part of an orientation toward a more inclusive, diverse, cultural view of teaching language. All these departments use critical pedagogy to inform dissertations and research. Unfortunately, this embrace of critical pedagogy in higher education has not transferred to public schools that host large numbers of marginalized students.

Since critical pedagogy was developed to work with oppressed groups like marginalized students, it seems appropriate to consider how critical pedagogy might be extended to work in public schools and further the needs and opportunities of marginalized students. To do this, we begin by defining our view of what it means to have a "critical" pedagogy and explain why public schools are an important site for this method. The second section focuses on how to rewrite and extend critical pedagogy by utilizing technology to create spaces of difference within schools and between schools and their local communities. In this section, we clarify what we mean by spaces of difference. The third section compares how spaces of difference would look in relation to spaces currently found in public schools. The final section explains how spaces of difference can contribute to a critical form of learning that can directly impact opportunities for marginalized students and their ability to name the world.

THE ROOTS OF CRITICAL PEDAGOGY

Critical pedagogy, in our view, is an outgrowth of the Frankfurt School of critical theory (Held, 1980). The Frankfurt School takes its inspiration from Marxist sociology with its economic capitalist core and then moves its theory to a place where both the culture and the economy are interactive and central to understanding oppression in society (Horkheimer & Adorno, 2002). A strict economic determinism associated with Marx is reformed such that culture no longer is an epiphenomenon of capitalism but rather becomes a legitimate place for inquiry on its own. Consciousness, as a result, can be shaped and reshaped by cultural transformations without a direct transformation of capitalism. And this reshaping, what is often viewed as critical consciousness, is not only at the forefront of critical theory but also one of the leading methodologies to produce critical consciousness within critical pedagogy. While this account begins to define critical pedagogy, more needs to be said about the word "critical" and what it means for both critical pedagogy and critical theory.

Criticality is a contested idea. For example, Argyris (1982) associates the term critical and specifically critical learning as "divergent thinking strategies and double-loop learning methods" (Brookfield, 2005, p. 11). For others, "critical learning cannot occur without explicit critique of capitalism" (p. 11). In contrast to both explanations and many others, such as those associated with critical thinking (Paul & Elder, 2014), our view of critical is based on a notion of oppression that includes unseemly gaps between the rich and poor. Based on this view of critical, the "critical" in critical theory and critical pedagogy is an attempt to see and act on oppression—a form of praxis (Marcuse, 1960). Critical pedagogy is one central method to see and act on oppression. It does so in two major ways. First is the transformation (in the cultural domain of education and schooling) of the basic relationship of teacher and student from expert/knower to learner to a two-way dialogical connection where both teacher and student work together to understand what should be learned in school, especially for oppressed cultural groups. Second, critical pedagogy moves from an approach to education that allows dominant culture to name the world of the oppressed to allowing the oppressed to rename

the world as also belonging to them (Freire, 2000). In short, what ideological critique and the dialectic are to critical theory, dialogue and naming the world are to critical pedagogy (Held, 1980).

WHY PUBLIC SCHOOLS?

Given our view of critical pedagogy, we can say with great certainty that this approach rarely finds its way into public schools (Freire, 2000, p. 15-16). One reason is that schools often resist significant change and are structured by curriculum, tracking, and testing as a sorting machine (Oakes, 2005; Spring, 1976). While largely true, these limitations do not define all of schooling and the progressive work that finds its way into schools (Gordon, 1986; Nouri & Sajjadi, 2014). Furthermore, as public schooling continues to be criticized for its performance, charter and independent schools are becoming increasingly common and their enrollment is growing (U.S. Department of Education, National Center for Education Statistics, 2016). Student demographics at charter schools and independent schools, however, are not balanced in terms of students' cultural backgrounds. In fact, policy promoting the expansion of these types of schools could increase segregation based on race, ethnicity, income, and special needs (Rotberg, 2014).

Because of these shifts in student populations, we argue in this essay that despite the challenges inherent in introducing critical pedagogy into public schools, these are the institutions that most *need* critical pedagogy to challenge the marginalization of their large student population. Even so, this need for critical pedagogy in public schools is unlikely to be met unless the approach undergoes some *extensions* that would provide a better fit between critical pedagogy and public schools and thereby further participatory engagement with marginalized youth culture (Cammarota & Fine, 2008; Kornbluh, Ozer, Allen, & Kirshner, 2015).

REWRITING CRITICAL PEDAGOGY?

The first step in rewriting critical pedagogy is to turn its critical emphasis back on its own construction so that it becomes a force for reconstructing educational spaces (McLaren, 1999). Critical

pedagogy proponents must do more than simply consider the role that space plays in its utilization. They must also look critically at its conceptualization and associated practices such that the pedagogy itself does not become reified and seen as an unchangeable commodity (Marcuse, 1960). One direction for critical consideration is how critical pedagogy can be used with technology to not only produce spaces of difference but also to become the foundation for a community-school relationship where there is joint responsibility and opportunity to enable marginalized students to have the same chances for success enjoyed by students of dominant racial, social, and economic classes (Kahne, Hodgin, & Eidman-Aadahl, 2016).

TECHNOLOGICAL POSSIBILITIES

Educationalists interested in critical pedagogy should not look at technology as *the* force for change. Instead, they should view it as *a part* of the change process. In fact, of all the possible angles one might consider to critically analyze critical pedagogy, technology would most likely be unusual. That is because critical theory, a foundation for much of critical pedagogy, holds that technology, especially as it concerns the industrial revolution, has not only caused alienation by separating the laborer from the labor but also became the basis for furthering the dominance of the management over workers (Held, 1980). More recently, technology has made many historically well-paying jobs, such as those in manufacturing, obsolete. Technology, however, is *designed* to accomplish certain purposes and therefore can be *redesigned* to accomplish other purposes. Technology can enhance all sorts of teaching methods if designed and used with learning in mind.

Technology can be designed to challenge reproduction of social hierarchies (OECD, 2012) and serve the interests of those who are marginalized (Gitlin, 2017). This sort of design, already in place in partial and complete forms, has even been considered in relation to critical pedagogy (Vakil, 2014). While it can be time-consuming for a teacher to ask each student to play a role in constructing their education, it is practical to use technologies that allow all students to organically generate discussions to help design the nature and content of their education. For example, smartphones do more than

make educational activities easier; they are also tools commonly used by marginalized groups to influence and alter established cultural norms by challenging formal language structure in verbal and symbol shortcuts (Lenhart, Arafeh, Smith, & Macgill, 2008). Caruthers and Friend (2014) describe one example of this type of critical engagement: online space where student-led dialogical and conversational learning does not adhere to the traditional classroom format of directly transmitting knowledge from one person to another. Students within these online spaces become "co-creators of knowledge through collaborative writing using Wiki-type platforms that support distributed expertise and decentered authorship, resulting in co-produced texts" (p. 15).

Many recent examples exist of youths using technology for social change. These examples have typically taken place outside formal educational settings; however, they would prove useful in imagining technology that will encourage participatory engagement with marginalized *student* culture. Youth Radio, based out of Oakland, California, hosts a program where young people "conceptualize, create and disseminate digital projects that break silences, expose important truths, and challenge unjust systems" while learning coding and design skills (Lee & Soep, 2016). Conner and Slattery (2014) examined how a youth group from Philadelphia used technology "to promote the digital literacy, academic achievement and civic engagement of low-income youth of color" in their community. Vakil (2014) looked at how a "critical pedagogical approach facilitates the engagement in urban youth in a mobile app development project within an after-school program" (p. 31). Exactly *how* preservice and in-service teachers can build on these examples in the classroom and into the curriculum for social change is far from settled (Garcia & Morrell, 2013, p. 125).

Technology used with education could contribute to the production and reproduction of dominant groups in society, particularly considering the power structure of most classrooms where children and adolescents are expected to be "passive recipients of dominant and 'adult' ideologies and norms" (Ito et al., 2010, p. 7). Technology, however, can also provide the space for liberating practices, such as student-led discussions that turn passive students into active, critical

learners who "negotiate, share, and create culture with adults and each other" (Corsaro, 2011, p. 20).

Educators and educational stakeholders need to think differently about the possibilities of critical pedagogy when coupled with technology. Robinson (2011) suggested technology is often way ahead of a realization of how one might use it (p. 38) and therefore users turn to it in limited ways. In his view, "new technologies present fresh possibilities for creative work, and the creative use of technologies leads to the evolution and sometimes transformation of technologies" (p. 205). Our hope is that these gains will inspire uses with critical pedagogy to produce educational spaces that benefit marginalized groups.

SPACES OF DIFFERENCE

Historically, the work of critical pedagogy has primarily focused on making a difference within informal learning contexts, such as literacy groups or "culture circles" (Freire, 2000). Critiques of critical pedagogy have focused on the rational nature of the approach (Ellsworth, 1989). However, critical pedagogy proponents also need to thoroughly consider space, the place of schooling (Gruenewald, 2003a). School spaces should encourage dynamic connections across cultural differences (Gruenewald, 2003b) within schools and between schools and local communities. Before proceeding to our discussion of space, it is important to say a few words about this complex concept.

THE MEANING OF SPACE

What is meant by educational spaces or "spaces" in general? Our view of space stands in contrast to a commonsense notion of space as something out there, a physical objective space that humans and other objects are placed within. Instead, we view space in line with Heidegger's (1962) notion of *Dasein*, where "being" is influenced by the world as the world influences "being." Space is not "out there" but made and remade as beings (humans) change and other objects (e.g., tables, chairs, lights) enter.

An example of this notion of space would be a coral reef (Johnson, 2010). A reef starts its "life" with the ocean washing over the coral such that an extended "home" is spawned from polyp clusters that form stony corals to create an underwater ecosystem. If a reef is to grow and be a successful home for fish and other sea life, it must provide protection from predators and the power of the surf. Changes in reefs occur through the interaction between the reef and the varying sea life housed within it. However, these interactions will not significantly change or improve the reef because there is no "progressive" interaction between the sea life and the reef. The species dependent on the reef can only do so much in redesigning their home through their activities. The reef and the sea life are in stasis. For progressive redesign to occur to the reef, the sea life would have to develop symbiotic relations. Only cooperation could produce new possibilities that exceed the abilities of any one individual fish or other sea life housed within the reef to move beyond the individualistic stasis. However, it is not enough to have one set of symbiotic relations. Symbiotic relations among the reef and species housed within it need to continuously form and reform to thrive.

Being a metaphor for educational space, what this means is that educational stakeholders pay too much attention to the form and content of the curriculum and best practices—the activities that take place in schools—as if the space created to this point by previous actors, activities, and objects is of no concern. What is limiting about these sorts of reforms is the way the "reef" space influences the students, the teachers, the curriculum, and so forth, and how these people and aspects of education influence the space. When educational reforms produce little or no change, those in charge blame the curriculum or the students and teachers. They overlook the interaction of space with students, teachers, administrators, and the curriculum. The educational establishment has yet to develop a design—a school space—that allows students, teachers, and administrators to develop ongoing and changing symbiotic relations that challenge the stasis of the current school "home."

CRITICAL PEDAGOGY AND SPACE

Our critique of the lack of consideration of space within critical pedagogy is more fundamental in that activities and actions in schools do not occur independently of the space in which they take place. Space and action are in a *two-way* relation (Heidegger, 2008). Because critical pedagogy largely ignores the space in which dialogue takes place, this sort of relational analysis is impossible.

It is within this two-way relation between space and action that we see opportunity for progressive transformation. The reluctance of educational stakeholders to effectively institute critical pedagogy in schools stems from the power struggles to gain and maintain control of education. Proponents have long advocated for democratic classrooms and the disruption to normative traditions for the formation of a more egalitarian society. Burbules (1986), however, argues against that view:

> [P]ower and power struggles are consequences of underlying conflicts between human interests; that these conflicts are inevitable given the hierarchical nature of our social system; that power is latent in structures of ideology, authority, and organization; and that the resolution to the problem of power lies neither in simply exorcising power nor in "getting it," but in transforming the underlying conflicts of interest that give rise to it. (p. 95)

He concludes that institutions of education should be viewed as culprits in creating and maintaining this structure and as spaces for the transformation of power imbalances. Within the space for progressive transformation, we see opportunities for change.

These spaces would enhance students' opportunities to be creative contributors (to invent new designs) to their own education (Gitlin & Peck, 2005). Therefore, the space of schooling needs to promote the "naming of the world," which Freire urged in constructing critical pedagogy (Freire, 2000, p. 88). When successful, these creative spaces of difference would allow school actors, schools, and communities to engage in continuous cooperation, inquiry, and experimentation that

can lead to an ongoing change and even transformation (Gitlin, 2015) that is based on the important insights of critical pedagogy.

CREATING SPACES OF DIFFERENCE

Space, in most schools, is commonly constructed to maintain order. Order is about keeping an eye on students and keeping them away from each other (individual desks)—it is a form of supervision (Phelan, 1997). Critical pedagogy stands in opposition to this notion of supervision. Our focus is on creating spaces where students, teachers, administrators, the local community, and others connect and reconnect. And not just any sort of connection will do; connections should cross differences and push those involved beyond their current view of problems and desirable actions (Johnson, 2010).

The possibility of connecting the school and the local community in real-time is almost unlimited with technology. Virtual space establishes a common, non-dominant place that is neither one group's nor the other's (Warger & Dobbin, 2009). Students can interact with other classmates and/or link up with outside individuals and groups beyond the boundaries of the institution (Fullan, 2013, pp. 23-27). By doing so, technology can open spaces for what Thomas and Brown (2011) term "a special type of culture" (p. 36). They explain, "Unlike the traditional sense of culture, which strives for stability and adapts to changes in its environment only when forced, this emerging culture responds to its surroundings organically. It does not adapt. Rather, it *thrives* on change, integrating [change] into its process as one of its environmental variables and creating further change. In other words, it forms a symbiotic relationship with the environment" (pp. 36-37). And yet, existing school culture and adherence to ritualized routines can make the shift from learning in isolation toward classroom openness difficult to realize. For example, one of the main activities that link the community and school together is parent-teacher conferences. While these conferences have any number of configurations, they typically involve parents coming to the school and hearing a teacher's concise assessment of a student's performance. Teachers use rubrics and grades to provide an objective assessment of the student. The teachers are trying to keep order in the school by maintaining the relation of

teacher as knower and student as learner and the teacher as expert and the parent as non-expert. The space of parent-teacher conferences is one of maintaining authority, not an engine for change like critical pedagogy.

With technology, space can be a shared arrangement that results in innovation and change. For example, instead of a brief, episodic interaction that tries to justify current relationships, classes and parents can be brought together daily if desired. This virtual space does not require one group to come to the space of the "others" and can allow parents and teachers to assess and inform teaching and learning. Not only can teachers gain an understanding of students from parents, but, more important, they can collaborate to produce more complex understandings of students and innovative ways to learn that are personalized to the wants and needs of the student. This virtual space brings the community understandings and teacher understanding together in ways much in line with critical pedagogy's focus on dialogical approaches to evaluation where both groups work together to understand teaching. In contrast, creating behavior that minimizes connections stands in opposition to our perspective of using connections across differences as a way forward.

CURRENT SCHOOL SPACES AND SPACES OF DIFFERENCE

Currently the space of schooling is constructed for sorting through testing (Nespor, 2010, pp. 31-32). Sorting is fueled by and the result of standardized testing, as well as the supposed objectivity of the standardized test itself. Just as the "rows of seats" illustrates separation of students from each other, so too does testing separate students by putting them in competition with each other. Although ordered seating isolates and can limit student learning, standardized testing has more severe consequences. Getting a low score on a standardized test can directly impede an individual's opportunities for advanced schooling and career options. If standardized tests are fair and objective as claimed, then at least the sorting is fair and objective. But within our neo-critical pedagogy framework, the sorting cannot be fair

because the *problem of educational success* is not school, but in the relationship between school and community.

Educational success, in our view, is centered in the relationship between the space of the school and any adjacent experiences. Therefore, a standardized test that does nothing to transform the relationship of the space of the school and adjacent experiences is inherently unfair in that it does nothing to account for the material realities in these spaces, which limit actions and cooperative participation (Kozol, 1991). Sorting will never be fair because it does not consider the different cultural playing fields outside the school (Tannock, 2008).

In contrast, our concern is with providing equal or nearly equivalent starting points for students by altering material conditions where needed for particular cultural groups. For example, part of the cost of "schooling" should include providing childcare and time off work to ensure that all parents can participate in student and school decision making. And where these funds are not possible, the parent or parents need to designate a relative or community surrogate to stand in for them. Once the community can fully participate with the school, the responsibility shifts from only the school to the school-community spatial relation. The student's responsibility is to engage in the learning process and to make a case for what they have learned (Moss, 2009). This is not to say that tests will disappear, but rather that in addition to standardized tests students will save all of the documents and materials they have created within a technological space that students can use to construct their own learning assessment or to turn these materials into a portfolio that reflects their learning and accomplishments. Critical pedagogy suggests this sort of activity when saying that students need to name the world as opposed to having the world named for them.

With this notion of learning development firmly in place, schooling would emerge as an institution of critical learning, not an institution of testing. We invoke the word *critical* to reflect a fundamental insight found in the work of Paulo Freire (2000) that there is little hope for a critical pedagogy where the student becomes an object, a commodity that is filled with information (Freire, 1999, p. 88). As noted, our position is an extension of Freire's contention in that instead of just

pedagogy, we are challenging the view that students should accept the way standardized tests and grades define what they have learned in the space of schooling. Students should, instead, be empowered to create parts of their learning as well as create a record of their learning and accomplishments. Through their involvement in curricular and assessment decisions, students not only would be challenging the banking model (Freire, 2000; Del Carmen Salazar, 2013) but also would become critical subjects of their learning and the assessment of their learning within schools.

To move in the direction of critical learning, technology plays a role in connecting adjacent spaces by providing fluidity between them. For example, technology can easily add participants inside a classroom who are not normally present. This could be a historian to orient students to primary source materials that provide varying perspectives to historical events. It could be a pedagogical expert invited to help teachers enhance instructional strategies for student learning. It could also be students from classrooms across the country or around the world to provide the opportunity to engage in debates, discussions, or literature circles (Crane, 2012, p. 89).

This kind of classroom fluidity would result in a broader fluidity between the community and school. When schools and communities have a fluid connection, the space belongs to neither group and combines virtual and physical spaces. No longer does the community come to the school or the school come to the community. The new space, which is enhanced by technology, welcomes everyone into a space designed for differences. It is a space to connect, reconnect, and communicate in a critical forum through discussions, polls, and group messaging.

In all these cases, technology can be used to create space for more fluid connections across differences. It does not mean that connections across differences within such a space will always result in critical consciousness. It only means that unless the space is transformed to work with critical pedagogy, few, if any, possibilities for substantive change will be achieved. From a consideration of the spaces within school and between the school and the community, our discussion now moves to how critical learning and its direct connection to critical

pedagogy can become a dominant educational outcome within spaces of difference.

CRITICAL LEARNING WITHIN SPACES OF DIFFERENCE

Freire (2000) begins his description of the worldview of people by stating, "Man is the only [being] to treat not only his actions but his very self as an object of reflection" (p. 97). This unique possibility allows people to cognitively transcend their place in the world and overcome situations that restrict their advancement. These "limit situations," as Freire calls them, "imply the existence of persons who are directly or indirectly served by these situations and those who are neglected and curbed by them" (pp. 99, 101). Freire sums up his position on consciousness by saying, "I must re-emphasize that generative themes [themes emerging from limit situations] cannot be found in people divorced from society; nor yet in reality" (p. 106).

For Freire, changes in the worldview require overcoming limit situations. However, some people do not see these boundaries because it is not in their interest to do so—they benefit from the current circumstances. Others who are "curbed by reality" naturally know the restrictions through their experiences. Because we are interested in placing critical pedagogy in public schools, our view of critical learning extends beyond the generalized limit situations of Freire's position.

Critical learning, as we see it, is based on creating spaces of difference. Because we use the status quo (as does Freire) as our starting point for transformation, we begin with the nature of the space as it is currently constructed. As it stands, the space of schooling is not even one of learning but rather of sorting by age, content areas, standardized testing, a common curriculum, and the like.

To move toward consideration of the "what" and "how" of schooling, a double move is required. First, one must reconsider grades, standardized tests, and so forth that center the space of schooling on sorting and as oppositional to critical pedagogy. This reconsideration should be used as a heuristic that opens spaces for teachers to direct and redirect their efforts concerning the education

of students. In other words, rather than the consistent narrowing of the school experience based on teaching to the test, teachers and administrators try to create openings that allow for alternative educational purposes to be considered—most specifically critical pedagogy. These spatial openings provide the foundation for critical forms of learning where students have an active role in their learning and the assessment of that learning. Technology can assist in this new kind of student-generated learning where all students' documents can be saved and organized, thereby providing a holistic picture of what is learned as students evolve into critical subjects.

With this first move in place, sorting is less likely because all students do not have a common assessment and can share experiences to explain learning growth that might not be covered on the test. As a result, the second shift would address the gap in assessments tracking students' learning progress. To fill that gap, students could (with assistance from teachers) keep track of and provide evidence of the skills, competencies, values, and content-specific concepts developed during an academic year or level of schooling. Since many technologies archive materials automatically, it would be easier for teachers to assess student learning and for students to track their learning progress. Permitting students to have access to their work, reflect upon their growth as a learner, and have the ability to share their knowledge and skills with others would further move students from the position of object to critical subject.

The transformation from sorting to what and how students should learn, however, still requires more work because the "what" and "how" of education remains tethered to the status quo. To integrate the "is" and "ought" into student learning, imposed communication must give way to a communication that critically analyzes traditions, histories, and prejudgments to form new understandings that are never final (Habermas, 1970). And school interests should not be seen in terms of institutional interest, but rather student interests about inquiry—especially for marginalized students and marginalized cultural groups in the community.

Technology can also provide the space for students and teachers to share personal information, amend that information, refer to it

regularly, and carry that information forward throughout the student's entire schooling experience. This way, communication is enhanced both within the school and between the school and the community. Combining technology with critical pedagogy to create spaces of learning across differences creates the conditions for critical learning to thrive. This approach challenges the status quo and the construction of marginalization through an embrace of differences that can pull public schooling toward a future of never-ending design and redesign to further marginalized students' opportunities and their ability to name the world.

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