

Work-In-Progress: Integrating Critical Pedagogy with Project-Based Learning

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Summary

The separation of disciplines in secondary education is an inherent obstacle to project-based learning (PBL): educators go years without meaningful collaboration, critical feedback, or self-reflection (Jacobs, 2010). As a result, many inhabit an isolated bubble where no space is given to interdisciplinary collaboration; this isolation limits the authenticity of the projects students can produce. Compounding the dilemma is neoliberal logic, which disseminates the model of the market to all domains and activities (Brown, 2017). The curriculum is depoliticized; students are motivated to excel academically so they can compete in the market rather than work towards more societal equity. Additionally, marginalized groups are tracked into vocational pathways that focus only on basic skills training and give no space to critical thinking, which hurts the worker's ability to confront and transform inequitable neoliberal policies (Darder, 2017). While PBL in STEM and vocational pathways have positive impacts on teaching and learning outcomes, implemented without a critical pedagogy framework, PBL has not been shown to increase critical consciousness (Montoya et al., 2018). This research aims to discover how PBL and an interdisciplinary curriculum (Montoya et al., 2020) implemented through a framework of critical pedagogy can impact the critical consciousness of students and teachers.

Keywords: Neoliberalism, Neoliberal Logic, Interdisciplinary Curriculum, Critical Pedagogy, Critical Consciousness

Type of contribution: Research extended abstract

1 Obstacles to Project-Based Learning

In 1892, the National Education Association Committee of Ten, a group of educators asked to make recommendations for the future of schools, decided the most effective way to teach secondary students was to separate each discipline (Jacobs, 2010). Well over 100 years later and this structure of separation still goes unquestioned by teachers and administrators. Secondary schools still hold the same schedules, grouping patterns and spaces from the 1930s (Jacobs, 2010); however, century-old structures can't prepare students for the interconnectedness and innovation of today's science and engineering (Wang, et al., 2018). We don't just need reforms; we literally need *new forms* (Jacobs, 2010).

In 2018, to counter the silo structure of public education, I formed a cohort of teachers from different disciplines to create a building and construction curriculum that utilized interdisciplinary collaboration and project-based learning; I co-authored a paper about the results (Montoya et al., 2018). In this project, a team

of students analyzed sidewalks surrounding high schools in affluent and disadvantaged communities. They discovered that disadvantaged communities had unsafe conditions, so they organized a community clean-up and created a virtual design, Gantt chart, and budget to fix the sidewalks. Throughout the process, students received feedback from industry mentors and made a final presentation at Stanford University. Ultimately, the research revealed a positive impact on students' social mobility perceptions, but no impact on their social justice awareness (Montoya et al., 2018).

While the project provided interdisciplinary collaboration, project-based learning, and helped students get certifications to make them more competitive in the economy, we did not use a critical pedagogy framework to help students develop a critical consciousness. The driving force behind our curriculum was to engage students (Perry, 2022) and to make them employable; however, this approach only mirrors the absence of critical questioning that has historically existed in vocational education (Darder, 2017). This lack of critical thinking and an overemphasis on standardized testing perpetuates a false binary between “brain-work” and “hand-work” (Rose, 2014), so marginalized students get tracked into vocational programs that rarely give space for critical analyses of societal injustice, which only serves to frustrate the workers' ability to confront and transform inequitable economic and environmental policies (Darder, 2017). For instance, in Silicon Valley, building and construction pathways have become a road-to-nowhere and rarely lead to higher education or high-wage careers (Lundell et al., 2022). Ultimately, our own construction pathway utilized the concept of social justice as a symbolic gesture; we became what La Paperson calls the “second university:” hegemonic radicals who assume talking about freedom will result in freedom (2017). Like many second universities, we checked the box of project-based learning and social justice but never did the work and dialogue with students or the community to create space for critical consciousness, self-exploration, and transformation.

2 Neoliberal Logic and Education

Neoliberal economic policies compound the problem of secondary education's silo structure. For the last 40 years, neoliberalism has dominated the globe; this economic system celebrates free markets, deregulates industries, cuts social spending, privatizes public goods (such as education, prisons, and militaries), increases finance capital over productive capital, and converts every human need or desire into a profitable enterprise (Brown, 2017). Under neoliberalism, the United States ranks worst among industrialized nations in social mobility and other health and social metrics such as life expectancy, obesity, imprisonment, and mental illness (Wilkinson & Pickett, 2014). This economic system not only creates a society of the have and have-nots but also disseminates the model of the market to all domains and activities, and configures human beings exhaustively as market actors (Brown, 2017). Under neoliberalism, citizens are depoliticized, and a market logic becomes the foundation of all decisions and interactions. Saving the environment is good, if it serves the market; social justice is good, if it increases profits. Getting an education has value not because of personal growth and community contribution but rather because it increases our human capital in a competitive economic system that thrives off inequality. No longer is there a separation of political and economic life; neoliberalism formulates social justice, government investment, and environmental protection as fuel for economic growth (Brown, 2017). Under such a pervasive market ideology, equity and justice are reduced to the symbolic, and people of color face a “new racism” founded in myths of meritocracy and color blindness (Prashad, 2005). If neoliberalism causes such high levels of inequality, how does our education system, directly and indirectly, support and promote this ideology?

Public discourse on education tends to focus on the failures of schools, teachers, students, and curriculum, but rarely do we question how our economic system interacts with the structures and systems of public education; however, we can no longer talk about failing schools unless we are willing to discuss failing economic policies; the two have become so intertwined that it is difficult to tell where one ends and the other begins (Rose, 2014). Neoliberalism is an economic system where profit outweighs equality; similarly,

public education defines success by the scores of standardized tests that center on white settler-colonial epistemologies (La Paperson, 2017). As a result, students from underrepresented groups who do not fit or follow white settler-colonial norms are labeled “underachieving,” which puts them at risk of entering the school-to-prison pipeline (Nocella et al., 2018). In essence, neoliberalism and our failing schools feed into one another and not only strengthen and perpetuate societal inequities, but also, and perhaps most dangerously, “de-democratize” our citizenry by placing market logic at the center of the human psyche (Brown, 2017). Ultimately, if our curriculum is depoliticized and supplanted with market logic, how can we find solutions to the systemic inequities that impact our society? Without dialogue, solidarity, and critical consciousness, democracy doesn’t work for those who need it most.

3 The Opportunities of Critical Pedagogy

Project-based learning alone does not provide students with the space to contemplate and confront societal/environmental injustice. Critical pedagogy allows educators and students to believe that “history is a time filled with possibility...that the future is problematic [but] not already decided fatalistically” (Freire et al., 2020, p. 21). To dismantle the market logic of education, we must not only practice problem-based learning and interdisciplinary collaboration, but implement it through a lens of critical pedagogy, which gives us the tools to understand that “mass hunger and unemployment, side by side with opulence, are not the result of destiny” and “nothing can justify the degradation of human beings” (Freire, 1996; Reyes & Morrell, 2008, p. 54).

In critical pedagogy, the teacher moves to the role of facilitator and uses the dialogical method to engage in the act of creation and re-creation in which the students begin to develop a critical consciousness that allows them to confront and dismantle the source of their oppression (Freire et al., 2020). Freire argues that “dialogues cannot exist in the absence of a profound love for the world and for people...love is at the same time the foundation of dialogue and dialogue itself” (Freire et al., 2020, p.151). Within this pedagogy, the fundamental flaw of neoliberalism in schools is confronted: instead of learning to earn, students learn for freedom (Reyes & Morrell, 2008). Learning for freedom demands that one embrace praxis (reflection and action) (Freire et al., 2020). Educators and students must enter a partnership in which they become agents of social change determined to develop the capacity to reflect on and confront oppression in their lives and communities (Freire et al., 2020). Critical pedagogy not only gives teachers and students the tools to examine neoliberal systems and institutions with a critical lens, but also dismantles pervasive myths of meritocracy and color blindness. In the end, only a critical pedagogy founded in love can begin to dismantle a system where profit and growth outweigh justice and sustainability.

4 Integrating Critical Pedagogy with Project-Based Learning

As it presently stands, there is a radical separation between courses that exist for vocational training and courses that exist for critical thinking, and this drastically impacts the ability of the working class to change an inequitable neoliberal system (Darder, 2017). When vocational pathways utilize project-based learning through a lens of critical pedagogy, they teach employable skills while also creating space for critical thinking and community action.

Using my initial research as a point of departure (Montoya et al., 2018), I hope to discover the following through ethnographic data: how can an interdisciplinary curriculum implement using principles of PBL and critical pedagogy impact the critical consciousness of students and educators? Ultimately, vocational education must move beyond “reform reforms” and discover “revolutionary reforms” (Meiners, 2011); “reform reforms” come along every year and only support the present neoliberal logic: test-taking strategies, growth mindset seminars, and social-emotional learning techniques. However, these strategies never question how racism, discrimination, and poverty can truly be eradicated from our communities (Love, 2019). Ultimately, all these reforms add to doing yoga in a burning building.

Ethnographic data will be gathered at three different construction pathways in the East Side Union High School District (ESUHSD). In one of the three construction pathways, I will work with industry and university partners to implement an interdisciplinary curriculum utilizing principles of PBL and critical pedagogy. Similar to the demographics of San José, the students in these construction pathways come from diverse cultural and socioeconomic backgrounds. Many of these students have been tracked into our vocational pathway due to being labeled as behavior problems or academically deficient; in reality, these are the students who bear some of the heaviest impacts from four decades of neoliberal educational policies. In the dead-end maze of Silicon Valley construction pathways, critical pedagogy can operate as a compass that creates a way out. In the end, this research could influence other vocational pathways to move beyond simply educating for money and towards educating for freedom by not only merging project-based learning with an interdisciplinary curriculum, but also implementing this curriculum through a framework of critical pedagogy.

5 References

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