

Student Choice in the Mode of Instruction in the 6th-Grade Math Classroom

Deacon Cook

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Reading Committee:

Marcus Wenzel, Chair

Thomas Howe

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The supervisory committee met with the candidate for a final evaluation in which all aspects of the candidate's program were reviewed. The committee's assessment and recommendations are:

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Chapter 1

Personal Education History

My personal education history is tied to the town I grew up in—Corvallis, Oregon. As a University town and the headquarters of Hewlett Packard, a high value is placed on education. According to websites that parents use to compare school districts for their children (as mine did), the district I grew up in is rated “Better than 59.2% of all U.S. school districts” (Neighborhoodscout, 2024). This rating is no doubt achieved in part by the outsized amount the average resident spends on education in Corvallis, 171% of the US average (Neighborhoodscout, 2024). Since my family left Corvallis, the elementary school I attended has changed its name from Jefferson Elementary to the Katheryn Jones Harrison School and the house I grew up in has tripled in price. Over 13 years, the slightly-above-average-on-standardized-test-scores town that I grew up in managed to produce a slightly-above-average-on-standardized-test-scores student named Deacon Cook. Out of all the well-meaning teachers in the kindergarten to college pipeline I encountered, one really sticks out to me. I had the honor of being the student of an educator who wanted to teach me something challenging and genuine about the world—Mr. Larrowe.

The extent that I viewed education as important was the extent to which my parents would get upset if I let my grades slip. Happily collecting low B’s and moving on with my life was a blissful way to pass my childhood. By the time I arrived in high school, I had already internalized the formula that still hangs from my neck like a millstone: putting in the minimal effort to get by allows you to get by with minimal effort. A social studies class I took as a Junior jarred me from my contented slumber. Mr. Larrowe assigned an essay about Globalism. I did my

usual half-hearted, “just enough” writing and was surprised to find he rejected my first draft. I did my best to repeat the words that he said in class: neocolonialism, the International Monetary Fund, the World Bank, blah blah blah, *c’mon man, just give me a B*. Instead, Mr. Larowe gave me an F. When I got home and showed the essay to my father, he understood immediately. “Ah”, he said, “well of course you got an F, you have it backwards, globalism is a fantastic system, write the next draft about Chile and how much their GDP went up after they started focusing on what they’re good at, mining copper! That ought to get you an A.” The next draft of my essay did not get a better grade. In fact, Mr. Larowe made a point of writing a note to me to look into the human misery that occurred under the US-sponsored dictatorship of Augusto Pinochet. My ‘just enough’ formula broke down when I encountered a teacher that didn’t want me to merely repeat a series of words. He expected me to think *critically* about the essay topic and formulate my own opinion, with my own reasoning. He wasn’t just looking for a right answer, he wanted me to demonstrate I was actually engaging with the world, not passively reflecting it.

Not many students will thank a teacher for giving them an F. Despite my initial shock, I came to appreciate these reproaches. They taught me an important lesson--that blindly parroting won’t work when a teacher *cares* about what I take away from the lesson. This appreciation came later; the *respect* he was showing me by honestly appraising my work and pushing me to do better is tough for a teenager to grasp. Now, I am also thankful for the next F I got in his class. This time he decided to focus on the conflict between Israel and Palestine. Each student received a person to investigate and write about, mine was a little-known Palestine Liberation Organization officer, whose last known whereabouts were in a cave somewhere in Lebanon. I did not have the research skills to find anything of value about this person. This F I did not show my father. Maybe I was not ready to think critically about what he was trying to teach the class,

or maybe I was too used to phoning it in, but I walked away with a vague idea that both sides should probably just try harder to get along. I recycled the copy of “Mini-Manual for the Urban Guerrilla” that Larrowe gave me instead of a passing grade and did not sign up for the next level of his class. I exhaled the deep breath of fresh air he had gifted me and slowly submerged back underwater. I have some regret now that I didn’t go back for more. I think my experience reflects many of the problems in how schools traditionally operate. When a lazy kid is shown implicit approval for phoning it in, for what reason should they challenge themselves? Even though I didn’t understand it at the time, I’m incredibly grateful for Mr. Larrowe and other teachers like him that took the effort to show there was another approach to education—my initial recoil from the experience was like being exposed to bright light after living in a dark room for so long.

Looking back on my time in school I can see connections between my experience and John L. Rury’s writing in Education and Social Change on colonial America. The young white men of New England were learning about Greek, Latin, and God. While the subject matter was different, there is a throughline in the vision of education I received and that of the sons of Puritans in the colonies. We were learning how to think about the world, learning that our comfortable position in it was justified. We were becoming indoctrinated to the timeless American truism that our good Christian effort would be “eventually repaid with tangible rewards. In the face of abundant resources, on the other hand, poverty was seen as the consequence of inability or unwillingness to work.” (Rury 2019, p. 35). This means that those who had wealth and comfort had earned it, and those without should not be pitied, as it was their own laziness and lack of merit that landed them in that position. Our ‘tolerant’, ‘enlightened’, education had overlooked the inhuman imperial force that it took to provide our tangible rewards and the vast numbers of oppressed peoples that went without the benefits we had access to.

Studying Accounting (my father's profession) at the University of Oregon (my father's Alma Mater) was a continuation of my strategy of following the path of least resistance. The most scathing indictment I can level at my professors in the Lundquist School of Business is that they gave me passing grades. The deep and profound learning of the accountant found as much purchase in my brain as a slipper on a sheet of ice. It was not until I found myself staring at an Excel spreadsheet in the headquarters of Inspire® Food Brands in Atlanta, Georgia that I realized I had no idea how to be an accountant and no interest in being one. I realized that I did not want my tangible reward for following the 'right' path—my great disappointment in thinking about the time I wasted was luckily eclipsed by my immense gratitude that I had found a different way entirely. The new way may be difficult and uncertain. I thought of Mr. Larowe, and knew the accountant life I had turned in was worth an F. It was time to start from scratch.

Action research

In my current practice as a teacher, I want to do my best to replicate what was done for me in my formative years. I would like to offer my students the chance to learn without merely repeating what I say. I want to extend my students the opportunity to think critically and to formulate their own perspective. This is why I will do action research based on student choice in the classroom. There is a huge breadth of mathematical learning and ways to teach it—it is a shame that we are so limited in how much time we can spend on the subject. One way to give students choice and agency is to allow them to choose for themselves how they want to learn. Within the Oregon state math standards there is a huge variety of ways to teach material, and even room to experiment with what concepts to focus on. Giving students a choice in this, through a democratic process would be a valiant step towards engaging them in their own

education. My action research will feature a class democratic process to choose the mode of learning.

Philosophy of Education

A society that puts such a high monetary valuation on education, in terms of both cost and reward, should theoretically not have a systemic problem with apathy. Working night jobs, getting scholarships, taking out loans and getting help from family and friends to go to college should have encouraged me to value the investment I had in my education. The prospect of a better paying job at the end, with a comfortable and lucrative pathway to success should have been an incentive to apply myself. Yet I was afflicted with the same apathy that I see in many of my current students and hear countless teachers express frustration with. Can it truly be the fault of each individual student for putting in minimal effort across so many cities, districts, states?

The experience that I had as a student, and that I hear repeated by many of my peers can be summarized in the phrase “box-checking”. When school is a box-checking exercise, of course a student, no matter how incentivized by future tangible returns, will struggle with the disconnect between school and ‘real life’. Many students will make the reasonable decision to sleepwalk through the entire experience. If school is a box-checking exercise, then we can only expect more of the “rememorizing” in place of learning. My goal for working with the students is to focus on the process of understanding rather than just expecting them to mimic whatever I present to them.

Paulo Freire saw the crisis of education and created terms to describe it in his book Pedagogy of the Oppressed. The view of education as a series of hoops to jump through is Freire’s “banking” theory of education. In this perspective on education, students are viewed as

receptacles in which to deposit information, most likely information relevant for the next standardized test. The problem for Freire was an educational system that reduced students to objects, saying:

“It is not surprising that the banking concept of education regards men as adaptable, manageable beings. The more students work at storing the deposits entrusted to them, the less they develop the critical consciousness which would result from their intervention in the world as transformers of that world. The more completely they accept the passive role imposed on them, the more they tend simply to adapt to the world as it is and to the fragmented view of reality deposited in them.” (Freire 1985, p. 73)

Freire’s view aligns with my own experience. I allowed the educational system to shepherd me submissively to a career where I could passively accept my role. The antidote to education as banking for teachers is, according to Freire, a relationship and dialogue with students. He says: “Teachers and students, co-intent on reality, are both Subjects, not only in the task of unveiling that reality, and thereby coming to know it critically, but in the task of recreating that knowledge. As they attain this knowledge of reality through common reflection and action, they discover themselves as its permanent re-creators.” (Freire, p. 69). This means that the two are on a journey of discovery together, not simply filling the prescribed roles of educator and educated. Had I engaged in the task of “unveiling reality” as a student, perhaps with my archnemesis: Mr. Larowe, I may have come to understand the world more critically.

Freire’s solution to the problem posed by the “banking” theory of education is the theory of “critical pedagogy”. This theory involves first understanding the nature of the education

system as it is, and all its flaws. The problems with the banking model of education are described as teacher as subject and student as object, which he describes as an extension of oppression, as well as a 'culture of silence' which reinforces the interests of the oppressive forces. To combat this, he calls for praxis and conscientization. These two practices are difficult and require both trust in the self as educator and trust in the students, but any intentional practice that is worth pursuing should be both challenging and achievable. Praxis is a cycle of action and reflection, it involves encouraging learners to actively engage and then reflect on their experience.

Conscientization is waking up to the world and seeking to change it for the better. Confronting Freire's problem of teacher as subject and student as object, both should see each other as whole people and strive for an understanding of how to live in the world. It is important to see student experience as part of the learning process both inside and out. This means forming meaningful relationships inside the classroom and fighting for this process outside the classroom.

The crux of the process of empowering students is the endeavor to see the student in the teacher and vice versa. As a student, my deficiency was an inability to perceive the need to seize initiative for myself in my life. Seeing the teacher in the student allows me to realize that the important learning that can happen in the classroom is the student expressing their own will to seize their initiative. If I had more teachers like Mr. Larowe, laying the challenge of self-actualization at my feet, I might have come to this realization sooner.

The apathy that confronts the teacher seeking to empower students does not reveal itself fully in the common complaint 'Why should I bother learning math? I have a calculator, I have a phone that will do it for me.' The student is truly asking 'Why should I learn math?' The answer is what I both seek to convey to my students and understand for myself. Simply acquiring the ability to repeat the components of mathematics on a test, without developing the critical logical

reasoning that is the true fruit of the subject is the box checkers' math. Storing in your mind the formulas that will be useful for an exam is the "banking" conception of mathematics and teaching my students this way is a disservice that they can clearly perceive and critique. My goal is to form a dialogue with the students that grows their crucial mathematical faculties, giving them a tool to seize their initiative in life. The subject can be challenging, especially when taught as a discovery instead of a list of formulas, but as the psychologist Lev Vygotsky proposed, learning takes place in the narrow range where learners are pushed beyond their comfort zone (Vygotsky 1978). I will strive to be a facilitator of a student's own educational journey, rather than an imparter of knowledge. Math as memorizing sums and products atrophies the students' self-actualization and my own in the process.

Children who grow up learning that the grade they get in a class is the most important component will have no incentive to take risks or strive for understanding. Schools impart this passive curriculum at a critical stage in human development. Children that absorb this worldview when their personalities and behaviors are so malleable will often take it with them into adulthood, "for there are innumerable well-intentioned bank-clerk teachers who do not realize that they are serving only to dehumanize" (Freire, p. 75). Teachers can impart this on their pupils when they bring to the classroom a worldview of aimless submission. These pupils may eventually find themselves exactly where I was,--in a job they worked for years to become qualified for, realizing that it is a hollow, meaningless pursuit, but not able to envision a worthwhile alternative. My intention for becoming a teacher is to fight against this societal tendency. I am reminded that over the years of public education ahead of me I must remain vigilant against the tendency to again take up the role of the sleepwalking box checker.

Teaching Goals

Freire's view that oppression degrades all parties, including the oppressor is something that I understand more than intellectually. I remember a short story I read for Mr. Larrowe's class, "Shooting and Elephant" by George Orwell. The story is about an imperial officer who commits a needless, cruel act in order to maintain his position of authority and to avoid looking foolish. As the oppressor accumulates position and power, he becomes the position that he occupies and is reduced to his role in the oppression of his fellow man. In understanding this, I realize that I need to create an environment that supports individual students as well as collaborative learning, and that this will encourage positive social interaction, active engagement in learning, and self-motivation. This is INTASC Standard 3: Learning Environments, and will be one of the primary focuses.

As a teacher I am striving to be an active participant in my life and the world around me. Inside the classroom I feel like an explorer, discovering math, my students and myself all together. Outside the classroom, my active participation has already been a powerful force in shaping the environment I work in. I want to continue to invest in this work by pursuing INTASC Standard 10: Leadership and Collaboration. Part of being actively engaged is seeking appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

These two standards will guide my work on this Action Research project and determine what ways I will change my pedagogical practices in order to become a better teacher. As I investigate the best way to proceed with implementing the critical pedagogy recommendations of Paulo Freire's work *Pedagogy of the Oppressed*, I will utilize this guiding framework to

reinforce my choices and measure my success.

Overview

My own educational journey has taught me a lot about why so many students feel apathetic about their learning and about the system of incentives that lead us here as a society. Combatting this apathetic slide is difficult, but there are many who have tried before and many who have succeeded. Learning from them, primarily Paulo Freire, will be the focus of my efforts to improve as a teacher. Freire's guiding theoretical framework, "critical pedagogy" is a way to understand the problem and the beginning of a prescription for finding solutions. I will utilize his work to experiment, research and improve on my pedagogy. In my action research, students will be given the ability to democratically decide what mode of learning they want to experience. Leading this effort will be the INTASC standards: creating a safe and engaging learning environment, as well as emphasis on collaboration and leadership for both myself and my students.

Chapter 2

The goal of this action research project is to find ways of incorporating the guiding framework of critical pedagogy into teaching practice. Namely, this will revolve around classroom democracy and student choice. In order to understand best how to implement these philosophies, studies that deal with the themes of student choice, classroom democracy and critical pedagogy are necessary to ground the work of the project.

Blotnicky, K. A., Franz-Odendaal, T., French, F., & Joy, P. (2018). A study of the correlation between STEM career knowledge, mathematics self-efficacy, career interests, and career activities on the likelihood of pursuing a STEM career among middle school students. *International Journal of STEM Education*, 5(1), 22.

This study explored the interaction between the perceived self-efficacy of middle school students in the mathematics domain, and their knowledge about and interest in pursuing a career in STEM fields. This study surveyed a sample of 1448 students in grades 7 and 9 drawn from public schools in Eastern Canada. The lens that the authors viewed their results through was Bandura's self-efficacy theory, which focuses on an individual's belief in their ability to succeed and how this belief influences motivation, behavior, and emotional responses. The results of this study were intuitive. Of the variety of factors that influenced a middle school student's decision to profess interest in a STEM career, the most informative "was career activity involving reading, study, analysis, and investigation was also statistically linked to students' likelihood to pursue a STEM career" (Blotnicky, Franz-Odendaal, French, & Joy, 2018). In other words, students who develop STEM related skills were more likely to be interested in STEM careers. The study found that things like grade level and career interests involving manual or

mechanical skills did not correlate to any preference for or against STEM careers.

Mathematics Self Efficacy (MSE) was a statistically significant predictor of interest in STEM careers.

This study is important to consider when discussing mathematics ability, because the self-efficacy of students in math class is not the goal in itself. The goal is to help students to become engaged in society, and thinking about how they use their knowledge in their careers is a big part of that.

Collins, J. , Hess, M. E. , Lowery, C. L. (2019). Democratic Spaces: How Teachers Establish and Sustain Democracy and Education in Their Classrooms. *Democracy & Education*, 27 (1), Article 3.

This article investigated how teachers are implementing democratic education practices in their classrooms. The study was conducted via interviews with 9 teachers in K-12 classrooms who self-identified as having attempted democratic pedagogic curriculum in a variety of ways. This study was conducted through the interesting lens of the theoretical framework of Deweyan Democracy. Deweyan Democracy is a conception of active and engaged participation in community life; he placed special emphasis on education as a democratic practice. The study revealed six common themes among teachers attempting to implement democratic education practices in their classrooms. These themes were: fostering relationships, empowering students, teaching and using democratic skills, democratic education structure, democratic teacher praxis, and the obstacles that were presented. Building relationships with students and empowering them in their education were noted as important prerequisites for classroom democracy. Students could not participate fully unless they felt like they were valued for their input. Democratic skills,

democratic structure, and democratic teacher praxis emerged as the three components that most affected the outcomes of the practices. Students and teachers alike needed to work on building a supportive environment where democracy was able to thrive through honing their pro-social skill set and following through on commitments. Finally, the participants in the study all reported that when they left behind the classroom based on the standardized model of teaching “it becomes a safe space for students to practice skills such as discussion, public speaking, and critical thinking with the guidance and support of educators they trust and know care for them.” (Collins, Hess, & Mowery 2019, pg. 6). In other words, the classroom improved in its capacity to nurture the values and skills that the classroom democracy hoped to engender after the experiment had completed. This important outcome is undermined at many points by the obstacles that the teachers run into on their quest for classroom democratization. These obstacles included difficulty in gaining the support of administrators as well as tension and confusion between stakeholders.

This case study will provide interesting insight into how teachers implement democratizing practices in their classroom, and gives me information to reflect on when I consider implementing these practices in my own classroom.

Freire, P. (1974). *Pedagogy of the Oppressed*. Seabury Press.

This foundational text of critical pedagogy argued passionately for a liberatory kind of teaching, aimed at liberating the oppressed. Freire’s career as teacher and exile from his home country led him to create this work, laying out his pedagogical theory; it has been one of the most influential educational theories of the twentieth century. The philosophy

of education proposed in this book is referred to as ‘critical pedagogy’ and has been expanded and expounded upon by generations of educators. Freire argues that the oppressive systems of the world dehumanize the oppressed people who are exploited by them. Education can be one of these oppressive systems unless teachers embrace a pedagogy that humanizes both themselves and their students. This pedagogy emphasizes mutual respect, love, and understanding through dialogue, thereby making all parties the subject and none the object of education. The dialogue that Freire suggests would reflect on the world and act to change it. Teachers and students work together to reveal a common understanding of the world and create a plan to make it a more human place.

The seminal work of Critical Pedagogy, Freire’s work is the inspiration for the entire project. I hope to gain a deeper understanding of the concepts of conscientização and praxis as an educator through study of this work.

Høgheim, S., & Reber, R. (2015). Supporting interest of middle school students in mathematics through context personalization and example choice. *Contemporary Educational Psychology*, 42, 17-25.

This study investigated whether students’ situational interest in mathematics would increase with the implementation of context personalization. 736 students were assigned to one of four instructional conditions and their interest, effort and the perceived value of the material were measured before and after. The theoretical framework that this study applied was a 2006 Hidi and Renninger theory of sequential interest development, consisting of four phases. The study found that there were some benefits of applying this framework to students’ mathematics courses. The main benefit was that “context personalization and example choice can increase triggered and maintained situational

interest for students with low initial interest.” (Høgheim & Reber 2015, ‘conclusions’). In other words, this means that choice helped students who were less interested in the beginning to become and stay more interested in the content over time. The study did not show an increase in all categories, only students with initial low interest had their perception of utility value increased with context personalization. Additionally, although effort was increased for these students, performance was not.

This study lays the foundation for my theory that student context personalization will be important in their interest in the subject. If they feel like they are getting a unique or tailored experience, according to this study, their interest should rise in the subject.

Hunaepi, Hunaepi & Khaeruma, Khaeruma & Hajiriah, Titi & Wardani, Ketut & Sukiastini, I & Kerti Nitiasih, Putu & Riastini, Putu & Sudatha, I Gde. (2024). Critical pedagogy and student learning outcomes: A systematic literature review. *Path of Science*. 10. 3048-3060. 10.22178/pos.104-27.

This literature review focuses on the specific and measurable outcomes of Critical Pedagogy being applied in the classroom. The authors investigate the results of over thirty different studies from all grade levels to uncover whether there is a unifying experience for teachers implementing Critical Pedagogy in the classroom. The results were observed through a post-structural, feminist, anti-racist lens to determine whether Critical Pedagogy is effective for the varied contexts of the modern educational system. The authors found that Critical Pedagogy had a profound impact on student learning outcomes. Findings suggested that its use “enhances personal and academic growth in secondary education, significantly developing students' affective and behavioural domains.” (Hunaepi et al. 2024, p. 3057). In other words, Critical Pedagogy was a benefit

to the secondary students' educational capacities, not only in the academic domain, but in the social-emotional realm. It also showed that the framework was useful across disciplines; literature, science and mathematics were studied alongside health, physical education, music and fashion, all of which showed a linked tendency towards desirable pro-social outcomes. The benefits of this pedagogical tradition are also explored historically, and the sources of definition for 'critical pedagogy' are explored.

This study is encouraging; it shows that there is an evidence-based reason to attempt the implementation of these practices in a classroom setting. It will serve as an important foundational justification for delving into the process of classroom democratization through the lens of critical pedagogy.

Kareepadath, V. P. (2018). Critical pedagogy in practice: A case study from Kerala, India.

Journal of Pedagogy, 9(2), 33-54.

This case study of two teachers from Kerala, India is a fascinating look into how Freire's Marxist thought functioned under the direction of an education system in a communist party-run state. The two teachers in the case study both attempt to use the prescribed textbook and pacing guide to please the administration, while trying to incorporate critical pedagogy into their lessons. The findings of the case study are analyzed through a neo-Marxist lens. This study found that the teachers face similar challenges to those we face here in the United States, strict adherence to a curriculum that is handed down from school districts and emphasis placed on student achievement. This mechanically disciplined approach to education is at odds with the ideas of critical pedagogy that the two teachers attempt to promote. They were stymied in the efforts, but the study shows the dialectical tensions between the administration and the teachers as being a source of

potential progress towards democratic ideals for the schools. Kareepadath concludes that “Critical pedagogy cannot be implemented mechanically in schools. As Freire opined, it is important to re-invent the practice in an organic fashion considering both the psychological and socio-political context.” (Kareepadath, 2018 pg. 50). In other words, there is no set way to implement critical pedagogy in the classroom. This is relevant to attempts made to bring critical perspectives to students here in the United States.

This Kerala study is one of the most interesting that I have looked at; it shows that teachers who attempt to democratize the education environment inevitably face obstacles and pushback. This is an important reminder for the investigation into my own attempt to implement these practices.

Kesler, Ted. (2019). Critical Pedagogy. 1-10. 10.1002/9781118978238.ieml0043.

Kesler argues that popular internet culture media is an opportunity for teachers and students to engage in critical analysis in a way that is interesting for students. This review of critical media literacy pedagogy investigated twenty studied attempts to incorporate pop culture media into the classroom with mixed success. The lens that Kesler uses to discuss the findings is that of Paulo Freire’s Critical Pedagogy. Kesler concludes that while critical pedagogy is at odds with standardization in modern education, it is still worth applying wherever possible by teachers with the initiative to do so. The author asserted that the reasons for incorporating these practices are: “the students’ development as literate people; their situated and multiple identities; and their transformation and emancipation as citizens in a democratic society” (Kesler 2019, pg. 7). In other words, the democratic classroom structure allowed students to learn in a way that supported their

unique identities. Teaching the students to read and digest information is only a part of the purpose of education, students need the ability to become free thinking members of society, which can only be achieved if they are engaged with the content that they are presented with.

Kesler's review of utilizing modern media in the classroom through the lens of critical pedagogy was important to consider. While I don't intend to incorporate modern digital media into the lessons, I appreciate the review of student choice in curriculum and how the standardization of education is positioned as dialectical with the efforts of critical educators.

Kohnke, L. (2019). Exploring critical pedagogy and choice in EAP material development: A case study. *Journal of Asia TEFL*, 16(4), 1219.

This study used qualitative data from ESL (English as a Second Language) students to determine if giving students a choice of topics increased their engagement with the material. The author says that "The use of action research and the collection of qualitative data allowed the phenomena of focus in the study to emerge in an organic way from participants co-constructing the information and knowledge at hand along with the researcher." (Kohnke, 2019 pg. 1223). In other words, student choice allowed students to better engage with ESL material that was more personal. The study's qualitative data is analyzed with a critical pedagogical lens for international readers. The participants in this study related that the material generally used to teach ESL classes does not have a significant relation to their authentic social context. The students relayed that they were interested in material that challenged the status quo and empowered them to critically reflect on their material conditions. Using this as an intervention creates student interest

in learning. Kohnke's insight here is that "our greatest resource is the students themselves. We need to work with our students to learn and grow. The intervention supplied students with experience of language use in authentic ways, offering more motivation, autonomy and choice to develop communicative competence." (Kohnke, 2019 pg. 1228). In other words, the students found voice in ways that were unique to them and not accessible in other formats of teaching practice. These desirable outcomes require customization of material to match student's authentic contexts and are preclusive of the top down impartation of knowledge.

This study is an important look at how classroom democratization affects students with English as a Second Language (ESL) designations.

León, J., Núñez, J. L., & Liew, J. (2015). Self-determination and STEM education: Effects of autonomy, motivation, and self-regulated learning on high school math achievement. *Learning and Individual Differences*, 43, 156-163.

This study measures whether autonomy in secondary students has an effect on the autonomous motivation of students in mathematics domains. The study was conducted on a sample of 1412 high school students, and results were extrapolated from data collected. The theoretical framing of this study was Self-Determination Theory (SDT). This is a framework that attempts to explain motivation based on the psychological needs: autonomy, competence, and relatedness. This study found that "building choice into both instruction and assessment methods for students may facilitate students' math achievement." (León, Núñez, & Liew, 2015). This confirms the authors' hypothesis that self-determination plays an important part in mathematical achievement. The study additionally found that "In a classroom climate that supports students' need for autonomy,

students are likely to find their schoolwork purposeful and interesting” (León, Núñez, & Liew, 2015). In other words, in addition to increasing achievement in rote understanding of mathematical concepts, student autonomy created a sense of importance or usefulness in learning that is deeper and more meaningful. This finding connects the feeling of autonomy that students desire and the outcome that a student gets from their effort.

This study is an important cornerstone for looking into student choice and democratization in the classroom. I would have liked to see information about middle school age students, as they are at a different phase cognitively, so the results of this study may not perfectly translate to my classroom.

Robert J Jagers, Fantasy T Lozada, Deborah Rivas-Drake, Casta Guillaume, Classroom and school predictors of civic engagement among black and latino middle school youth, *Child Development*, Volume 88, Issue 4, July/August 2017, Pages 1125–1138, <https://doi.org/10.1111/cdev.12871>

This study was designed to measure civic engagement among Black and Latino middle schoolers depending on the presence or absence of equitable and democratic practices in the classroom. The study was conducted by surveying short term-longitudinal data on engagement attitudes, beliefs, and behaviors of 515 students from the desired population. The study used the lens of Lerner’s positive youth development model to analyze the data that was collected and select the appropriate conclusions. This study’s results strongly suggest that “youth varied on the three civic engagement dimensions based on age and gender but not racial/ethnic group membership.” (Jagers et al. 2017 ‘discussion’). Using the cross sectional samples and the longitudinal samples, the study also found that “the more exposure Black and Latino youth had to democratic... homeroom and classroom

practices and the greater equity they perceived in their school environment, the more likely they were to be civically engaged as reflected in concurrent attitudes, beliefs, and behaviors. Homeroom practices and school climate from the previous year also... predicted civic attitudes 1 year later.” (Jagers et al. 2017 ‘discussion’) In other words students perceive equity in classrooms that utilize democratic practices. The findings also indicated that students benefit from democratic classroom practices as well as perceived equity well after the experiment has ended. The three measurements, civic engagement attitudes, beliefs, and behaviors were boosted among the 515 Black and Latino middle school students.

Democratizing the classroom is not a goal itself, it is a step in the direction of the real goal. For Feire, this goal was "conscientization" of the student, which ties in well with the study's interest in civic engagement. This is also a great way to investigate the effect of the democratization of classes on marginalized and minoritized Students of Color.

Smale-Jacobse, A. E., Meijer, A., Helms-Lorenz, M., & Maulana, R. (2019). Differentiated instruction in secondary education: A systematic review of research evidence. *Frontiers in Psychology, 10*, 2366.

This paper aims to create clarity on the subject of differentiation and to determine whether there are measurable positive outcome differences between strategies. This study was conducted as a systematic review of the research evidence of 14 papers about 12 unique empirical studies on the topic. The theory of approach for this study is the didactical framework. The main takeaway from this article is that there are simply not enough good studies done on differentiation. While the authors suggest that differentiation itself is a positive classroom intervention, what kind of differentiation is

most effective and whether all forms of differentiation are effective are unresolved issues. Small/non-significant effects were found in individualized instruction attempts and mixed/medium effects were discovered among like-ability grouping trials. This implies that there is a good reason so many teachers are hesitant to incorporate differentiation into their pedagogical practices.

I wanted to include a thorough study on differentiation because democratization in the classroom is a form of differentiation. With so little being known about what interventions are effective, I can assume that the results of my investigation, positive or negative, will not be easily transferrable to other educational scenarios.

Van Den Ham, A. K., & Heinze, A. (2018). Does the textbook matter? Longitudinal effects of textbook choice on primary school students' achievement in mathematics. *Studies in Educational Evaluation*, 59, 133-140.

This 2018 study delves into the fraught subject of textbook selection and whether it has a significant impact on the educational outcomes of the class. Data from a three-year longitudinal study of 2330 children from 127 classes from 40 schools in Germany was used to review the essential question: does the textbook matter? The framework that this question was investigated through was the Item Response Theory, which seems unbiased enough for the study. The detailed results of this study showed multiple factors associated with student outcomes in mathematics domains. The study positively confirms that textbook choice has an effect on the student achievement as well as in number and pattern content domains. They were also able to positively confirm their hypothesis that different textbooks have different effects on student achievement. This was confounded

by the other variables, such as teacher quality and qualifications, which had a significant impact on student achievement as well.

I will use this study to investigate whether student choice in the form or modality of learning has a significant effect on their educational outcomes and what student experiences students have when given choice. Learning about prior studies gives me the opportunity to build on the work of formative figures in the space and to learn from their investigations. While my study will be smaller in scope, I plan to utilize many of the same measures employed in these studies in order to create a healthy research environment. I hope to learn about whether students are able to democratically decide what ways they learn best.

Chapter 3

Where research alone may be interesting to the teacher who aims to improve their practice, its shortfalls: abstraction, biases, etc. can detract from its usefulness. For a classroom teacher who wants data that is applicable to their own classroom, and wants to ensure they see all of the variables in the research, action research is the best investment of their valuable time. Action research is defined by Richard Sagor in *Guiding School Improvement with Action Research* (2000, p.3) as:

a disciplined process of inquiry conducted by and for those taking the action. The primary reason for engaging in action research is to assist the “actor” in improving and/or refining his or her actions.

This means that the process of conducting the research is as informative as the results themselves, as the teacher is the one conducting the study, and so the one who controls and adjusts the variables. Tailoring the study to their specific needs and interests.

The order that action research for teachers should be done in is very specific. The first step is selecting a focus. This entails identifying what part of learning or teaching seems most important to study. The next step in action research is clarifying theories. The perspectives and biases of the researcher need to be looked at deeply, and because there are so many motivational and pedagogical theories of education, care needs to be taken to choose the right framework. The third step for the action researcher is to identify the research questions. These questions will guide the process. After questions are chosen, the action researcher will be collecting and analyzing the data, which represents the bulk of the work of the study and can be the most intimidating aspect. The sixth step will be compiling your thoughts, reporting the results of the

action research. Finally, the teacher will fulfill the mission of the project by taking informed action in their practice.

Action research is the proper method for this study for multiple reasons. The theoretical framework that this research is based on is Paulo Freire's Pedagogy of the Oppressed. This means that the entire project is centered around raising the collective consciousness in the students and the teacher together. Action research is uniquely suited to this end, as the teacher and students must collaborate in both grappling with the questions and making positive changes as a result.

Guiding this research will be the following questions. Will students be engaged in their learning when given the opportunity to decide aspects of the material, pacing or curriculum? Will a democratic process create positive educational outcomes in the classroom? Will students retain more if given agency in what they learn? These questions are the most important when it comes to understanding whether a democratic process succeeded in enhancing the educational environment and the internal drives of the students.

The purpose of this research will be twofold. First, I want to better understand how agency and democratic classroom engagement can serve the student. Next, I want this project to build my own skills as a reflective practitioner. Both objectives tie in together—as I develop my ability to be an educator, my students will demonstrate how best they can take charge of their own education. These outcomes would mutually reinforce each other, creating a positive outcome cycle.

Participants and Setting

MMS is a middle school in Albany Oregon, a rural but growing city of over fifty thousand people. MMS is fed by a separated K-5 program where students have K-3rd grades at

one school and 4-5th grades at another. Of the 550 students, 1% or less are American Indian/Alaska Native, Black/African American, and Native Hawaiian/Pacific Islander, 2% are Asian. 19% of the students and 6% of the teachers identify as Hispanic or Latino. 70% of the students and 94% of the staff identify as White. These demographics are heavily weighted towards one ethnic/cultural group. This has advantages in that there is a common way of approaching subjects and set of behavior expectations for most students. However, it is important as educators to not let the needs of the majority detract from those of the underrepresented populations. So, as a teacher, I will need to build in checks for both myself and for students to ensure all voices are represented in the feedback process in case certain student needs are overlooked. One cannot presume as an educator to know what is best for all populations. We can do our best to widen the teaching methods and means of engagement. Critically, we must solicit feedback from all students, which I will address more specifically in my design for exit tickets. This ensures the educator hears from all students

The funds of knowledge at MMS come primarily from two cultural centers. The students from White ethnic/racial backgrounds and the students who come from the Hispanic/Latino community. Many students have knowledge relating to their parents' work, which is often agricultural. Additional funds of knowledge come from 9% of the students at MMS have been identified as English Language Learners, the majority of whom speak Spanish. 17% of the students have disabilities. These students are served in various programs such as the Small Learning Community Center. 40% of the students at MMS are experiencing poverty, which can have a big impact on attendance and academic performance. Planning an instructional unit without considering this factor would be useless. For example, students experiencing poverty will often have less support at home to dedicate to schoolwork outside the classroom, as one or

both parents are frequently occupied with work. This issue is even more relevant to my action research which revolves around an experiment with classroom democracy. As Eleanor Roosevelt said, “Freedom means nothing to a man with an empty stomach.” Ensuring student needs are considered in every aspect of instruction, engagement, and assessment, will help us ensure household poverty does not lead to educational impoverishment. For example, I ensure there is dedicated time to working on assignments in class—rarely is there work students need to complete solely outside of class to ensure students who lack support at home don’t automatically fall behind.

The academic hurdles my school faces are not insignificant—the students are on average ~10% behind in reading and mathematics. Only 32% of the students are meeting grade level expectations in English Language Arts and 23% are meeting expectations in Mathematics. This shows how much attention mathematics instruction needs and potentially, a new approach to to match.

Data Collection & Analysis

I will be conducting my research on the percentages and decimals unit. This ties the unit together nicely because it sets up internal informational parallels between the experiment and the material. Building student ‘number sense’ when it comes to percentages not only builds foundational math skills they will need later on in meaning mathematics, but has innumerable relevant applications to real life. What percentage interest does my credit card have, and how much money does that translate to? How does voter turnout impact election results? How can we interpret survey results presented to us? The number of real-life situations which utilize this knowledge presented in this unit increases the immediacy of gathering relevant information on

improving student outcomes. We will be using the iReady math curriculum, which is a newer curriculum tied to district assessments. This will give lesson plan skeletons and workbook materials that students can engage with during the experiment. The research will take place over five lesson plans, one whole week of instruction. The first day will introduce the topic, followed by refine and reinforcement days, there will be a practice day and finally a summative assessment at the end of the week to gauge retention.

The data will come in several forms, my own personal teaching reflections will make up the qualitative side of the data. Exit tickets from class as well as the assessment on the final day of each unit will make up the quantitative data. In addition, informal observations of student engagement and feedback from mentors will inform and help me to adjust the research. I will organize the data I collect for analysis, gathering and scanning materials, reviewing notes, and arrange qualitative and quantitative data. Once I have thoroughly read through all of the data, I will have a general sense of the overall themes and patterns.

Coding and analysis will need to be detailed and track the categories and topics of the research. Quantitative data like summative and formative assessments will be coded together, journals, feedback and other qualitative data will need to be summarized and coded separately. More specific themes will emerge, which I will support with quotations and specific evidence from the data.

Finally I will interpret and derive meaning from the collected data. Lessons about classroom democracy will be complex, there will be a lot to discuss. Comparing my findings to the findings in Paulo Freire's *Pedagogy of the Oppressed* and the findings of other studies conducted on student agency.

Researcher Positionality

My identity, as with all teachers, is layered. As Freire describes in *Pedagogy of the Oppressed*, teachers can be viewed as oppressors, in their capacity as the authority, the source of discipline and instruction in the classroom. Freire argues that educators are also a vector for emancipation, as the source of liberatory knowledge. This is only true if teachers themselves are conscious of their role, or identity, and how they can create a liberatory practice. Often academic research such as this seeks an objective, verifiable truth that can be universalized and applied across situations. With teaching, few universal truths can be found. How can the teacher, who is immersed in and reacting to the classroom around them, be an outside and objective observer?

How can I distill the data collected into a replicable set of steps for others to follow? Each teacher is different, each classroom is different, each student is different, and so each set of results will be as well. The teacher is enmeshed in the classroom as an agent, rather than an observer. This is not a bad thing, in fact it is an asset. Learning about oneself, one's classroom, and one's students may be more valuable than learning about what worked for someone else. When analyzing data, the benefit or result is not always universally applicable facts or trends, but an opportunity for self reflection for the educator.

Chapter 4

During the course of the action research, four major themes emerged from analyzing the data. They are participation, the change in the classroom environment, pluralism, the meta-understanding and the outside world, and the effect on education. The theme of participation came up early in the research, as the predictable result of having students vote on simple things such as choosing between two options for a lesson. Students needed to become comfortable with the democratic process, they may be used to their voice not being heard, or were wary of making choices that were visible and had consequences. The result of this was that a handful of students would refuse to participate in the early stages. The second theme that I noted during the research was the effect of the democratic process on the classroom environment. Once students became more comfortable with their impact and their voice, the effect on the classroom environment was drastic. This is evidenced through increases in energy and engagement, as well as more positive interactions between students. The third theme that emerged in the data was pluralism in the student groups. Their many diverse backgrounds, viewpoints and beliefs became apparent and played a big part in the democracy that unfolded in the classroom. Another theme that revealed itself throughout the action research was how the educational setup reflected and was influenced by the material world. It was fascinating to see students bring ideas from outside the classroom in. The last prevalent theme to surface was the effect that the classroom democracy had on the education of the students. The way it interacted with the students' educational outcomes was of key importance.

Theme I: Participation

The first theme that I came to notice in my action research was participation. Every democratic process requires participation in order to work, and a classroom democracy is no different. In a classroom democracy, the students are meant to be the involved party, taking part in the decision making process. Students had a variety of ways to participate. During classroom votes, students could vote between possible options. These options ranged from, in the early stages, choosing whether to have music during a test, whether to have the lights on or off, or whether to go outside for a reward or stay in and do a Blooket. As the students became proficient with making decisions as a group, in the later stages, they were given options like deciding between learning a concept from the book or from the online guided lesson. The mode of participation ranged as well. Students were given the opportunity to take part in blind votes, using the “heads down, thumbs up” method. They were also given surveys where they could share their feedback and interests in future activities.

Participation rates varied, sometimes the entire class participated, and other times, only a few students were confident in sharing their opinion. Two factors largely influenced whether students felt comfortable engaging in classroom democracy. The first factor was whether they were explicitly instructed to participate. I tried running three votes, one in each class, without explicit instruction that each student needed to participate. This netted between 55% and 71% participation. It was good to see the majority of students participating, even when not told specifically that they were required to. The next three votes were held with a general statement that every student needs to participate, but without enforcing this rule. Participation here climbed to between 67% and 94%. At this point, I initiated three votes in which specific individual students who were not voting were individually asked to participate. This still did not result in

100% participation in one class. The other thing that affected participation rates was the amount of times that students were asked to vote. The more they had been asked, the more participation increased. Class discussion about why this would be the case revealed that some students thought that the vote wouldn't affect anything initially, and seeing that their choices had an impact on what they class did encouraged them to share in the activity. My personal interpretation of this is that in addition to seeing how classroom democracy worked, many students needed time to build the confidence to vote.

There were two other interesting phenomena that had an impact on participation. One positive impact was that students would encourage each other. On the second round of trials, where I instructed everyone to vote, but did not enforce the rule, friends would remind each other to vote or ask each other to vote a certain way. Students also attempted to 'tattle' on each other, by informing me when someone failed to vote. The other interesting phenomena was students who asked whether they would receive effort points for their participation. At first I was confused why they would want to be graded on voting, as in my mind it seemed that this would influence the outcome. Especially on surveys and ballots, I had several students ask whether they would get credit for turning it in. My analysis is that this is part of the ingrained understanding of education that many students have. They are working for points, grades or rewards, and when a student has come to expect that this is the norm, they will struggle to understand why having a voice in the decision making of the classroom is important. The banking method of education that Freire discussed seemed to be playing a role in the way that students conceive of the underlying purpose for participation in a school setting. Students are, in a behaviorist sense, trained to expect an immediate reward for their effort. Thus, when a vote revolves around something immediate like the choice between going outside or staying in, they can conceptualize

the options and can see why they should be interested in participating. When the vote is for something farther in the future, and involves reading or writing, it feels more like work to them, as opposed to an opportunity to express their desires for the use of classtime.

I was very hopeful that this experiment would have positive, substantial results. However the democratic system is only as good as the involvement level of the partaking body. When a small number of students vote, less students feel ownership of the outcome, and so are not engaged in the ensuing results.

Theme II: Classroom Environment

Being intentional about the classroom environment was a large part of the setup for the action research. Setting up expectations, routines and the physical space in such a way as to be conducive to classroom democracy took a lot of effort, but was well worth it. My math classroom hosts three sections of sixth grade students and is the meeting location for the after-school gardening club. I try to cultivate a very mellow atmosphere in the room, with old-school green chalkboards where I tally votes and no smartboard. I decorate extensively with plants and paintings. This helps keep students feeling comfortable and able to engage with challenging material in a less stressful physical space. The organization of table groups is very intentional. Students are placed in groups of four to six, facing each other, at a table with baskets in the middle where students store materials. This lends itself to the formation of a small table group community, where students frequently help each other to get out books, calculators and warm ups.

A second theme that I encountered when conducting the research was the effect that classroom democracy had on the environment. The physical organization of my room did not

significantly change during the research. The environmental factors that changed over the course of the research were the social-emotional components. This shift is more difficult to document quantitatively. Participation was one part of the shift, meaning more students were interacting with each other and the prompts over time. As students became more comfortable with each other and with the procedures of democracy, they elevated the energy of the room by encouraging each other to participate and being more courageous about making their voices heard. This had a real effect on the classroom dynamic.

Part of the change in the classroom environment was students' treatment of each other. In teacher journal entries, the frequency of students disagreeing increased over the course of the experiment, but the type of disagreement was more frequently constructive as opposed to simple bickering. Teacher journals from the length of the study also reflect a shift in attitude towards myself. Students who started the year disagreeing or arguing with me about issues in the classroom slowly shifted towards attempting to convince their classmates. For example, one student wanted to review for the quiz with a Blooket. In the beginning of the experiment, the student would try to persuade me as the teacher to create a Blooket for the class to use as the review materials. After this did not provide the results the student desired, he tried making the Blooket himself and asking if we could use it. Finally, as the student saw that the majority of the class would need to be interested in his idea, he turned to persuading them to vote for the Blooket and even offered to let them help make it, so that the project would be a collaborative effort that everyone could get behind.

Another piece of the classroom environment that changed was the psychological experience in the room. Students came to have higher trust in each other and me as the teacher. One way that this revealed itself was through student commitment to the choice the class had

made. Once students had decided on a course of action, they were more likely to follow through. When I selected the activity, there were high rates of student non-participation, with students more likely to distract or disrupt instead of working on the expected assignment. When given the option to work independently or as a class, even students who voted to work as a class were more on-task during independent work time if that won. This created a more productive environment for all students, even students who were displeased with the vote results. There was also a clear trend towards more comfort supplying wrong answers in class discussions. When students saw that multiple ways of doing things could produce the desired results, they were more likely to experiment, and more likely to offer their strategy when the question was posed to the class. Importantly, these students were anecdotally less likely to be discouraged if their answer was not correct, and the peers were less likely to make unconstructive comments.

Ultimately the classroom democracy changed the environment in the classroom, making the environment more conducive to positive class discussions and mistake making. This was a positive shift and was visible to students, who anecdotally reported better understanding of concepts in the latter classroom environment. This theme was impactful to me personally, as it had a sizable, positive impact on the experience of working in the classroom daily as well.

Theme III: Effect on Education

The effect that this research had on the students' education was interesting and constituted a major theme in the study. The feeling that the educational process was different came up frequently throughout the research, however, this did not translate well to statistically significant, quantifiable summative testing outcomes. The research was largely conducted between December 2025 and May 2026. While I could point to the increase in progress towards growth

goals between the iReady math diagnostic at the beginning of that time and those at the end of that period as proof that something in my classroom was causing students to achieve more on standardized testing. However, it would be disingenuous to leave out the fact that the building's other 6th grade math teacher experienced an almost identical growth of 215%. This leap in progress is incredible, and it is mostly attributable to a change in the scheduling structure so that the size of each class was lowered significantly. This change in class size was not totally removed from the democratic experiment. The smaller groups made it easier to conduct the voting and student decision making.

Differences between summative tests taken where students were given the opportunity to vote on their preference of modality for instruction and those where I picked the instructional method were slim. A quiz given after students chose to learn about ratios using the guided iReady practice on the Chromebook actually had a lower class average than a similar quiz on rates where I selected to use notetaking as the review method. This indicates that in many cases, students do not achieve at a quantitatively higher level when allowed to vote on the class activity, and in some cases, even lose points when selecting something that seems more interesting but ultimately restricts the amount of retention.

Despite the lack of immediate effect on test scores, the foundation was laid for the students to be motivated intrinsically, which has a much more important long term effect on education. The more interesting research would be to track the long term effects of this type of classroom democracy on students and their motivational levels. This would take a concerted effort over multiple years and several teachers, but could provide a more holistic picture of the effects of student choice.

Chapter 5

The action research that I conducted in my classroom was built upon and largely based off of the frameworks that were envisioned and tested by other researchers interested in the same concept. When researching for this attempt to implement a democratic framework for mode of instruction with my students, I reviewed scholarly literature based around this concept, and created the annotated bibliography of relevant studies for chapter two. There were several important theoretical and methodological interests that I discovered through this process.

The first influence on my research and the research done by others in the same vein is the concept of Deweyan Democracy. John Dewey's vision of education as the key to a participatory democratic society in the late 19th and early 20th century serves for me as for many others as the starting place for this investigation. Dewey's political and philosophical writings laid the foundation for the research done by Collins, Hess, and Lowery (2019) when they interviewed teachers about the creation of 'democratic spaces'. I in turn used the insights of the nine interviewed teachers in order to narrow and solidify the focus of my work with my own students. Themes like participation and classroom environment were also highlighted in this article. Interviewees had similar revelations to my own, a supportive and respectful environment was crucial to promoting engagement. Many of the listed obstacles to classroom democracy in this study were also present in my own experience, except that I had the full support of my administration. This differs from the way the authors found most hopeful teachers run into bureaucratic hurdles in their buildings.

Another important influence on the research conducted by teachers interested in participatory democracy is the work of Paulo Freire. Freire's pedagogical theory 'Critical

Pedagogy' is a major guiding piece used by the proponents of this framework. This guided my own experiment and inspired the work of many others, including V. P. Kareepadath's 2018 study "Critical Pedagogy in Practice". This research had parallels to my own, namely that the emphasis on student achievement and tight adherence to curriculum and pacing were not conducive to the promotion of critical pedagogy. Another work that was relevant to initiating a Freirian Democracy in the classroom was T. Kesler's 2019 look at Freire's legacy in education: "Critical Pedagogy". His emphasis was on the fact that teachers needed to have initiative in order to implement whatever facets of this thought that they could to whatever extent was permitted in order to facilitate the conscientization of students. This gave me the leave to conduct my own study in the smaller and more limited fashion that I eventually settled on, as opposed to a full-year complete immersive experience. Hunaepi et al.'s interesting 2024 literature review also heavily focused on how Critical Pedagogy is applied in the classroom, and informed my understanding of how my experiment played out. Finally L. Kohnke's 2019 case study on choice material development focuses especially on giving students a choice of topics, which is similar to my student choice of mode of instruction, and how it is related to Critical Pedagogy. The study found that giving students choice helped them to engage, retain and reflect on the material, which corresponds with my findings in my own classroom.

Limitations

The action research that I conducted contained many limitations. These limitations can be grouped into three overarching types; theoretical, methodological, and practical.

The first kind of these were the theoretical limitations of the action research. The theory that I chose to use as the lens through which to conduct my action research was Paulo Freire's

Critical Pedagogy, which was laid out in his seminal 1968 work: *Pedagogy of the Oppressed*. Freire's framework was useful in teaching me how to think about the issues with systematized teaching and what can be done in order to raise the conscientiousness of my students. Unfortunately, as the work purposefully avoids a prescriptive approach to pedagogy, it is left to the educator to determine what and how to use this theory in the classroom. This creates a theoretical limitation on the efficacy of the research, as it is left to me to interpret and implement Freire's ideas based on my own understanding, as opposed to having this process structured for me by others. My findings were also hard to interpret in light of the abstract nature of the goals of the theory. The implication of this is that if I wanted to conduct deeper, more credible research, I would need to lay out a more solid framework for contemporary understandings of Critical Pedagogy and what would constitute its' successful implementation.

Another kind of limitation on the project was the methodological limitations. The methodology of the study was significantly less robust than some of the comparably aimed studies in the annotated bibliography. Its scope and scale were small, the students involved provided a set of qualitative and quantitative data that could be interpreted in numerous ways, and the duration of the study was relatively short. This all added up to a less than perfect data set, which needed to be interpreted based on abstract criteria. The implication of this is that the study would have benefited greatly from increased duration, and a larger amount of data gathering for higher correlation findings.

The final kind of limitation that I encountered on this study was the practical concerns of the research. Due to the nature of Freire's theories, other teachers would have a completely different experience trying to recreate this study, because each teacher, each classroom and each student is unique, it would be impossible to recreate. The implication of this is that the study

cannot conclusively determine whether student conscientiousness was increased, as the study is not large enough, extended enough, or repeatable in order to form conclusive results.

Conclusion

From conducting this action research, I have a better understanding of my own role as an educator, and that of my students in their capacity as participants in their own education. Experimenting with classroom democracy, in student choice of instructional mode, has had a variety of effects on myself, the students and the classroom environment. The primary takeaway was that students need to be involved in decision making about their learning. While the results of the study were inconclusive on whether students could make choices about their instruction that improved their outcomes, the choice itself and the discussions around it had a positive impact on all of the involved parties. More than providing a definite outcome to be repeated each year with new students, this action research provides an entry point to a lifelong pursuit of deeper understanding of student participation in education and in society as a whole. I have learned that being inspired to take initiative is more important than having a blueprint for success.

References

- Blotnicky, K. A., Franz-Odendaal, T., French, F., & Joy, P. (2018). A study of the correlation between STEM career knowledge, mathematics self-efficacy, career interests, and career activities on the likelihood of pursuing a STEM career among middle school students. *International Journal of STEM Education*, 5(1), 22.
- Collins, J. , Hess, M. E. , Lowery, C. L. (2019). Democratic Spaces: How Teachers Establish and Sustain Democracy and Education in Their Classrooms. *Democracy & Education*, 27 (1), Article 3.
- Corvallis, OR public school ratings. NeighborhoodScout. (n.d.).
<https://www.neighborhoodscout.com/or/corvallis/schools>
- Freire, P. (1974). *Pedagogy of the Oppressed*. Seabury Press.
- Høgheim, S., & Reber, R. (2015). Supporting interest of middle school students in mathematics through context personalization and example choice. *Contemporary Educational Psychology*, 42, 17-25.
- hooks, bell. (1994). *Teaching to transgress: Education as the practice of freedom*. Taylor & Francis Ltd.
- Hunaepi, Hunaepi & Khaeruma, Khaeruma & Hajiriah, Titi & Wardani, Ketut & Sukiastini, I & Kerti Nitiasih, Putu & Riastini, Putu & Sudatha, I Gde. (2024). Critical pedagogy and student learning outcomes: A systematic literature review. *Path of Science*. 10. 3048-3060. 10.22178/pos.104-27.
- Kareepadath, V. P. (2018). Critical pedagogy in practice: A case study from Kerala, India. *Journal of Pedagogy*, 9(2), 33-54.
- Kesler, Ted. (2019). Critical Pedagogy. 1-10. 10.1002/9781118978238.ieml0043.

- Kohnke, L. (2019). Exploring critical pedagogy and choice in EAP material development: A case study. *Journal of Asia TEFL*, 16(4), 1219.
- León, J., Núñez, J. L., & Liew, J. (2015). Self-determination and STEM education: Effects of autonomy, motivation, and self-regulated learning on high school math achievement. *Learning and Individual Differences*, 43, 156-163.
- Lin Wu 吴林 (2023) Enacting Hip-Hop Pedagogy for Joy and Justice, *The Educational Forum*, 87:3, 147-161, DOI: 10.1080/00131725.2022.2158256
- ORWELL, G. (2023). *Shooting an elephant*. PENGUIN BOOKS.
- Robert J Jagers, Fantasy T Lozada, Deborah Rivas-Drake, Casta Guillaume, Classroom and school predictors of civic engagement among black and latino middle school youth, *Child Development*, Volume 88, Issue 4, July/August 2017, Pages 1125–1138, <https://doi.org/10.1111/cdev.12871>
- Rury, J. L. (2019). *Education and Social Change: Contours in the History of American Schooling*. Taylor and Francis Group.
- Sagor, R. (2000). *Guiding School Improvement with Action Research*. Association for Supervision and Curriculum Development.
- Smale-Jacobse, A. E., Meijer, A., Helms-Lorenz, M., & Maulana, R. (2019). Differentiated instruction in secondary education: A systematic review of research evidence. *Frontiers in Psychology*, 10, 2366.
- Van Den Ham, A. K., & Heinze, A. (2018). Does the textbook matter? Longitudinal effects of textbook choice on primary school students' achievement in mathematics. *Studies in Educational Evaluation*, 59, 133-140.
- Vygotskiĭ, L. S., Cole, M., Stein, S., & Sekula, A. (1978). *Mind in society: The development of*

Higher Psychological Processes. Harvard University Press.