

PEDAGOGIES OF PLAY: AN ETHNOGRAPHIC ANALYSIS OF ACTIVITY-BASED
LEARNING IN TWO ELEMENTARY CLASSROOMS

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ABSTRACT

PEDAGOGIES OF PLAY: AN ETHNOGRAPHIC ANALYSIS OF ACTIVITY-BASED LEARNING IN TWO ELEMENTARY CLASSROOMS

by Chelsea Halliwell

In this document I discuss the relationship between education standards for curriculum and structured play in the elementary classroom. I discuss the various forms of teacher-initiated structured play, and student-initiated informal play and resistance strategies - through participant observation, digital analysis, spatial analysis, semi-structured ethnographic interviews, and unstructured conversations - to understand the full range of learning strategies in elementary classroom settings. I analyze how these strategies relate to curricular standards, or how they might deviate from or transform those standards, which are partially shaped by federal and state education policy. I also outline and develop two hypotheses in an effort to define what I observed in the classroom and the information I gained through my interviews, which I call playing capital and reciprocal power. I define playing capital as a resource and a skill that students are trained to develop in activity-based classrooms, and which has the potential to change collaborative environments and organizational structures. I define reciprocal power as an alternate structure of soft power, in which actors are empowered to take agentive action in hierarchical social and organizational networks, and which creates an exchange of power and changes social dynamics in systems of power.

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Introduction – Setting Up the Study

Play is an important component of life and of human cultures in general. Gamification, the process of redesigning cultural institutions or practices to function more like a game, and conceptualizing how it can be used as an effective motivational tool (Kim 2015), substantiates that play is an important component of the learning process as well. This research focuses on the relationship between play and learning, and how that relationship is affected by social dynamics. To study this relationship, I conducted two case studies at two elementary schools in an affluent Bay Area community, using ethnographic fieldwork methods, such as participant observation and semi-structured interviews. Education policy is included in this study to better understand how learning environments are impacted by a standardized curriculum and testing process, and to what extent teachers and administrators can exert their own influence on curricular design and policy implementation.

Project Overview

This research focuses on the different types of play that can be observed in classroom settings, emphasizing the dynamics between structured and informal types of play and how these affect the learning process. Playful methods of teaching and learning come in many forms, from Socratic discourse, to activity-structured environments, or individualized learning strategies. During my fieldwork, I conducted case studies of one third and one fourth grade classroom at two different elementary schools in an affluent Bay Area community referred to here as Rochford¹. Pseudonyms are used throughout this

¹ This is a pseudonym for the community to provide anonymity to the study participants.

document for the community, the schools, and the individuals involved in the study to maintain their anonymity for the duration of my research and this document. One school is a public school, while the other is private, both in the same community, which allowed for a juxtaposition of their pedagogies and philosophies about learning. The public school, referred to as Emerald Elementary School² (EES), is one of several elementary schools in the community, while the private school, referred to as Sacred Trinity School³ (STS), is a Catholic school for grades K-8. Some of the research questions that guided my fieldwork include: What forms of structured and informal play are used in third and fourth grade elementary classrooms? How do these strategies differ between public and private school environments? Are there any critical ways that these environments are similar or different? How do these learning techniques relate to the curricular standards that are set by education policies?

Through this study it became clear that the main differences between the two school environments were not in pedagogical strategy, but instead were centered around differences in sociocultural structure and environment. These differences specifically occurred in the way each school was able to interpret educational policy and curricular standards, and variation in social hierarchies and structure. Both teachers I worked with used a form of play-based pedagogy, generally referred to throughout this document as activity-based learning or activity-based pedagogy, and the main differences in the classroom environments were the result of individual teaching styles. Another obvious

² This is a pseudonym to provide anonymity to the school site and study participants.

³ This is a pseudonym to provide anonymity to the school site and study participants.

difference was that the students at STS prayed together as a group at the beginning and end of the school day, but this religious aspect was kept separate from the bulk of their curricular studies, except for their specific religious studies work. The main difference in administrative structure between the two schools seemed to be that the principals adhered to education policy to different extents, with the private school principal having more autonomy in this respect.

Research Methods

The methods in this study included participant observation of the two classrooms, spatial analysis, informal conversations, and semi-structured interviews over a two-month period, as well as a discourse analysis of the school websites after my fieldwork was complete. With each of these methods, I recorded the interactions between students, between students and educators, and between both groups and the classroom environment. These interactions also sometimes included personal items that children played with, but were not supposed to be using in class, such as small toys or portable game systems. No identifying information about the children or direct quotes from them were recorded. I interviewed teachers and the principals at both school sites, as well as teacher's aides, and spoke to several education specialists through informal conversations.

I conducted ten interviews in total, including both principals and eight teachers and teacher's aides. These interviews helped to triangulate the information obtained during my observations, which made up the bulk of the data along with my work as a teacher's aide. Triangulation is reached through a combination of research methods in the effort to

examine a topic or phenomenon from multiple perspectives, which can correct for researcher bias or reveal variables the researcher did not previously consider (Jick 1979). After conducting the interviews, saturation was achieved with regards to understanding the pedagogical methods I observed, and the curricular design that informed those methods. The teachers were asked a variety of questions that involved their opinions about curricular standards and policy, how these standards affect teaching and learning in their experience, how they make learning accessible and engaging for their students, and how the classroom environment is structured to facilitate learning. The principals were asked about policy and curricular standards, as well as how such policies affect curriculum design within their institution. I also spoke with the principals about how they interpret policy, and about institutional goals and ideologies.

During the fieldwork portion of the study, I took on the role of a teacher's aide as well as that of a participant observer, to give back to the host community, and as an attempt to minimize any effect my presence might have on regular classroom activities. This volunteer work included helping the teachers build and facilitate classroom activities and helping students who needed individual attention to finish their worksheets and projects. Volunteering in the classroom was also useful to round out my observations, granting me the opportunity to observe the informal types of play that students engaged in with their peers, which may have otherwise been missed. Facilitating classroom activities and participating in small group discussions through my volunteer work gave me direct experience with practicing an activity-based pedagogy, and how difficult yet

rewarding this practice can be. This work led to the hypotheses and critical insights that are covered in this document.

My observations were focused on the various forms of structured play initiated by teachers, and informal play initiated by students to better understand the full range of learning strategies in elementary classroom settings. Special attention was paid to the ways that teachers utilized structured play to maintain student engagement and track student interests, such as using games, activities, experiments, and role-play to enhance the learning process. I also focused on observing the play-based strategies children use to subvert adult authority and create their own agendas, like using their own nonverbal codes to avoid detection. The pedagogical and social aspects of the environment were also noted, along with instances of student collaboration. I observed the practical application of activity-based pedagogy through my volunteer work, and how this format appears to reshape the teacher's role in the classroom to that of guide and facilitator.

The spatial and website discourse analyses conducted during the research helped to round out my observations of behavior in the classroom and triangulate information shared in the interviews. A spatial analysis of the two classrooms also helped illuminate how the space is used and how the classroom setup supports the pedagogical design. Making observations about the way the classroom was used during activities and workshops highlighted the importance of social interaction in play-based learning. A website discourse analysis helped to reveal what the school administration thought was important to communicate about their institution and their student success goals. I

compared the website design of the two schools, including what was and what was not included, to reinforce the analysis of the two school environments.

As this was a qualitative study of two school environments a variety of nonprobabilistic sampling methods were used at each stage of the research to help select and narrow down the population of study. These methods were purposive, specifically criterion-based sampling, meaning the selection of participants was based on the characteristics of the population and the purpose of this study (LeCompte and Schensul 2010). A mixture of theoretical and comparable case selection was used to choose which schools I would approach. The goal was to conduct case studies of two schools within the same community where I would be more likely to observe play-based learning due to fewer financial constraints. Cluster sampling, a type of group sampling method (LeCompte and Schensul 2013), was useful for choosing which classrooms would be best to work in, based on the type of learning I wanted to observe and when students begin standardized testing. The grades most relevant to this study were grades three through five, because of the changes in curricular standards and testing that begin at that time in a student's developmental trajectory. The goal was to observe how these standards would affect pedagogical techniques and the social environment of the classroom, and how such standards are integrated with play-based learning strategies.

Working as a Teacher's Aide

My role as participant observer in the classroom did not hinder my ability to work with the students in any meaningful way. Most interactions with the students were situated through my role as a classroom volunteer and teacher's aide, working with

students one-on-one and in small groups depending on the teachers' needs. Even when taking notes during short bursts of pure observation, I endeavored to help students with their work, if they needed help or seemed to be stuck on an assignment. During my initial volunteer sessions, I reported these interventions to the teachers for their feedback and to ensure this behavior was acceptable and helpful, which they assured me that it was.

I primarily worked with two teachers, both of whom introduced me to their class on the first day, telling the students who I am and where I am from. The teachers allowed me to give a brief description of this study, simplified for a younger audience. The students were informed that I would be assisting them and the teacher while I was in the classroom, and that this study was focused on play and how their classroom functioned. Thus informed, the students in each class at least understood that I was a volunteer that would be acting as a teacher's aide, even if they might not completely understand what I was studying. This basic understanding was enough to help them place me in the setting and understand how to interact with me. We also informed the students that I might be asking questions about what they were working on and perhaps helping with their work at times. Working with the help of teacher's aides and volunteers is normalized at both schools, so such interactions were not new to them. Still, it took a couple of weeks for the students to become more comfortable with my presence. This shift was noticeable when students started approaching me directly for help and holding conversations with me.

The students that I worked with on a one-on-one basis were mainly those who were behind in their work and needed a boost to catch up in the form of individualized attention, or who were diagnosed with a learning disorder. The former group was

comprised primarily of students who had missed some number of school days due to sickness or family vacations, while students in the latter group included those who had been diagnosed with Attention-Deficit Disorder (ADD), Attention-Deficit/Hyperactivity Disorder (ADHD), or dyslexia. Most of those were actual diagnoses, while one student was not diagnosed, but suspected to have ADD by the teacher. Even though both classrooms had part-time or full-time teacher's aides, it seemed that my presence was a major boon, and both teachers took advantage of my additional help, which allowed them and the other teacher's aides to focus on classroom facilitation, group work, and grading, as well as conflict mediation, and other types of guidance.

While both schools are located in a wealthy community and enjoy more resources for teaching and learning, they still benefitted from more help in the classroom. When volunteering, I was often called upon to work with students who were behind due to absence or disability, which allowed the teachers and their aides to focus on the general needs of larger groups of students. I usually worked one-on-one with these students to help them complete worksheets or special projects, such as writing poetry or completing a science experiment, so that they could catch up with the rest of the class. The teachers also benefitted from my help, because it meant they did not have to split their attention in as many ways. Without this extra help, the teachers or teacher's aides would give such students brief periods of individual instruction, lasting a few minutes, then give them the space to complete their assignments as well as they could on their own, answering any questions they may have in between classroom facilitation. Students that needed extra help would also ask peers that were sitting near their desks for their input, and their peers

would provide what assistance they could. It quickly became clear that the students I worked with would not have gotten the same level of individual attention had I not been present. Even though both schools had programs for gifted students or those with special needs, these students still needed additional classroom help.

Introductions to the Gatekeepers

I contacted each school through two personal acquaintances, who were each connected to the schools in some way, such as a former parent who is still active in school functions, and a staff member of one of the schools. Children are a protected group and working with them as a volunteer can necessarily include many barriers, making it difficult to gain entry as a researcher. I gained credibility with the gatekeepers at each institution by working with contacts who endorsed me. The project parameters were first introduced to the principals at each school through my contacts, which helped me gain entry. After it was clear that each principal was interested to learn more, I sent them introductory letters via email with consent forms. Both principals eventually responded to the letter via email, giving me permission to conduct fieldwork at their schools.

I arranged for separate, introductory meetings with each principal, to tell them more about myself and this project, and to learn more about their schools and career paths. Ms. Amanda Granger⁴ of STS has been the principal at that school for thirty years, and she spoke of her work as a calling that leads her to create a community of learning that has robust curricular standards and is inclusive of everyone's differences. Mrs. Susan

⁴ This is a pseudonym used to protect the identity of the study participant.

Kendricks⁵ has served as the principal of EES for twenty years, and she shared that she decided to make the move from teacher to administrator for the pay increase and because she felt that she could make positive changes to the school and curriculum as the principal.

After the meetings, they both sent out an email introduction to their teachers on my behalf to see who would be willing and able to participate in this study. A few teachers at each school responded that they would participate, allowing some choice about which classrooms would be included in the study. I decided to work with Mrs. Margaret Wake⁶, a fourth grade teacher at EES, and Ms. Melissa Sellis⁷, the third grade teacher at STS. As discussed above, these are two of the grades important to this study based on the standardized curricula and testing criteria that begin at these stages of education. It was also better to select two contiguous grades to ensure more similarity in curriculum for easier comparison.

Defining Play and Play-Based Learning

Play is a vital part of being human and connecting to our environment and the activities we perform. It is also the way we understand and create meaning, which we ascribe to objects and roles we perform. Johan Huizinga (2014[1950]) describes play as an element of human cultures that fulfills some societal need, during which the participants' social roles are temporarily suspended through the process of play. Play carries meaning for the participants that can go beyond the process itself and has the

⁵ This is a pseudonym used to protect the identity of the study participant.

⁶ This is a pseudonym used to protect the identity of the study participant.

⁷ This is a pseudonym used to protect the identity of the study participant.

potential to create lasting effects. It also goes beyond games to the realm of perception; play requires a particular mindset and way of behaving that, when performed, can provide new contexts for a space or activity (Sicart 2014). Social roles and activities can be permanently transformed through play as new meanings are created and performed through repeated play (Upton 2015). Participants can take on new roles during play, effectively changing how they relate to cultural practices and activities, which highlights the transformative quality of play (Guberman et al. 1998).

Csikszentmihalyi and Bennett (1971) define play as an experience of flow in one's actions and mental state. They describe flow as a mental state that one can enter as a part of play, during which the person's awareness merges with their actions, and is characterized by a lack of self-consciousness (Csikszentmihalyi and Bennett 1971). For a person to be able to enter the mindset of play and experience flow in a game setting, it is vital that the experience is initiated voluntarily (Csikszentmihalyi and Bennett 1971). To allow a person to act freely and without a feeling of self-consciousness is to give him or her the opportunity to experience different ways of being. It is possible to behave in an atypical manner within the context of a game or a playful environment without fear of repercussion, providing the opportunity to be a different person for a brief amount of time, or a safe place to fail and learn through trial-and-error (McGonigal 2011). Flow happens in liminal spaces created during rituals or games (Turner 1974), and the activities and games that are a part of playful learning provide the space for such liminality. Flow can also be achieved in classroom settings through participation in role-play scenarios, or during creative brainstorming sessions in group discussions.

In current education theory and practice there is a focus on student-centered learning rather than teaching (Nygaard et al. 2008), manifested in a variety of forms, such as activity-based learning, play-based learning, discovery learning, and collaborative learning (Bolenbaugh 2000; Goldstein et al. 2011; Jahreie et al. 2011; Oliver 2008; Savery 2015; Schill and Howell 2011). These terms are used to describe types of learning based on active participation, social interaction, and creative experimentation. The common thread between these pedagogical formats is an emphasis on the teacher as facilitator and the student as an autonomous and active learner (Bolenbaugh 2000; Goldstein et al. 2011; Jahreie et al. 2011; Oliver 2008; Savery 2015; Schill and Howell 2011). These methods deemphasize rote memorization and lecture formats and encourage students to take an independent and active role in the learning process through discourse, role-play, and self-pacing (Bolenbaugh 2000; Goldstein et al. 2011; Jahreie et al. 2011; Oliver 2008; Savery 2015; Schill and Howell 2011). These playful pedagogical methods are increasingly being recognized by teachers as an effective method for engaging students and encouraging them to apply important concepts from their lessons.

Learning-centered or activity-based pedagogical methods can all be categorized as forms of structured play in education. The goal of structured play is to engage students in various forms of self-teaching, encouraging them to be independent, and hopefully, lifelong learners (Jahreie et al. 2011). Pedagogically speaking, structured play allows for experimentation with new meanings, roles, and rules (Jahreie et al. 2011). Structured play can be further defined as play guided by design to encourage new forms of thinking and behaving. Within the context of learning environments, structured play is encouraged by

curricular and pedagogical design. Additionally, informal play is defined as a generally spontaneous activity initiated by students, that can include play-based experiments, discussing popular media, or sharing personal stories with peers.

In the classroom, teachers strive to blend curricular standards with their own pedagogical formats and techniques. They are expected to follow the Common Core curricular program that has been adopted by their school, according to current standards established by education policies, while simultaneously communicating this material to the students in a way that will encourage them to be motivated to learn. Students also reinvent ways of knowing and cultural practices through the activities and tasks they participate in, creating a multimodal relationship between learning and play (Guberman et al. 1998). In other words, students do not only receive knowledge and skills from their teachers; they also change the learning environment through their participation and social interactions with their peers. I conducted this research to better understand the connections between child and adult-initiated play in classroom environments to fully understand the power of play, and how people are playing with power in the learning process.

Play and Education

In formal education environments, play is structured through specific activities and ways of thinking, designed to create new pathways of knowledge building and to encourage desired habits and behaviors. The elements of certain types of activities can provide students with the opportunity to engage in transformational play, such as using role-play scenarios to solve real world problems (Barab et al. 2010). This role-play gives

students the opportunity to use their imaginations, in conjunction with new concepts they have learned in class, to make important decisions and experiment with different communication strategies. This type of transformation can be seen in the classroom setting when teachers give students advisory roles among their peers, who may require extra help, or ask their students to write from the perspective of historical individuals.

Children are more likely to think innovatively and alter the rules of their environment through play when working with peer groups, rather than through adult-child interactions (Guberman et al. 1998). Through their research, Steven Guberman and colleagues (1998), used their observations of children playing Monopoly to explore the ways in which children's participation in activities transform cultural practices with a focus on learning by participating in and contributing to everyday collaborative activities. Cultural practices or activities may undergo minor transformations during children's play, such as changing the game's rules, or a major one that alters the very nature of the activity, such as working cooperatively rather than competitively (Guberman et al. 1998). In collaborative learning environments, in which peers are working together on team projects, participants are constantly negotiating and recreating the activities, roles, and modes of communication to complete their assignments. As such, the tasks that children complete may be different from the intended task the teacher gave them.

These alternate tasks or agendas are forms of resistance to normal classroom rules for behavior, or traditional ways of knowing in classroom settings. Children's resistance to adult authority can be an agentive, intentional effort to insert their own agenda in the learning process (Henward 2015). In an ethnographic study of three preschools, Henward

(2015) found that children often utilize sight and sound blocks in their environment to appear that they are on task, while they are engaged in other prohibited activities or dialogue with peers. Henward (2015) classifies this as a form of resistance to adult authority, and an effort made by children to reclaim some measure of autonomy. In this document, such alternate agendas are also considered a function of reciprocal forms of power in activity or play-based systems, which are defined in more detail in chapter four.

Activity-based classrooms offer a liminal space for learning that is heavily dependent on play, and which provides the freedom to form new ideas and ways of being.

Liminality is created by the teacher through structured play, such as activities or open workshops, and by the students through informal types of play operationalized by sight and sound blocks. Liminal spaces offer the opportunity to explore alternate social dynamics that are not possible according to normal social codes (Turner 1974). This can lead to group bonding, creating *communitas*, meaning a feeling of intense social connection (Turner 1974). The reciprocity created by activity-based learning upsets the traditional social structure of the classroom, creating the space for a more egalitarian structure, and a classroom that functions with greater social cohesion. This idea of liminality is central to the hypotheses of playing capital and reciprocal power developed throughout this document.

Student engagement in the classroom and understanding the way people learn are common themes of inquiry within the anthropology of education. One particular theoretical branch focuses on the feedback methods that can improve education through an emphasis on learning over teaching. Discussion in this branch centers around the

social aspect of learning, and the ways in which students and teachers can learn from each other through democratizing education and facilitating student independence and autonomy (Cook-Sather and Alter 2011; Handler 2013; Kozaitis 2013; Niesz 2014).

There is also an emphasis on collaboration between teachers and students as a current trend in curricular reform, a method also known as utilizing student voice in education and curricular design (Cook-Sather 2002; Handler 2013). Studies that specifically focus on play in education discuss the importance of social networks in curricular reform and as essential components for instituting cultural change in educational environments (Niesz 2014). These lines of inquiry track similarly with those of educational theory, both of which acknowledge the importance of involving all social actors in the learning process.

Anthropological research on childhood learning focuses on the power of play, and on children as active participants in their own education. Some activity-based learning, or learning through participation and observation, is conceptualized as a method that fosters a sense of belonging to a community (Paradise and Rogoff 2009). Through a meta-analysis of social science research on informal learning styles in many different cultures, Paradise and Rogoff (2009) found that activity-based learning is inherently more cooperative and collaborative than traditional formal education, with room for shifting roles between learner and expert, the benefits of which are dependent on the choice and agency of the child. This style of learning is much like role-playing with different social roles and activities, which can create new spaces for teaching and learning (Long et al. 2007). In their study of sociodramatic children's play across three ethnographic studies, Long and colleagues (2007) found that children were more likely to engage in innovative,

syncretic play when interacting with their peers in safe environments, where they trusted that their ways of knowing would be meaningful and valued.

Thesis Summary

This thesis is an ethnographic analysis of activity-based pedagogy and educational policy, focusing on how these social constructs inform one another, and their effect on the learning process. The next six chapters outline how play can provide structure in classroom settings and how it can also be used as a method of resistance to adult authority. My observations and analyses are used to build hypotheses about reciprocal forms of power and playing capital, a type of social and creative resource. Playing capital is established as a potentially valuable social resource that the students I worked with were able to develop due to greater financial resources provided by their parents and the local community. The American relationship to learning and education is explained in a sociohistorical context and connected to federal funding and accountability practices, which is connected in this thesis to the development of reciprocal power. This thesis is situated within the context of education in California, and specifically the Bay Area, and in the context of the classroom environments where I worked.

This document explores how structured and informal play work together in educational environments to create a network of activity that highlights the social elements of learning. How these types of play establish a foundation for reciprocal forms of power, and how playful thinking is potentially a skill that can be developed and a resource that can be cultivated are discussed. Activity-based pedagogy creates a learning environment based on social interaction and creative exploration. It is hypothesized in

this document that activity-based pedagogy, which promotes collaborative behavior and innovative thinking, is encouraging students to develop a form of cultural capital referred to here as playing capital, and that students who can develop and utilize this capital may have an advantage over others who lack this resource. The possibility is examined that systems of accountability in policy design and implementation leave room for an exchange between different actors in organizational and social networks that lessen the impact of soft forms of power. It is hypothesized here that this exchange allows for a reciprocal form of power that empowers network actors who might otherwise lack such autonomy in more traditional social hierarchies. Both ideas of playing capital and reciprocal power are dependent on liminal spaces that are created when people share responsibility, collaborate with one another, and create mutually beneficial play spaces.

Chapter 1 – The Local Context and School Environments

This chapter explains demographic, academic, and descriptive information about the educational environment in California and specifically the Bay Area, to provide local context for my fieldwork. A narrative description of the community and school sites where I worked are provided, which situates the context of these two schools within the broader institutional and policy frameworks of California and the nation. This context provides an important juxtaposition for the educational environment in the rest of California, as Rochford is a wealthy community with access to more resources and programs for their schools in comparison with low income communities, which is reflected in the academic performance of their students. The two school environments are compared to create a context for the pedagogies and praxis discussed throughout the rest of this document.

The Educational Environment in California

According to the California Department of Education (CDE) census data for 2017-18, the California education system currently supports about 295,000 teachers throughout 10,000 schools (CDE 2018). California is currently experiencing a teacher shortage with 75% of the 200 school districts reporting shortages that are only getting worse (Torlakson 2018). The award allocation of new teaching credentials has stayed consistent at 11,500 annually since 2013-14, while the need for new hires now exceeds 20,000 annually (Torlakson 2018). The issue has been traced to the beginning of the recession in 2008, when many school districts received budget cuts (Torlakson 2018). In response the CDE has launched a campaign called “Make The Switch: Become a Teacher,” to encourage

professionals to make a career change to teaching, particularly science, technology, engineering, and mathematics (STEM), as well as special education and technical education (Torlakson 2018). To help support this campaign, the state legislature has increased funding for recruitment and training to \$25 million, which is included in the 2017-18 state budget (Torlakson 2018).

The CDE reports online through DataQuest that there are 6,220,413 students in California in grades K-12 for the 2017-2018 school year, putting the average class size at about twenty students per classroom (CDE 2018). DataQuest is an online database maintained by the CDE that provides demographic and testing information at various levels of inquiry, including by school, district, county, or state level. This database mainly reports on public schools in the state, while private schools have their own, varied reporting systems. The racial demographic information for the state shows that 54.3% of students identify as Hispanic or Latino, while 23.2% identify as White, 9.2% as Asian, 5.5% as African American, 3.5% as two or more races, 2.4% as Filipino, and 0.5% each as Pacific Islander and Native American (0.9% was not reported) (CDE 2018).

Teachers' unions are another important part of the local context, and even though they were not discussed in the interviews, they are important for contextualizing the working environment of teachers. The California Teachers Association (CTA) is the largest union in the state, with 325,000 members, making it the largest affiliate of the National Education Association (NEA), a national professional employee organization that offers news, information, and resources to NEA members, as well as federal and state representation. The CTA represents and advocates for its members at both the state

and federal level and holds annual fundraisers through the CTA Foundation for Teaching and Learning to support teacher-driven projects and provide funding for scholarships and grants.

A related topic that was discussed by most of my informants was the issue of pay, especially in comparison to the number of hours and personal resources they contribute to the learning and teaching process every day. Research shows that quality of education and GDP value per capita are positively linked; when the quality of education improves so does the GDP value, yet teachers are consistently undervalued when it comes to their salaries (Hanushek 2016). This discrepancy is one of the major workers' rights issues that CTA and other teachers' unions advocate for their members. They also advocate for more funding for public education in general to benefit the students and provide a greater quality of education.

The Bay Area Ecosystem of Education

This project was focused on the education and student demographics of Alameda County in the East Bay, where the field sites are located. The curriculum and pedagogy of the county is overseen by the Alameda County Office of Education (ACOE), which acts as a bridging agency, overseeing the school districts within the county to ensure compliance with state and federal laws and regulations. Additionally, there are four divisions of the ACOE which provide services to the eighteen school districts of the county, including alternative education programs, support for the professional development of teachers, and IT and administrative support for school business

operations. There are roughly 10,000 teachers in Alameda county, putting the average class size at about twenty-two students per classroom.

The ACOE is focused on developing academic success of students in the county, as well as social and emotional learning and development. The Learning & Accountability division encompasses the Core Learning Department, which provides information and professional support for teachers and administrators as they work to incorporate Common Core standards into their curriculum. The focus of these standards is to cater the educational experience to each student with the goal of creating students who can achieve academic success from preschool through college. The 2013 Standardized Testing and Reporting Program (STAR) testing results for students in Alameda county show that 52% of third graders and 69% of fourth graders display a competent to advanced proficiency in language arts, while the test scores for mathematics shows that 70% of third graders and 74% of fourth graders have a competent to advanced proficiency (CDE 2013).

As of July 1, 2013, the STAR testing was replaced by the California Assessment of Student Performance and Progress (CAASPP) System, established by January 1, 2014. This system focuses on evaluating skills and proficiencies based on new standards that emphasize analytical thinking, problem solving, and communication skills. According to the 2018 Smarter Balanced test results of the CAASPP - taken by the majority of grades 3-8 and grade 11 - about 54% of third graders and about 48% of fourth graders met or exceeded the state standards for language arts, while 57% of third graders and 51% of fourth graders met or exceeded the state standards for mathematics (CDE 2018). There is also a test taken by students in the same grades, called the California Alternate

Assessments (CAA), which caters to students who may have cognitive disabilities that prevent them from taking the Smarter Balanced assessments.

According to the 2017-18 census data included in the DataQuest online database, Alameda County has 228,356 students in grades K-12, which is 3.7% of the California statewide total of 6,220,413 students (CDE 2018). A majority of students in Alameda County identify as Hispanic or Latino at 33.9%, while 25.4% of students identify as Asian, 18.3% as White, and 10% as African American (CDE 2018). Some other racial demographics include 5.6% of students who identify as two or more races, 4.8% identify as Filipino, 1.0% as Pacific Islander, and 0.3% as Native American or American Indian (0.7% was unreported) (CDE 2018). This demographic makeup for Alameda County has stayed relatively consistent for the past five years.

The racial demographics of the Rochford community where I conducted my fieldwork is atypical when compared to the county records, with students who identify as White comprising 59.2% of the students in the district. The next most populous category in Rochford is 18.3% of students who identify as two or more races, while 12.7% identify as Asian, 7.7% as Hispanic or Latino, 1.3% as African American, and 0.7% as Filipino. There are no students in Rochford that identify as Native American or Pacific Islander.

The Community of Rochford

The community of Rochford is a small, wealthy community situated in the East Bay of the San Francisco Bay Area. Rochford is mainly a residential community with a population of about 11,600 people and a median household income of about \$225,000 annually. Most homes in Rochford have an average listing price that is just over \$3

million and boast Tudor or Boston styles with landscaped yards and artistic features. The streets are quiet and relatively safe with many children walking to and from school with no adult supervision necessary. There are about seventeen different charitable organizations that provide extra funds for community needs and events, as well as local needs in the Bay Area and global causes in Mexico and Africa. One of these charities, the Rochford Education Foundation (REF), holds annual charity drives to build extra funds for their schools, beyond what is provided through property taxes.

The extra income for the school district afforded by the REF funds goes to providing additional services for special needs and gifted students, and to maintain what are usually considered non-essential programs, such as art and music. These funds also support full time counselors on staff, who help children reach their academic goals, and schools in the district are able to share a nurse and psychologist, who rotate between schools throughout the week. Each school in the district also maintains a large library for their students, and advanced technology for older children, grades third to fifth, such as iPads and Chromebooks.

The local school district includes three elementary schools, one middle school, and two high schools, as well as one K-8 private, Catholic school. The district serves children who live in Rochford, as well as the children of school and district employees, who often commute from various cities around the Bay Area. Each of the elementary schools and the private school have closed campuses, secured with fences and locks, while the middle and high schools are open campuses, with the high school students being allowed to leave campus during breaks.

The high schools are separated based on the residence status of the student's family and the achievement level of the individual student. The main high school, Rochford High School (RHS), is reserved for the average student, high-achievers, and students in need of extra support, who regularly attend a learning center during school hours. The continuation high school, Serenity High School (SHS), includes the students of school and district employees, who do not live in Rochford.

The children of families who live in Rochford are preened from an early age to go on to college, and even the elementary schools are commonly referred to as "college prep schools." Rochford is a community of an elite socioeconomic class of citizens, whose children frequently go on to attend top tier colleges, like Stanford, Harvard, or Yale. Rochford schools are some of the top schools in the state, and many families who can afford to live there often move into the community specifically so that their children can attend one of the local schools.

The School Sites and Teachers

Emerald Elementary School

EES is one of the three public elementary schools of Rochford, housed in a building modeled after a Spanish mission style typical to California, complete with a central courtyard and landscaping with local plants and trees. The grounds and building are meticulously kept, and the school was recently retrofitted for earthquake safety in 2011. The only element that mars this idyllic image are large black metal fences that were recently installed, and that surround the outdoor eating area and playground, which are locked with keypad-controller locks, like all entrances and exits of the building itself. The

intent is to help protect the children, and the principal mentioned that the fences were built after several news stories were released about child abductions around the Bay Area, which caused prominent members of the community to become concerned over their children's safety. The inner courtyard beyond the main doors is decorated with brightly colorful student artwork and science projects lining the borders of the common area.

The main office is small and cluttered, mainly because the administrator's desk dominates nearly the entire space, and the office also doubles as a waiting room for students going home early or anyone who is waiting to speak to Mrs. Kendricks. Personal pictures and objects can be seen on the desk, and the principal has an office with a personal library and meeting table, which is made to be less daunting by the use of children's chairs at the table. The office administrator, Mrs. Sharon Whatley⁸, is generally friendly and helpful, but she could be withholding at times, which I interpreted to mean that she is protective of the principal's time and the school's resources. I knew that I had a good rapport with Mrs. Whatley, and I offered to help her in the office on many occasions, but she always refused. Social roles seem to be clearly defined in this institution, and people are expected to stay within their role, which is potentially why Mrs. Whatley refused my aid. This was an important realization that helped me build deeper relationships with the educators at this institution.

The school currently employs twenty-seven teachers, all of whom have specialist degrees in their field and are compliant with current certification requirements. EES offers its students a library that holds over 14,000 volumes of books, magazines, and

⁸ This is a pseudonym used to protect the identity of the study participant.

comic books, and boasts a full-time librarian and librarian's assistant. The school has a website that is well laid out and designed to be open and accountable about the services and curriculum provided there, with a link to their annual School Accountability Report Card (SARC), which is a requirement of the CDE. The principal's message includes the three themes the school is striving for this academic year: maintaining a growth mindset, providing an emotionally and socially safe environment, and creating different approaches to meet individual student needs.

The Emerald Demographics and Academic Performance

EES publishes the SARC on their website for the previous academic year, and their 2015-2016 report card uses data copied from the 2014-2015 SARC. The SARC is a document that all schools within California are required to publish by February 1st of each year. These documents typically include population demographics, environmental conditions, and academic performance for the school. According to their 2014-2015 SARC, EES had 298 students attending as of that academic year, 71% of who were White, 9% were of Asian descent, 9% were Latino, 10% were listed as belonging to two or more races, and the remaining 1% were Filipino or Native American. There are no children listed in the Black or African American category for this school. Of those 298 students, 11% were listed as students with disabilities, 3.4% were English learners, and 0% were socioeconomically disadvantaged. By far the most students were enrolled as first graders, 21% of the students, with fifth graders coming in second, and fourth graders being the third largest group. There are no students on a free lunch program; the school

uses a catering service that parents pay for separately, or children bring lunch prepared at home to school.

Updated demographic information is available on the DataQuest website, and according to the 2017-2018 report for EES, enrollment increased to 304 students, 59% of whom were White, 16% were of two or more races, 12% were Asian, 12% were Hispanic, and 1% of students were Filipino, with 0% of students in the Native or African American demographic categories. The two or more races category is nebulous, though, so it is possible that other demographics are represented through this category and are not specifically identified. The difference between these two academic years across both reports reveals a 16% decrease in White students, a 25% increase in Asian and Hispanic students, a 38% increase in students who identify with two or more races, no change in the Filipino student population, and a 100% decrease in Native American students (represented by one student). While the student population at EES is still predominantly White, minority groups are being represented in greater numbers over the last few years, with the exception of African-American and Native American groups. This discrepancy is an issue discussed in more detail in chapter two.

As of the last school year, 84% of the students at EES met or exceeded the state average in the English language arts and literacy category, while 88% met or exceeded that for the mathematics category. Student assessment for academic ability begins at grade three for this school district. In grades three and five a higher percentage of male students exceeded the state average in English literacy, which was reversed in grade four. Strangely the statistics breakdown by race does not include specific information for

children of any other race other than white, even though the charts show the children of other demographic groups were tested. The high test scores can be attributed to the greater financial resources at EES, which grants this institution with the ability to offer a more robust curriculum and many other programs and services.

The Emerald Curriculum

The school offers a curriculum that includes the basics of English, math, and science, but goes well beyond that to include robust music and art programs, state-of-the-art technology programs, physical education facilities, and a Gifted and Talented Education (GATE) program for students who display special aptitude in the classroom. The school also offers a special education program for special needs students, a learning center for students who need more attention, and an English language program for those whom English is a second language. In addition, all students at EES are taught social and emotional skills in an effort to create a safe, inclusive, kind and respectful environment for the school community. These types of intelligence are communicated in the classroom as advice given by the teacher, and reinforced through conflict mediation. Many of these additional programs are paid for with the funds garnered from the charity drives facilitated by the REF discussed above. Beyond these programs, each individual student has a tailored “student study team” designed to help them reach their academic goals.

Mrs. Wake and Her Fourth Grade Classroom

Mrs. Margaret Wake is one of three fourth grade teachers at EES, where she has been teaching grades two through five for twenty-three years. She has been a teacher for twenty-eight years and she started her teaching career at a Friends Quaker elementary

school on the east coast. She shared that she has always loved children, and that she used to play school with her siblings growing up, so teaching is something of a calling for her. Mrs. Wake's philosophy about teaching is simple: the teacher ought to talk less, while the students should be doing more. In practice this ideology means that she only gives very brief introductions to and lectures about different subjects and modules to give her students more time to learn through practice and collaboration.

Mrs. Wake teaches the majority of subjects in her classroom, including math, reading, language arts, history, and social science, while a science teacher, Mrs. Patty Summers⁹, comes in once a week to teach life sciences and engineering. As stated above, there are also specialists at the school, who teach art, music, physical education, technology, and library sciences, and Mrs. Wake shares one teacher's aide with five other teachers. During my fieldwork, there were twenty-two students in her class, which is about average for the school. On a typical day, Mrs. Wake begins with a morning meeting, when she shares announcements and her plan for the day, while the students sit on the large meeting rug at the front of the room. The class then follows the daily plan, which includes all subjects taught by Mrs. Wake plus one additional subject taught by a specialist. This schedule is broken up by two twenty-minute recesses and one twenty-five-minute lunch period. The school day ends with Mrs. Wake reading aloud to her students on the large meeting rug, while they listen and eat an afternoon snack. At the end of the day the students clean their desks and line up to leave, hugging or waving to Mrs. Wake as they leave.

⁹ This is a pseudonym used to protect the identity of the study participant.

Sacred Trinity School

STS is the private, Catholic K-8 school in Rochford, and the campus is adjacent to a community park and residential neighborhoods with winding streets and gardens overflowing with flowers and eye-catching foliage. The original building is constructed of several layers, all modeled after the Spanish mission style, that were added over the years as the school expanded. These newer sections only vaguely mimic the original architecture, but provide larger spaces for some of the school's needs. The additions allow more space for assemblies, the library and study rooms, and the middle school classrooms, situated in the lower floors of the school. The first floor of the main building is dedicated to the school offices, teacher meeting rooms, and the elementary school classrooms, as well as the computer lab. Each classroom on this level is numbered by grade, one classroom per grade, for students in Kindergarten through fifth grade, and artwork and reports from each class adorns the walls of the single, long hallway. There are several exits that open onto the wide expanse of the school yard that includes several playgrounds and a large blacktop with basketball courts. STS is a closed campus with locked doors and a chain-link fence around the large playground, which is meant for the children's safety.

STS cultivates a culture of inclusivity and belonging that shows in the social interactions and use of space. There is a small but dedicated staff who handles the daily tasks of the school, including scheduling, parent correspondence, and bookkeeping. The two ladies who run the office were always friendly and talkative whenever I checked in for the day. Just across the hall from the main office is the principal, Ms. Amanda

Granger's, office, where she can often be seen in a meeting with a teacher or parent. Ms. Granger's office is small and comfortable, with two padded chairs and a couch, and her desk is full of interesting paraphernalia. One object that figures prominently is a jar with fairy dust, which she keeps to sprinkle over the heads of every new Kindergarten student on their first day of school. While this is a private, Catholic school, Ms. Granger feels that new children need to feel special and recognized if they are to be successful and feel like they are a part of "the family," meaning the school community, which is treated much like an extended family.

STS currently employs nineteen teachers and instructors, nine teacher's aides and assistants, and four extended care instructors. The school also employs a full-time librarian, psychologist, and technology coordinator. All instructors and most teacher's aides have master's degrees or are on the path to obtaining one. The library offers a modest pt selection of books for each grade, with a large space for reading or group study at one of several long tables that dominate the study room. The school website offers information on the personnel, school philosophies, policies, costs, and curriculum with an openness that supports their philosophy of accountability. Biographies about the educators are also provided, including their academic and credential history, their teaching style, and personal interests. The learning expectations for each student at STS are to become a spiritually rooted, academically responsible, and self-aware individual.

The Sacred Trinity Demographics and Academic Performance

As a private school, the reporting methods of STS are a bit different than those of EES, and demographic information is not openly reported. Based on my observations in

the classroom and on the school campus, STS students represent a greater racial demographic diversity than EES. This diversity is most likely due to the fact that enrollment at STS is more inclusive, while enrollment at EES is limited to residents of a particular district of Rochford, and parents must provide multiple documents to prove that they live in the community to be able to enroll their students there. The students at STS hail from all over the East Bay and surrounding suburbs, and all are encouraged to enroll. Religion is not a barrier; students are not required to be Catholic to attend, but families that are parishioners of the school's church do receive a discount on the yearly tuition, saving them about \$800 per year for one student. Financial constraints do not have to be a barrier to families that find the tuition fees a burden, as the local diocese that oversees Catholic schools in the East Bay offers over a dozen financial aid scholarships for students of low-income families.

STS does provide a yearly document detailing the Western Association of Schools and Colleges (WASC) Report of Findings, of which the 2017 copy is currently available. This document provides information on the school environment and curriculum, whether or not these elements are up to or surpass academic standards, and how well the current school context aligns with their action plan for student academic achievement. The WASC report reveals that STS students perform well in math, reading and language skills, with 87% of students across all grades performing at or above grade level in math and reading proficiency based on STAR test scores, and students in the middle school performing at or above 80% in language on IOWA tests. Like EES, STS is able to

provide a robust and varied curriculum for their students, funded through tuition fees and annual fundraisers, which is partly accountable for these higher test scores.

The Sacred Trinity Curriculum

STS offers programs in Common Core mathematics, language arts, science, and social studies, as well as additional programs in technology, fine arts, and Spanish. The school also organizes what is called a student success team for any student with special needs, or who may need additional help academically. According to the STS website, the formal religion program is considered the backbone of the curriculum at the school, providing spiritual guidance in the Catholic faith for the students as they complete their daily tasks and assignments. During my time as a volunteer in Ms. Sellis' classroom I observed the class praying both before and after school, and occasionally during school-wide announcements. This practice was always a group effort, and when the class prayed together they added personal prayers as part of the ritual, so that the entire group could pray for whomever or whatever each individual wished or deemed important. The entire prayer ritual was always student led and treated with reverence by the group.

Ms. Sellis and Her Third Grade Classroom

Ms. Melissa Sellis is the third grade teacher at STS, where she has been teaching for five years. She has been a teacher for eight years in total, with her first three years being at a Montessori school, where she taught two different combination classes that included grades one through three and three through five. She initially intended to teach high school drama classes, but fell in love with the younger grades when she worked as a teacher's aide for a first grade class while she earned her teaching credential. She decided

to switch to teaching elementary school, because she thought the younger students were more engaged and interested in learning. While I was conducting my fieldwork, Ms. Sellis was finishing a graduate program in education, in conjunction with teaching at STS, with an emphasis on technology in the classroom.

Ms. Sellis teaches a variety of subjects in her classroom and has a nuanced philosophy about teaching and learning. She handles most of the main subjects taught in her classes, including reading, math, language arts, social science, life science, history, and some technology studies. She believes that it is important to creatively engage students in all of the subjects she teaches by offering an open classroom format, where students can freely take a variety of tools to complete assignments, as well as show what they learned in a variety of ways, such as with art paper, cameras, or iPads. One of the favorite techniques the students used during this study was to create videos about what they learned, using several different apps on their iPads to create the videos. This technique is a manifestation of Ms. Sellis' philosophy on teaching, which is to continually challenge students, while giving them some freedom and choice in how they engage with the curriculum. She also feels that teaching skills is more important than retention of information at the third grade developmental stage. She believes it is better to let children fail at something, so they can grow and learn through trial-and-error, rather than herself being overly concerned that they are able to accurately repeat information through rote memorization. She also sees collaboration as a key component to the learning process and allows her students to consult with one another when they are working side-by-side.

There are also other specialists who help with the curriculum, teaching art, music, library studies, physical education, Spanish, religious studies, and computer science once or twice a week, either in dedicated rooms on campus, or in the classroom itself. Ms. Sellis also works with a dedicated teacher's aide, who only works with her, and provides help with lesson prep, grading, and management of student task fulfillment. They sit next to each other in one corner of the classroom with their desks in an L-shaped pattern, looking out into the classroom, which makes it easy for them to consult with one another while keeping an eye on the students. There were twenty-four students in the classroom when I was working there, which is only slightly higher than the state's average.

The class begins and ends every school day with student-led group prayer sessions at the large meeting rug in the front of the class, after which Ms. Sellis displays the learning plan for the day on a large touch-screen television (see Figure 1). This screen was used as the primary "whiteboard," placed next to the actual whiteboard at the front of the room, and was connected to her laptop, from which she could display teaching materials and manipulate educational apps while she interacted with the students. The class would then follow her plan for the day, meeting back at the rug for smaller group work with the teacher, and for some segments of each day the class would split in half to work on two different subjects, such as computer science in the technology classroom and language arts in Ms. Sellis' classroom. I had my own workstation in her class, which was a U-shaped reading table she set up for me with a rolling chair. Students would often sit across from me to work when I was taking notes, and I would alternate between working with them and walking around to help other students.

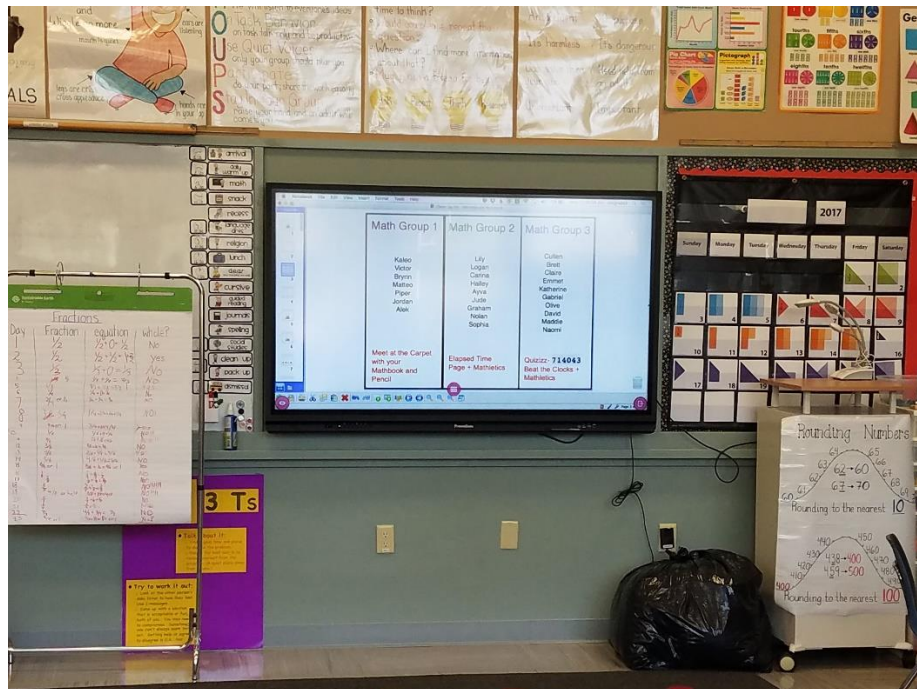


Figure 1. This image shows the television screen in Ms. Sellis' classroom, which is used much like a traditional whiteboard. *Reproduced by permission of STS.*

Comparing the School Environments

Generally speaking, EES seems to cultivate a more exclusionary atmosphere to visitors, while STS cultivates a more inclusive one. This environment is partly constructed by the facade of each building, the design of which helps to communicate a message to visitors. The exclusionary message at EES is reinforced by physical barriers, such as black iron bar fences that reach seven to eight feet high and surround the lunch and play area for the younger students, which have electronic locks on them. These barriers are in the front of the building, so it does not encourage one to approach, which is likely part of the goal of the design, beyond providing safety to the students. The fenced-in playground at STS is located at the back of the campus, and it is a traditional

chain-link fence with access for vehicles through a sliding gate, all of which appears more accessible. Both campuses are closed with doors that lock internally and visitors are required to be granted access by the secretary, which is designed as another safety measure for the students due to their young age.

The social environment is affected by the general behavior of the people within each institution, which is related to the level of rigidity in the social hierarchy and variability of social roles, or lack thereof. The faculty and staff at each school set the tone for behavior and acceptance of new people or treatment of volunteers, and their behavior is influenced by those at the top of the social hierarchy, namely the principals and the school board or diocese. The principals at each school were both accommodating, but handled my entry into their academic communities differently. There were less barriers to volunteering in the classroom at EES, than there were at STS, but STS had a less rigid social hierarchy, and I was able to fill a volunteer role for other instructors there.

This difference could also be attributed to the social dynamics within each institution and between organizations in the network. Both schools are accountable to the immediate community, accrediting institutions, and governmental bodies, but the public and private school status also affects the way that social hierarchies are treated. As a private school STS has more control over how it will interpret policy and what curricular programs will be adopted in collaboration with the local diocese, while EES is more beholden to what has been approved by the local school board. The social hierarchy at EES was fairly rigid during this study, while the social hierarchy at STS was more flexible. These social

dynamics affected the different classroom environments, and I observed that more punitive measures were used at EES than at STS, which contradicted my expectations.

Chapter Conclusion

As members of a wealthy community, the students of Rochford schools, including the schools in this study, enjoy more programs and greater benefits from increased funding in comparison to many in neighboring East Bay communities. These schools have technology in the classroom for each student, extra classroom support for the teachers, safe spaces for the children to play, a hot lunch program, and art and music classes for creative development. The students likewise benefit from living in a community that places such a high priority on education, and many of them have support at home, reinforcing what they learn in class. It was heartening to see children thriving in these settings, and equally disheartening to know how many other communities and schools struggle that are so close by. My participant observation experiences revealed interesting pedagogical formats that favor social interaction and activity-based instruction, but many schools from low income communities usually cannot offer these same experiences. The next chapter covers student-oriented pedagogical strategies and activity-based learning, and my observations and experiences as a volunteer in the classroom.

Chapter 2 – Activity-Based Learning and The Classroom Environment

This chapter focuses on activity-based pedagogies and how these methods affect the learning process. These pedagogies offer a student-driven educational praxis that promote creativity and social cohesion. A description of the classrooms I observed is provided, as well as the physical and digital spaces of each campus to provide a context for how these social environments are created and maintained. This discussion includes the role that organizational culture plays in shaping the teacher's professional experience, which affects the learning environment. This chapter explores how activity-based learning, which relies on collaboration and cooperation, brings formal education closer to situated learning as established by Lave and Wenger (1991). Emersion in this social and creative environment led to the development of a hypothesis about a new form of social capital, referred to as playing capital, defined near the end of this chapter.

Much of this discussion of the classroom environment and culture is based on my observations of the two classrooms. This chapter is also based on interviews with the principals, teachers, and paraeducators, which were conducted concurrently with the participant observation. More of my teacher's aide experiences are shared in chapter four in the discussion of power dynamics and resistance in the classroom. This chapter focuses on the current emphasis in education on learning, rather than simply teaching, and how this pedagogical format affects the classroom environment.

Play and Activity-Based Classrooms

The goal of activity-based pedagogical formats is to create autonomous and engaged learners, while the teacher dons the roles of facilitator and motivator (Bolenbaugh 2000;

Goldstein et al. 2011; Jahreie et al. 2011; Oliver 2008; Savery 2015; Schill and Howell 2011). In this format, teachers still relay ideas and strategies to learners, but my observations revealed that these lectures are organized in short, concise bursts as a precursor for an activity or workshop session. In the interviews, the teachers discussed the importance of instilling a sense of responsibility in students for completing their assignments, in terms of the quality and the pacing of their work. Another goal of this pedagogical format is to instill in students a personal responsibility to improve the quality of their work, and to encourage them to take ownership over their own learning, effectively engaging in self-teaching (Jahreie et al. 2011). This practice creates learners that are more confident than their previous counterparts, and who are more capable of independently directed action and an open exploration of ideas (Niesz 2014).

The student autonomy that is encouraged by this pedagogical format in elementary classrooms today, gives students the space to express themselves and choose how they want to engage with their subjects and activities (Cook-Sather 2002). Teachers provide a variety of strategies that students can use to engage with the assignments and options to show how they understand the material, and students are free to choose what strategies they use and how they express what they have learned. Additionally, the environment is structured to encourage movement throughout the classroom, with learning tools and supplies situated in easily accessible cubbies, and a variety of options for workspaces are made available to the students. In the classrooms I observed, the students were also free to choose the work they would perform from several options provided by the instructor during workshops sessions, which were held on a daily basis.

During one of my volunteer sessions for Mrs. Wake's fourth grade class, I observed an activity lead by the science teacher, Mrs. Patty Summers, who guided the students through the process of creating a circuit for an LED light. She was directing the students to create the circuit on the back of a painting on canvas, which the students had painted in a previous art class. The teacher walked a group of about eighty students through each step of the process by working on a circuit herself and projecting this example onto a screen. Between each step she would wait to make sure everyone was following along with her and vocally repeated the step several times to make sure everyone understood before she would proceed. It was the students' responsibility to pay attention and follow along with her directions, and if they did not, then they would have to figure out how keep pace with the group. In general, the students were dedicated to building the circuits as independently as possible, preferentially asking their classmates for help when needed, and only asking an adult for help when all other strategies had been exhausted.

There was one group effort near the end of the activity when several boys were helping one student who was not able to get his light to work; they were all huddled around his circuit, manipulating the copper tape and talking about the best way to fix it for him. They were speaking very directly to each other, sharing ideas that went back to the lesson, at times in an authoritative tone, but no one seemed offended by this attitude. They were collaborating with one another to solve this student's problem, and they shared their opinions with confidence and directed action. Ultimately, the group needed to ask the teacher for help, but this step was only taken after they collectively took apart and rebuilt the circuit, and were still unable to get it to work on their own. This story

illustrates the agency afforded by an activity-based pedagogy, which gives students the space to take on the roles of advisor, consultant, and collaborator with their peers in a formally sanctioned way.

Setting Up the Room

At the schools where I worked, the teachers designed the layout of the classroom to help facilitate the learning process and create spaces where students could explore and expand. The classrooms were configured with cubbies and cabinets around the border of the room, which held learning supplies like pencils, markers, counting blocks, plastic coins, and clocks. These cabinets are typically low to the floor to be within easy reach of the children, and along three of the walls, leaving space along the remaining wall for the whiteboard and large meeting rug. Atop the waist-high cabinets are counters where students can turn in their assignments to specific inboxes, the teachers and teacher's aides can store student work in files, and classroom science experiments can be stored and viewed by the students. Along the periphery of the classrooms are small hideaways with rugs and comfy chairs and more informal workstations, where students could work if they chose (see Figure 2).

I primarily worked in the classrooms during the latter half of the school year, and by that time the students knew where the supplies were and would confidently take anything they needed to help in their daily tasks. They were instructed to return these supplies after each segment or subject as a way to take responsibility for their own clean-up. As discussed above this behavior all led to plenty of movement throughout the room, and a great deal of idle chatter as students helped one another complete their work. They were

usually allowed to help each other with daily assignments as long as they were working and completing their own work; students were not allowed to simply copy each other's work, but they could collaborate or consult with one another. There were spaces where students could go to work if these informal consults were a distraction to them, such as a small multipurpose room with a door, or they could go out into the hallways with lap desks to work alone or in small groups.



Figure 2. This image shows one of the small informal work areas that students can use during workshops with colorful plastic seats and lap desks to the right. The cabinets of learning supplies that line the walls can also be seen here. *Reproduced by permission of STS.*

The majority of the classroom is occupied by the student's desks, and in the classrooms I observed the desks were either clustered together or the students sat together at one larger table (see Figure 3). These desks created physical spaces to work, but also social ones that led to natural collaboration, as students who sat together often worked together. Alternatively, students would also move around the room to work with their

friends when the option became available to them, or if they wanted to work together, which was a privilege that could be revoked if they broke classroom codes for behavior. When this privilege was revoked, the student would have to work alone at their desk during workshop sessions.



Figure 3. This image shows the desk clusters that occupy most of the classroom space. *Reproduced by permission of EES.*

All of the desk clusters or tables were situated to allow easy viewing of the whiteboard at the front of the room and the teacher's desk, which was usually off to one corner of the room. The desk clusters created a U-shaped pattern around the main meeting rug and whiteboard, which is used by most of the teachers at the school sites from Kindergarten through grade four, after which the meeting rug is exchanged for larger desks (see Figure 4). The only area I did not observe the students using was the areas behind the teacher's desks, where there seemed to be an implied barrier that could

be a social taboo to cross. It is possible that the teachers told the students this area was off limits at the beginning of the year, when they explained to the students how the classroom would function.



Figure 4. The main meeting rug of one classroom can be seen in this image. *Reproduced by permission of EES.*

Creating a Classroom Culture

Through my observations and interviews it became clear that teachers play a major role in creating classroom cultures, and that each teacher's individual teaching style affects the environment differently. The teachers I interviewed saw their role being that of a guide, leading discussions in a Socratic format, and encouraging peer consultation over help from themselves or paraeducators. These methods are used to promote deeper

and more critical thought about the curriculum, student responsibility for producing individual work, and student affective development. The teachers played a critical role in creating this learning environment with a classroom value system that stresses accountability, responsibility, and engagement, which was accomplished by organizing learning opportunities, and validating student ideas while guiding them toward critical thinking and creative problem solving. This positive reinforcement inspired student engagement and created an environment that is intended to make students feel more comfortable to participate in discussions.

In the interviews, the teachers discussed the importance of giving students a sense of responsibility for completing their assignments, by holding them accountable in one-on-one work review sessions with the teacher or in group work situations as fully contributing members. Their goal was to encourage students to take ownership over their own learning, and engage in self-teaching. The teachers accomplished this goal through a variety of methods, including giving students roles in the classroom, creating ongoing work teams, or using pre-established Common Core leveling systems in reading and math. The instructors reported that the students responded well to this extrinsic motivator, using their level as a metric of competition with themselves to see how far they could go, or how many levels they could increase in math or reading. Ms. Sellis gave her students a role that they fulfilled during the school day, such as supply maintenance, organizing work, or cleaning desks, each with an official title and associated job. These were minor jobs, but she believes such roles give the students a sense of purpose and help to structure their classroom experience.

The teachers and educators I interviewed also stressed the importance of student independence, citing the problem-solving, social, and executive functioning skills their students could develop as a result. This independence was one of the main components of creating an effective classroom environment for learning that teachers cited in the interviews. They discussed the importance of students learning from one another by sharing their work, which also puts some of the responsibility on them to engage in the learning process. In the classroom, students were encouraged to share their work in group discussions, but to also listen to each other. The teachers stressed that this procedure helps their students understand and accept different perspectives, and build social skills in a safe environment. I also observed them supporting this inclusive environment by giving the different students' ideas equal weight during classroom discussions. The teachers stressed that such methods are important for building a cohesive classroom that creates happy and engaged lifelong learners, which is critical for their academic success.

Educators are likewise concerned with creating safe environments, where children can feel free to express themselves and their interpretation of classroom material. The teachers I interviewed discussed various methods of creating a sense of community in their classrooms, which encourages their students to participate in a more open manner. They may directly ask students to share their thoughts during discussions, give verbal affirmations of student efforts at comprehension and participation, or highlight valuable points that students make. They talked about avoiding reward and punishment systems in preference of direct positive reinforcement as an extrinsic motivator and utilizing community as an intrinsic motivator. They cited light encouragements they made to

students in the form of a shoulder squeeze, or pat on the back with a verbal affirmation of their work in progress, and hailing each student as an expert in one skill or behavior when appropriate, as examples of positive reinforcement. The aforementioned elements of responsibility were also cited as a way to create a sense of community and an ownership over the state of the classroom. There were certain aspects in the environment that support a community feeling as well, such as the visual cues that covered the walls, like the posters that remind people of the school motto, short biographies of each student rotated on a biweekly basis, or posters showcasing student work (see Figure 5).

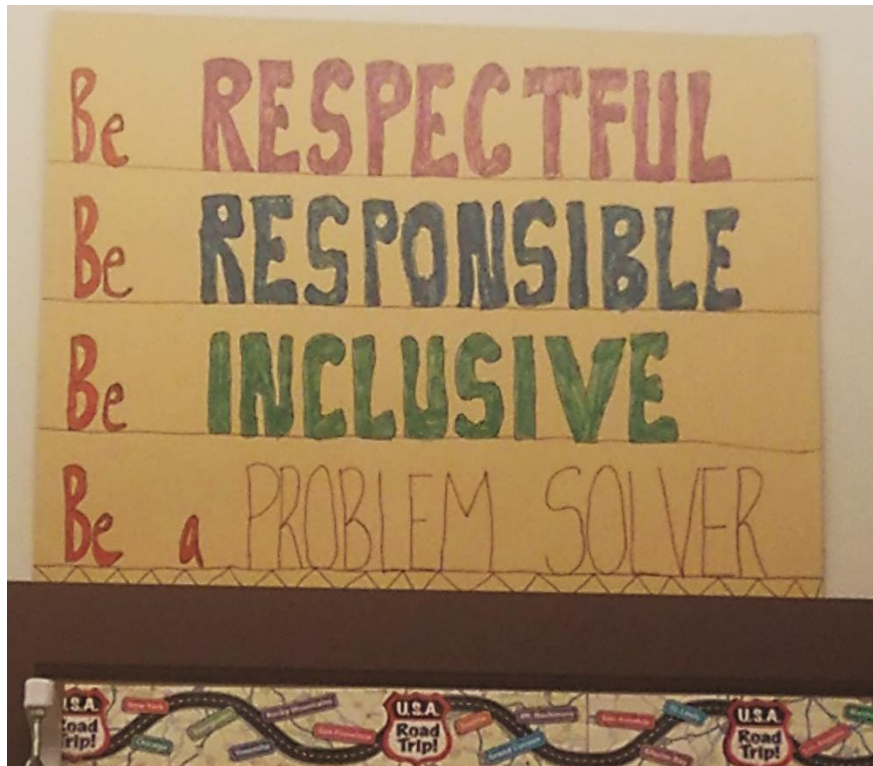


Figure 5. This image shows an example of a classroom sign that repeats the school motto. *Reproduced by permission of EES.*

The classroom community is also constructed through the rules and practices that the teachers and students adhere to as a part of their social contract. Students agree to abide by the rules for behavior, make a good effort to create valuable or constructive work, and

to work with their peers in a cooperative and collaborative manner. The teachers and paraeducators agree to share their knowledge with students in a way that they can grasp, provide meaningful feedback toward improvement, and generally take on a supportive role to help students develop an emotional intelligence. This contract serves to maintain the cohesion of the classroom community, which was another major concern that the teachers expressed in the interviews and our informal conversations.

While teachers guide student's behavior and facilitate the learning process, the students also have an effect on the learning environment. Students are enculturated and socialized through their education, but also change the learning process through their participation in the classroom in a multimodal relationship between the learner and the environment (Guberman et al. 1998). Within this frame learner, content, and context are bound together, positioning the learner as an agent of change, but one who is also affected by the situation or environment (Barab et al. 2010). The learning environment is partly shaped by the students as they are given the space to create meaning through interpretation during discussion and other social interactions. Their participation in activities also affects the learning process through a reciprocal exchange of ideas, which alters the course of or otherwise affects the quality and shape of the activity. This participation in turn changes the meaning of these activities, which can affect learning outcomes, or how students interpret what they have learned.

Organizational Culture and the Classroom

The organizational culture of schools additionally affects the classroom environment and how the teachers develop it. This influence can be pinpointed to the relationship

between the culture of a organization and the teachers' professional experiences within them (Pescarmona 2011). School cultures play a role both inside and outside of the classroom, which influences teachers' decisions to implement change, or whether they will attempt it at all (Pescarmona 2011). Teachers are members of their organizational cultures, which shape the way they think about pedagogical innovations, how changes should be implemented, and what problems they perceive that any changes might bring about (Pescarmona 2011).

The organizational culture is partly based on educational policy and academic surveillance, in the form of testing scores and accreditation, which influence the goals of school boards, principals, and teachers. The principals I interviewed talked about working with the school board to determine what elements of Common Core would be adopted and what their academic goals would be as an educational community. They also collaborate with their teachers and staff at key points throughout the year when developing the school curriculum and to hone pedagogical techniques. The principals in this community also organize general school meetings to make sure they are working as a cohesive unit to create a contiguous academic experience for their students, year to year. No teacher or administrator works in isolation; they are each a part of a larger collaborative unit of educators that influence, support, and challenge one another.

The school culture is reinforced in the classroom, but also in other physical spaces on campus and in digital spaces through the school websites. At both school sites there were signs that stated the school mottos at the entrance as you walk through the front doors, "Be Kind, Be Respectful, Be Yourself" for EES, and "Shaping Minds, Nurturing Spirits,

Together” for STS. At both schools there were cork boards put up in the hallways outside each classroom where students could showcase their work, and which rotated at different points throughout the year, whenever a new project would be completed. The trend at EES was to display work with a math or science focus, while the work displayed at STS tended to have a religious or socially conscious focus with regards to inclusivity and respecting and appreciating others. Both school websites maintain the institutional goals of transparency and honesty, including information about the curriculum, classroom structure, the teachers and staff, institutional goals, and student test scores from the most recent standardized tests. The main difference here was that STS included more pictures, both of the school grounds and the teachers and staff, which reinforces the environment of inclusivity and connectivity cultivated by the school.

Ties to Situated Learning

Activity-based learning – also referred to in this document as structured play - necessarily involves more social interaction and co-participation than traditional pedagogical formats, and brings formalized education closer to situated learning as a result. According to Lave and Wenger (1991), intentional instruction is not necessarily the cause of learning on its own, while situated learning is inextricably tied to social practice and derives meaning through the act of participation. Learning is a social process that takes shape within a framework of participation, not in the mind of the individual (Lave and Wenger 1991). During one poetry activity in Mrs. Wake’s class I was asked to work with a boy who has dyslexia, and we created several haiku poems together. There were magazine pictures to use as prompts, so we chose several of those to work with and

we talked about the important elements of each image together before we would write each poem. I made suggestions about something he could focus on, like a seal's spots, or the icy water it swam in, and he would dictate the way he wanted each line to sound, counting out the syllables on his fingers, while I wrote down what he said. When he got stuck and wanted to reach a syllable count of a line we would talk together about some words he might choose, so went the rest of the activity with us discussing possibilities and working together. It is through these social interactions that groups give meaning to work outputs, and the mode by which different individuals insert their voice into the production of learning.

For situated learning to take place in school settings, students must be able to actively see the practical applications of what they are being taught (Lave and Wenger 1991). The learning process is strengthened when the student can understand the course content in a "real world" context, and when learning is an intentional process, not simply something that is happening to them (Barab et al. 2010). Based on their study, Sasha Barab and colleagues (2010) discovered that transformational play can increase student engagement when students use and understand concepts they have learned in class to solve contextual problems, thereby having an effect on their environment. One can engage in transformational play when one enters a state of flow - a state when one's awareness is merged with one's actions - and the contextual environment allows for creative experimentation without fear of failure or judgement (Csikszentmihalyi and Bennett 1971; McGonigal 2011).

While the teachers I interviewed agreed that communicating the “real world” applications of the curriculum was important to the learning process, they also admitted that this method is not employed as often as it should be. Some stressed that third and fourth grade children are too young to fully grasp how knowledge can be applied in a “real world” context, although it is sometimes helpful. One paraeducator I interviewed disagreed with this assessment, saying that he regularly refers to his background as a financial advisor to stress the importance of math to the students he works with. The activities and games the teachers employed, however, provide a practical application of the curriculum in ways that are immediately relevant for the classroom environment.

This process also involves communication and collaboration with others, which can enhance creative forms of thinking, opening pathways to innovation. During an activity or experiment, the teachers I worked with would typically call on everyone to pause their work and meet at the large meeting rug to discuss their process and what had been discovered thus far. Some students may get further than others in the activity by this rough halfway point, but by sharing what they tried or discovered, other students could learn from that and apply it to the remainder of the activity. By working with various small groups during these activities, I observed the effect this method had on different students, and how those who may have been struggling in the beginning of an activity would come away from such a check-in better prepared to perform to a higher standard. The variation of social interactions and sharing of information made these activities and experiments more accessible for the students, and give the teachers an easy and immediate way to assess their students’ progress.

Teachers that have adopted student-centered pedagogy often use different forms of structured play – in the form of games, activities, and roleplay – to engage students in the learning process and help give meaning to a standardized curriculum. Even while such activities call upon each student to take personal responsibility over some task, or adopt a certain role, an effort was usually made to contextualize this task or role through group participation to create an added layer of meaning. I observed an unconventional form of role play in Mrs. Wake's fourth grade class during a segment of their American history lesson, in which each student took on the role of a California mission. Since there were 22 students in her class, two shared Mission San Juan Bautista, the largest mission in the chain. While each student researched about their mission to create a report, they also studied the placement of the missions by drawing a map of California in a class-wide activity to help them understand where their mission was in relation to the others. This knowledge was reinforced through discussion and group activities, such as one activity in which the class physically lined up in the order of their missions North to South on the meeting rug. Mrs. Wake also regularly quiz the group by calling out dates that different missions were established or other distinguishing features, and the students were expected to respond if they recognized a detail that pertained to their mission. The students were taught to identify as the mission itself, and were called by their mission's name during these history segments.

This form of role play seemed to be an effective tool for motivating the students to take responsibility for their own learning, while the activities for that history segment helped them contextualize their knowledge through group interactions. Sharing what they

were learning with one another in a group setting helped the students retain the information, while gaining a deeper understanding of its relevance. Mrs. Wake disguised an oral quiz as a fun activity, and the children were excited to participate, and looked proud when they responded to the appropriate questions. This test was given in an informal manner, so the children were able to have their mission books open, while the teacher was able to get a quick assessment of how each person was doing with the segment. During these activities the students who represent missions nearby one another, based on the actual location, are encouraged to sit together and help one another. They form clusters of knowledge groups in this way, helping one another in these activities and informal quizzes. Their knowledge of their mission is situated in a social context, developing a framework of understanding through participation and experimentation. While this environment is constructed and facilitated by the teacher, it is perpetuated by the group, and given meaning through social interactions.

Introducing Playing Capital

The different types of play I observed in the classroom combine to create an open pedagogical format that stresses social interaction and creative experimentation. Through the insights provided by my fieldwork and analysis, play can be identified as its own type of knowledge and skill resource, utilized to cultivate belonging to a group, overcome obstacles, and learn complex concepts through role play or activity-based play. Through their co-participation in these playful learning methods teachers and students are cultivating a playing capital, which is defined in this document as a socially created knowledge base for methods of networked participation that inspires innovative thinking

and creative problem-solving. This idea is based on Bourdieu's (1977) theory of cultural capital, defined as the accumulated knowledge, skills, and behaviors that demonstrate one's belonging into a particular social group. Playing capital is a form of cultural capital that focuses on the human capacity to think playfully and syncretically as a way to transform cultural practices and activities. Play in this context is not only something one does, but also a way of thinking one can use to create meaning as a social participant. Playing capital demonstrates a person's belonging into a new type of social group that is structured around collaboration, cooperation, and creativity.

The term "playing capital" is used here to capture the combination of social skills, resources, and toolsets that I observed being taught through structured play in the classroom. This idea is identified as its own type of resource, because of the way it breaks with traditional forms of teaching and learning, and how it encourages students to think in innovative ways. The students I observed were being taught to think creatively about what they were learning as an exercise in self-reflection to cultivate an intrinsic sense of how they learn best, and to perfect how they communicate their ideas with others. Innovative thinking or thinking creatively was something the teachers were actively trying to cultivate within their students. Both Mrs. Wake and Ms. Sellis explained that they use games and other activities to make the curriculum more accessible for their students. Both teachers also see this form of pedagogy as a useful method for promoting collaboration and cooperation in the classroom, for allowing students to practice what they have learned in engaging ways, and for providing a qualitative way to assess each student's progress throughout the year.

During one of my volunteer sessions with Mrs. Wake I facilitated a homonym bingo game, which she had found online. She confided that her students were having trouble understanding homonyms, so she found this game that would require that they make quick associations between similar words. In this case the words had the same phonetic sound, but different spellings. The students were organized into teams of two and I pulled one word from the pairs from a bag, then wrote it on a sheet of paper that was being projected onto the whiteboard. The teams would then find the similar sounding word on their bingo cards and call out when they reached bingo. We played two bingo games and two blackout games, and I did not ask them to collaborate, but during the games the teams helped one another if they had trouble. Even though these students were playing a competitive game, they still wanted to cooperate with one another, which can be interpreted as an effect of their environment, based on my observations and work as a teacher's aide.

The students did seem to be disappointed that there would be no prizes for winning, but then Mrs. Wake told them they would have bragging rights if they won, which they seemed excited about. Even though the teams were motivated by the idea of winning, and getting to brag about it, no one that won a game actually took the opportunity to do so. All of the groups talked animatedly about the words they spelled correctly and which words they had on their cards as a way to share their experiences of the game with each other. The game did seem to help them become more comfortable with the concept of homonyms, and it had the added effect of helping them bond over the shared experience.

The goals of activity-based pedagogies are to develop student autonomy and responsibility through working on activities and projects, as well as building skills in social engagement and creative problem-solving. Teachers facilitate this development through guided discussion, assessing individual student and whole class progress, individual consultations, and question and response discourse. This role is intentionally meant to encourage students to take a more active role in the learning process, and teachers share a portion of their power with their students during this process. Reciprocal power in the classroom is made possible by a softened social hierarchy. In this pedagogical format, students are empowered to exert their own voice into the learning process during group discussion and activity design and process. This reciprocity helps teachers reach pedagogical goals, such as creating an intrinsic motivation in their students to engage with the learning process, and more self-reliance in completing tasks or overcoming challenges.

Chapter Conclusion

The play-based methods of teaching and learning I observed take advantage of the social and discovery elements of learning, situating the focus of education on skill and strategy development. Through my observations, it has become clear that activity-based learning and the focus on STEAM subjects - science, technology, engineering, art, and math – can be identified as the foundation for a playing capital that new generations of young scholars of a particular socioeconomic class are being trained to develop. This focus represents a recent shift in perspective from the previous focus on STEM subjects, which disregards an emphasis on art within elementary curricula (Sharapan 2012). This

new focus recognizes art as an important bridging component between science and math curricula and student understanding (Sharapan 2012), and this focus naturally encourages the use of activities and a structured play format.

Through the literature on education and my own fieldwork, it can be established that teachers are partially responsible for creating the learning environment, which affects the classroom culture, especially which behaviors are meaningful and valued in that environment. There is a general trend of creating a culture of responsibility, autonomy, and accountability through discourse, collaboration, and cooperation, while valuing a variety of perspectives and methods of engagement. The extent to which teachers can create such environments is limited by the organizational culture of their school, and how the institutional norms structure the understanding of school life (Pescarmona 2011). The extent to which an institution strikes a balance between testing-oriented and activity-oriented pedagogy will influence the methods that teachers use to achieve the same balance in their classrooms (Pescarmona 2011). The next chapter covers the methods that teachers and administrators utilize to strike a balance between adhering to curricular standards, while making sure that the students are learning something valuable, rather than simply preparing for a test.

Chapter 3 – Education Policy Adaptation and Implementation

Education policy affects educational praxis, and the learning process as a result, which impacts how teachers and students construct and understand play. This chapter explores the current policy environment as it affects education, both in the U.S. in general and in California specifically, to understand how classrooms are impacted by top-down authoritative educational strategies. While many books and articles have been written about education policy, a brief overview is provided here to establish this component as an important part of the tapestry of learning as relevant to this study. The current policy environment is described, and its implementation is analyzed, while insights are provided about how these policies affect educational institutions and how school administrators adapt them to fit their organizational needs. The impact of educational policy on public school funding is also discussed with an emphasis on quality of education and income disparity.

The current pedagogical and policy environments are dependent on people – policymakers, principals, educators, parents, and students – to give them meaning and replicate or alter them, just as such people are dependent on the things they create, such as policies or curricula, to shape their behaviors and give meaning to their actions (Hodder 2012). These meanings change over time and can have a ripple effect, changing the physical and social environments through interaction, discourse, and innovation (Hodder 2012), such as when policies are interpreted by different institutions and individuals, which may be practiced in a different way than they were written or originally intended to be used. Even while top-down policies shape this environment,

other actors within the organizational network exert their agendas in lateral ways, as principals and teachers do within their organizations and during interorganizational collaborations. Through an exploration of educational policy and its implementation we can expand our understanding of power, and how it can be wielded to achieve multiple ends simultaneously. An outline of reciprocal power is established in this chapter as a means to describe such an exchange or sharing of power, and this will continue to be explored in more detail in the next chapter with regard to how this exchange functions in organizational networks.

The Policy Environment During This Study

In the execution of their role as educators, teachers and administrators must navigate between their students' needs and the educational goals of their institution, but also federal, state, and municipal policy requirements that outline academic standards and student achievement goals, which vary grade by grade. According to the U.S. Department of Education (ED) website, most education policies are designed to improve the learning process and correct inequities in the current educational system. Many such policies are also designed to create funding opportunities for disadvantaged schools, standards for what children should know in each grade, and systems of accountability to ensure that schools are meeting those standards. One of the main federal laws on education currently in effect is the Every Student Succeeds Act (ESSA), signed by President Obama on December 10, 2015, designed to replace the No Child Left Behind Act (NCLB) of 2001, and to re-authorize the Elementary and Secondary Education Act (ESEA) of 1965, a national law on education standards and equal opportunity commitment.

What sets the ESSA apart from the ESEA is the intention of preparing students for college and their subsequent careers, and support of localized innovation strategies in education. In California, the CDE developed a state plan based on the new law, known as the ESSA Consolidated State Plan, over an eighteen-month period and submitted the completed version to the ED on September 15, 2017. The Consolidated State Plan updates state curricular standards and merges them with ESSA standards, while adapting them to the needs of California students. The plan also includes many changes made to the systems of accountability and funding in school districts established by the California Local Control Funding Formula (LCFF) of 2013. The LCFF and the Consolidated State Plan are both part of the recent effort in California to shift away from traditional top-down state mandates to bottom-up local initiatives, giving students, parents, teachers, and local administrators a voice in the statewide effort to improve education for all students. The current educational initiatives in California show a dedication to create a nuanced approach to improving education in the state, and one that is more supportive of the needs of local schools and their communities, even while the systems of accountability intensify.

The ESSA also replaces the federal requirement that states adopt the Common Core State Standards (CCSS), which was previously an incentive for states to receive federal funding under the Race to the Top program of 2009. The CCSS is a federal policy aimed at creating national standards for education, designed in 2009 by the Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center) in collaboration with parents, teachers, and administrators in a

state-led effort to improve education. The CCSS is a set of academic standards and goals for what students should know at the completion of every grade in the subjects of mathematics and English language arts/literacy (ELA). To date, forty-two states have adopted Common Core, California among them, having incorporated CCSS in 2010 and implemented the standards in 2015. The ESSA, however, now allows states to determine what parts, if any, of the CCSS they want to adopt, which is no longer a barrier for receiving federal funding. The only current standards requirement for federal funding is that states employ challenging standards for education, a quality which state officials are now free to define for themselves.

Policy and Education

The current education policy environment in the U.S. has largely been inspired and informed by the standardized testing of students over the past fifty years. Standardized tests, such as the SAT or those later required through NCLB, are one of the primary forms of tracking that government officials use to assess how well specific schools and teachers perform according to policy standards. They were (and still are) used to determine which schools should receive more funding and which teachers should be kept on or let go, all based on how well students perform on these tests. While these methods may seem logical on paper, many educators have disagreed with the way they are implemented. Since the late 1960s, education researchers and teachers have been critical of these tests, claiming they provide incentives to cheat and to teach directly to the test (Cizek 2001). While teaching to the test may yield higher test scores, raising the likelihood of additional funding, this is only a short-term gain. Students may understand

the material well enough to perform on a test, but this does not guarantee they are incorporating what they have learned, nor that they are gaining the necessary skills to succeed as they develop further. These claims raise concerns over the quality of education students are receiving, and how well students are prepared to apply the knowledge they gain in school. Such issues or concerns indicate that standardized tests may be less reliable, and their relevancy for assessing how well students and schools are actually performing are called into question (Cizek 2001). Standardized tests fail to communicate students' ability to fully comprehend curricula and their capacity to apply knowledge in innovative ways.

The current trend of providing more freedom to states in their application and implementation of national curricular standards may very well be in response to these critiques. While standardized tests can provide useful information about student performance in particular subjects, such as language arts or mathematics, they are not designed to show how students learned what they know, or how to keep the acquisition of various types of knowledge relevant. While standardized tests by grade level are still used for municipal, state, and national tracking of student knowledge, individual schools and their associated faculty members are more involved in the assessment process under the ESSA.

The CTA claims to support standardized testing, at least according to their website, as long as it is aligned with state standards and what is being taught in the classroom through Common Core. Their reasoning is that testing can improve pedagogy and the learning process, and they advocate for teachers receiving the proper professional

development and resources to help their students succeed. This reasoning aligns with the opinions of the teachers and administrators I interviewed in this study, which was somewhat surprising. Based on my research into standardized testing I expected they would be against the practice, but in general they tentatively supported it. My informants acknowledged that the current testing system may be flawed, particularly regarding the accessibility and design of the test forms, but that the system has its merits, especially as a form of assessment. The interviewees stressed that standardized tests are a useful form of assessment, but these tests are certainly not the only method they use or rely on for assessment. The teachers I spoke to confessed that while they do use test scores as a metric for student achievement, they rely more heavily on their daily interactions with the students and weekly classroom assignments to assess each student's progress.

Many schools are also accountable to accrediting boards, such as WASC, that assess the academic standards of schools and colleges that belong to the association. According to the WASC website, if an academic institution can prove that it has clear educational objectives for learning that align with accrediting standards - that these objectives are being met by teachers and students - and that they can continue to do so, then the institution will receive accreditation by the commission, indicating it is a trustworthy institution for student learning. These accrediting commissions work closely with various governmental bodies to ensure that academic standards and goals are being met. WASC is the regional accrediting institution for California, and representatives work closely with the Office of Overseas Schools under the U.S. Department of State and the CDE. Much of the accreditation process relies on internal assessments made by the faculty of each

institution, which helps them to stay up to date on relevant policies and better understand the effectiveness of their curricular standards for promoting student success. These individual assessments are then aggregated by school or department through collaborations between teachers and administrators.

Adapting Policy

The current pedagogical and policy environments are dependent on people to give them meaning and replicate or alter them, and these meanings change over time, such as when policies are interpreted by different institutions and individuals. Policies may also be practiced in a different way than they were written or intended to be used. Even while principals and teachers adjust curriculum and pedagogy to comply with policy and educational standards, they strive to exert as much control over their local environments as they can to achieve their own educational goals. The explicit accountability for academic success comes in the form of standardized tests and reports based on internal assessments by the schools, making it easier to accept some policy mandates and resist others. Resistance exists in the liminal spaces between social interaction and acts or ideologies of control, and provides the means for alternate strategies and actions (Foucault 1977). Foucault (1977) argues that resistance is not arbitrary or self-defeating, stipulating that it is still an effective and legitimate course of action, because it means that individuals or groups are not simply trapped in a static system of power and control.

Resistance of this type can also be seen as the power that these actors hold with regards to bounded rationality (Perrow 1986). Bounded rationality is an idea that the logic in decision-making is limited by understanding, time constraints, and available

information (Perrow 1986). There is a limited range of accountability through standardized academic assessments that federal government actors can implement, based on limitations on their time, available information, and scope of direct influence. With little federal oversight when it comes to implementing educational policy, administrators and faculty are free to negotiate their own interpretation of national and state educational standards according to the needs of their students (Koyama 2011). Administrative interpretation of policy, teacher-initiated structured play, and student resistance and informal play are all forms of resistance to and compliance with structures of power in education.

Educational policy and assessment push a standardized form of pedagogy focused on quantifiable results as a form of proof of academic success, while administrators and teachers are concerned with the needs and interests of their students and their families. Their ultimate goal is to facilitate learning, which they strive to achieve while simultaneously subverting and incorporating educational standards. Current educational theory and policy would seem to be at odds with regards to how to best facilitate learning, but state surveillance comes mainly in the form of assessment tests and funding is the reward for policy compliance. There is little compliance oversight with the exception of accrediting institutions, which conduct curriculum assessments in collaboration with the schools themselves. If schools can ensure that their students produce outputs which are considered adequate according to policy standards, then their methods for achieving this outcome are left largely up to them to design.

The interviews with the principals at each school provided insight about the processes by which districts and schools comply with and adapt policy, and how they create interpretive space and garner support for their methods. Through these two interviews it became clear that the principals in Rochford rely on their school community and the local community of parents to support their authority and the decisions they make as school leaders. Mrs. Kendricks also shared that the other two public school principals in the community follow a similar process. The three public elementary school principals meet on a quarterly basis to collaborate on curricula and discuss current standards, which allows them to share ideas and helps them coordinate a district-wide plan for elementary education. The public school administrators from the entire school district also meet with the Rochford school board members on a quarterly basis to report on student and teacher performance, recent changes or successes, and future plans, and to discuss updates to state and federal standards. By comparison, beyond collaborating regularly with her teachers, Ms. Granger and her administrative staff have quarterly meetings with the local Catholic diocese to make curricular decisions and make plans for the spiritual development of STS students.

Through her work with several school districts within the New York Department of Education system, education anthropologist Jill Koyama (2011) has shown that principals can gain power as policy actors by persuading other actors in the policy network to follow their priorities. Koyama (2011) found that more than half of the principals in her study used test scores and progress reports as a method to direct the activities of Supplemental Education Services (SES) managers and convince district officials that they

should be in charge of the SES staff. There was a provision in NCLB stipulating that low performing schools need to provide SES, while limiting the available programs to those provided by state-approved, for-profit educational support companies (Koyama 2011). Furthermore, Koyama (2011) found that principals were able to leverage their social network - through which they were connected to other educators, government administrators and private firms - to maintain their control over the curriculum and pedagogical methods of their respective institutions, despite top-down policy reforms that demanded accountability.

Based on the interviews, it would seem that the principals in Rochford, at least at the elementary school level, enjoy a similar agency with regards to their wielding of power within their school district. They have a say in what curricular standards they will employ, manifested as programs they pick and choose from, provided by for-profit third party companies that develop these curricular programs in compliance with state and federal standards. The principles I worked with talked about using parts of these programs that worked for their institutional goals and their students, and throwing out the parts that do not. They maintain this balance and position of power by regularly collaborating with the teachers at their respective institutions in monthly school-wide or departmental meetings, and keeping in touch with the parents through parent-teacher conferences, emails, PTA meetings, school reports posted on the school websites, and semi-annual school meetings. As discussed above, the principals also work regularly with the school board, and in the case of STS, their diocese, to perfect their school's

curriculum according to institutional goals, while exercising their agency as actors within the organizational network.

Power dynamics are an important focus of this study, and particularly how actors position themselves and are positioned by external forces within organizational networks. Actions taken by members of organizations beholden to others within their network are often contextualized as resistance to hegemonic ideals, but it is also a form of reciprocal power manifested through responsibility and accountability in these networks.

Connections within networks can be leveraged to exercise control in a localized way that can affect the entire network once that control is realized by local actors. There is a give-and-take in the use of power in organizational networks that allows individual organizations and network actors to maintain some measure of stability of practice, even while they adjust to changes dictated by the interorganizational environment. Reciprocal power functions in the liminal spaces created by lack of direct observation by and limited information available to those in power in large and complex organizational networks. It can also be intentional, however, such as with California's new approach to supporting schools to grant them more autonomy in their assessment methods and changing the funding constraints to remove some of the barriers to funding.

Funding Constraints on Education

Financial restrictions on educational institutions are integral to this discussion, since these constraints are a major driving force for education policies and their implementation in the U.S. Such policies are also influenced by the capitalist concepts of accountability and individuality that Americans hold as ideals. These capitalist ideals are

understood through the economic terms of “return on investment” and “fiscal responsibility,” which has affected educational praxis and learning in substantive ways. During the late 1970’s through the 1980’s, the funding of public schools was severely curtailed, both federally and within the state of California, seriously impacting the quality and format of public instruction. Even though there has been a slow reversal of this national defunding of education over the past twenty years, as evidenced by the policies discussed previously, public schools are still struggling to make up the deficit to provide a more robust education beyond the bare standardized minimum.

During the Reagan era of the 1980s, neoliberal policies led to budget cuts in the federal funding of education, causing public schools and universities to reexamine which programs would receive the focus for financial support, and which would have to be cut (Schensul 2010). The atmosphere of national and global markets also affected ideologies concerning the role of science and the university system in American culture (Schensul 2010). As governmental and public funding diminished, public schools and universities were pushed to search for funding in the private sector (Schensul 2010), affecting pedagogical approaches and program initiatives from primary school to higher education. Such changes were a response to the growing pressures from federal funding agencies, taxpayers, and private donors, who demanded that public schools and universities become accountable to the public by producing quantifiable results to show that their financial investments had been worthwhile (Kozaitis 2013). Universities were also pressured to prove that their curricular programs were effective in producing new generations of workers who could be productive in society (Kozaitis 2013), which led to

an increased requirement to standardize curriculum and focus on programs that would be more lucrative for the market (Schensul 2010).

Issues with the defunding of education began a bit earlier in California with the passing of Proposition 13 in 1978. Prop. 13 was added as an amendment to the California State Constitution on June 6, 1978, and it reset property taxes to the 1975 assessment levels and restricted new increases to 2% per year provided that the property stayed with the same owner (Hirsch 1981). Public schools in California relied on revenue from property taxes and saw a massive decrease in funding after the passing of Prop. 13, which has been cited as one of the main causes for the decline in the quality of education in the state (McCombs and Carroll 2005). While California was considered to have some of the best schools in the nation forty years ago, it declined to be one of the worst as of the early 2000s, based on state and national assessment test scores (McCombs and Carroll 2005). The issue of funding began to be rectified in the late 1990s to the early 2000s as voters approved initiatives to fund schools through the state budget or bonds, and while this funding was a helpful start, many public schools were still suffering from a lack of adequate financial support (McCombs and Carroll 2005).

Education anthropologist Kathryn Kozaitis (2013) warns that as public schools acquiesce to neoliberal demands for accountability and standardization, without any attempts at negotiation, a reduction to the quality of education is certain. At the primary and secondary school levels, enforced standardization of education has led to the development of the Common Core curriculum (discussed above) and various standardized forms of testing, starting in the third grade and continuing through the

twelfth grade. This shift in policy was in part a competitive response to the extremely poor test scores in the Program for International Student Assessment (PISA) of U.S. American adolescents in comparison with students in other first-world or developed nations (Cizek 2001). The PISA test is a form of assessment that began in 2000 and measures 15-year-old students' proficiency in math, reading, and science every three years, across seventy different participating countries. American students placed thirtieth, behind developed and developing nations in all subjects, which spurred policy-makers to begin working toward a standardized education as a competitive response to the scores of European and Asian students in the PISA test (Cizek 2001).

These cultural and economic trends have put the pressure on public schools to produce forms of knowledge that are directly relatable to the market, reducing the opportunities for teachers to act autonomously or employ creative approaches to education (Schensul 2010). In the public education system these trends manifest as a greater focus on STEM subjects and reducing or outright removing the arts, depending on any additional funding schools may or may not have. Many public schools cannot afford to offer art or music classes due to lack of funding, so many children go without this form of enrichment (Arum et al. 2015). Not only do the students from economically disadvantaged communities miss out on these enrichment classes, they are also missing an important bridging component in their education that their parallel counterparts in wealthy public schools and private schools are able to take advantage of. Within this decade, there was a shift in focus on teaching STEAM subjects in childhood education, incorporating the Arts in the acronym, to emphasize the importance of using creative

methods in the learning process to approach concepts in science and mathematics (Sharapan 2012). Art and language skills have been recognized as important avenues of expression and understanding of scientific and mathematical concepts, used to help students access these fields of study and communicate what they have learned more effectively (Sharapan 2012).

Schools in wealthier communities and private schools, similar to the one where this research was conducted, are able to support art classes, often through additional funding sources, such as income scaled tuition and community donations. The teachers I worked with were also able to spend more time on developing activities and art projects for their students, because their schools could afford to hire teacher's aides, as well as dedicated art and science teachers. Schools in economically disadvantaged communities cannot typically afford additional staff, and some teachers must often focus on "teaching to the test" as schools are reliant on student scores on standardized tests to continue to receive federal funding (Arum et al. 2015). While the ESSA has removed this barrier in part with regards to applying Common Core curricular standards, student test scores are still used as a metric for federal funding, so schools must still prove that funds are being used responsibly toward ensuring student academic achievement.

Chapter Conclusion

Educational policies and funding greatly impact the format and quality of teaching and learning at the organizational level and within each classroom. To receive funding and accreditation, schools must comply with state and federal curricular standards to ensure better test scores. The lack of adequate funding to education means that schools in

disadvantaged neighborhoods are not only kept in a lower socioeconomic position through funding constraints, but also through a lack of cultural capital development. Meanwhile, schools in wealthy communities can offer more to their students, due to additional funding from tuition or community donations. In Rochford, property taxes that are approved by voters and generate income directly for the local schools are often increased and can be thousands of dollars per household. This consolidation of wealth is how the Rochford schools can provide supplementary programs and services, and technology in the classroom for the older students. Meanwhile, schools in low income communities often go without these tools. These issues all have ties to lines of power within organizational networks, and measures of control within institutions, which are discussed in detail in the next chapter.

Chapter 4 – Alternate Agendas and Reciprocal Power

This chapter explores educational traditions and organizational networks to provide context for the hypothesis of reciprocal power. This concept is further defined through an exploration of changes to educational praxis and the social dynamics inherent to systems of soft power. The relationship between power and play in the classroom is discussed to highlight forms of resistance I observed, while comparing this relationship to performative play, and contrasting it with conformity and self-policing behaviors. Reciprocal power is constrained to social structures that utilize soft power and to situations in which that power is shared with others. This idea is problematized in the next chapter, and explored in greater depth with regard to the way soft power interacts with playing capital.

Traditional Top-Down Teaching Methods

When learning is formalized in the classroom and in institutional environments, it can affect the power dynamics of the social structures within those institutions. Schools have traditionally utilized a hierarchical structure, with principals in the highest position of authority, teachers in a position just below them, paraeducators and administrative staff in the next tier, and students at the bottom. In interorganizational networks, school boards and educational departments are in the top positions of authority, but they do function in collaboration with principals and teachers.

This structure is still maintained by most educational institutions today, but there is a great deal of collaboration between these groups within the hierarchy as well. The tradition in teaching until about twenty years ago was one of conformity with a focus on

competition, and teachers often imposing constraints on ideas (Hofstede 1994). In this tradition, teachers disseminate knowledge to students in a one-way direction, with little opportunity for students to voice their interests and ideas in a way that gives them agency (Hofstede 1994). This practice seems to be shifting in classrooms today, with some teachers emphasizing learning over teaching, although there is still a reliance on arbitrary grading systems.

In academic institutions, students undergo a socialization process that adapts their behavior to fit the environment. This process is typically informed by the particular set of values that are held by those in power within the school hierarchy (Hofstede 1994). Traditionally, cognitive intelligence was favored by educators, as well as students who displayed less independence, and who could boast greater academic achievement (Hofstede 1994). Schools today still largely operate as meritocratic systems, like they have in the past, but there is now a greater emphasis on collaboration and variety. No matter the value system, people typically become socialized or enculturated in school settings through discourse and knowledge transfer (Foucault 2012) in the form of lecture and guidance. This phenomenon also highlights the relationship between discourse, knowledge transfer, and enculturation that occurs in formal education settings.

Enculturation in formal education occurs primarily in the classroom environment, but is reinforced through other school activities and settings, like school assemblies or the library. Individuals become enculturated through knowledge dissemination, and their behavior is modified through their experiences within a particular culture or environment

(Foucault 2012). Through enculturation and discourse, individuals and groups adopt and carry on the dominant ideologies of their culture and community (Foucault 2012).

Through the traditional lecture and rote memorization format in education, teachers disseminate knowledge and students absorb the knowledge skills in order to pass tests and complete a grade year (Cook-Sather and Alter 2011). This pedagogical format creates new generations of scholars, who have internalized ideologies about their culture and social hierarchies through a transfer of knowledge and practice. This format encourages students to look for extrinsic motivators to perform up to their teacher's expectations, rather than finding intrinsic reasons to be interested in learning.

The Relationship Between Power and Play

In the classroom setting, similar systems of control are played out on a micro-scale. A classroom functions well when all actors participate in the maintenance of classroom cohesion and acknowledge the authority of the teacher, but this breaks down when everyone is not following the same agenda. There were several students in each classroom, who would distract their peers during workshops or group work sessions, which was not allowed by the rules of the environment. Students can help each other and work together if they want, but they are expected to keep working and stay on task. The teachers would initially give a warning to these students, then send them out of the room to work alone in the hall if they could not stop drawing people's attention away from their work. One classroom had a student numbering system, and if students broke a classroom rule, their number was removed from the whiteboard, and they could no longer choose where they worked during workshop sessions (see Figure 6).

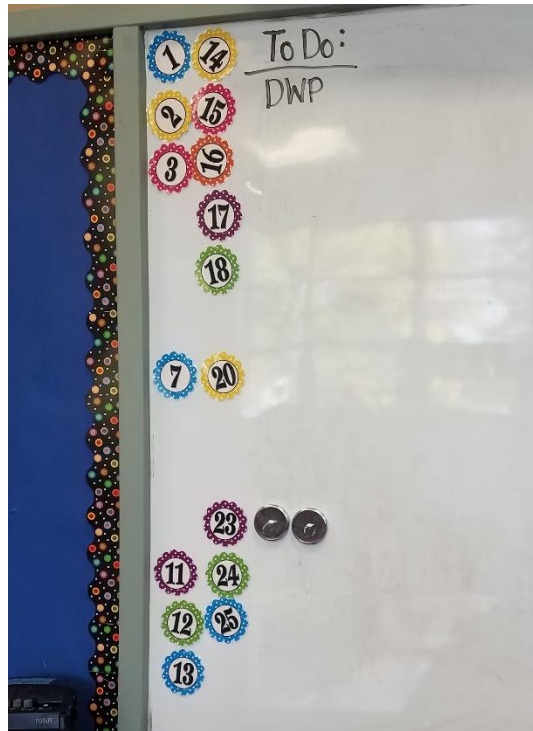


Figure 6. This image shows the student's classroom number on the whiteboard, and several had been removed when this was taken. *Reproduced by permission of STS.*

This freedom of choice is a highly desirable privilege, which I deduced through the students' disappointment and pleading if they were caught being off-task too many times and the teacher took away this privilege. Students will often work to avoid being caught when they break classroom rules by using sight and sound blocks in the environment (Henward 2015). I observed various methods that children used to subvert adult authority through performative acquiescence and covert double play. For example, I once observed a teacher asking two students to be quiet during a workshop session, and they initially acknowledged her order, then whispered and used hand signals to continue their conversation, after the teacher was distracted with helping someone else. One interviewee shared that this behavior is sometimes called partial compliance by educators. This level

of resistance is more passive in nature, as students use the environment to their advantage to make space for the activities they want to engage in, which may not be sanctioned in that moment.

During another classroom activity I observed, the students were learning about slope and gravity by creating a ramp and using plastic wheels to roll down this makeshift hill. The students were broken up into groups by the teacher, and each group chose a different area of the classroom to work in. The main experiment took only about fifteen seconds, so some of the groups got more creative with their approach, infusing their own meaning into the activity. One notable experiment happened when two groups of boys decided to band together, off-setting their ramps to make one multi-leveled hill. They began using many different plastic components together to make different types of wheels to roll down the ramps, something the teacher had specifically asked the class not to do. This behavior went unnoticed by the teacher for a while, because they were able to use the desks next to them as a sight block to prevent the teacher from immediately seeing what they were up to. However, the boys eventually became so excited by their new experiment that they began cheering and yelling, at which point they were finally noticed, and the teacher put a stop to their play session.

The responsibility students have to completing their coursework and the freedom of movement they enjoy around the classroom gives them a measure of control over their engagement in the learning process, which creates space for a reciprocal form of power. Teachers and students participate in a reciprocal exchange of give-and-take in the learning process. The activity-based pedagogical structure gives teachers limited power

when engaging their students; they have limited recourse when controlling an individual student's behavior, because of their drive to maintain classroom cohesion and the need to engage the entire group of students they work with. At the same time, a student's power in the form of choice and agency is limited; they are still required to do the work the teacher gives them, and they are legally required to attend school.

When the relationship is functioning well, teachers and students can cooperate and collaborate according to the social contract, but each social actor has certain concessions to make. Reciprocal power in classroom settings is a form of social exchange (Molm 1999), in which teachers are bargaining with knowledge and structured activities, and students are bargaining with engagement and work outputs. Participation in the exchange is required to exercise power within it. The relationship between play and power is also multimodal; through the act of participation, children ascribe their own meanings to roles and activities to create new or reveal emergent properties (Guberman et al. 1998). The teachers I worked with accept that their students have unique ways of accessing the curriculum and their own methods of engagement, and this highly individual form of learning clearly affects their pedagogical methods. The teachers use this information to organize activities and experiments. They also take their student's needs into account when planning out the day, in particular to determine who might need more attention to and the tools that are needed each day.

Reciprocal Power in Action

Participation is a key component of reciprocal power, which is constructed through the combination of structured and informal play. In practice, structured and informal play

work together to create a network of activity: students work together on assignments, provide peer feedback, and engage in covert forms of play; meanwhile the teacher is playing the role of facilitator, advisor, and mediator. This environment seems very chaotic on the surface because the activity is all happening simultaneously with various actors carrying a multitude of messages to other groups within the network. Both types of play are executed by design as ways to create meaning through semiotic communication and directed action; teachers design the environment and objects within it, as well as the activities to engage students in a particular way, while students interpret their experiences, communicate these interpretations with other social actors, and direct activity flows with targeted invitations to co-participate. Activity networks are related to actor-network theory, but the focus is on how messages are relayed in social groups, or how meaning is constructed communally.

Even open workshop or free play sessions are designed by the teachers to encourage certain social behaviors, and give students the space to explore what interests them in the physical and digital spaces of the classroom. Ms. Sellis organizes a Fun Friday event every week for her third grade students, during which the students are allowed to freely direct their engagement, meaning they are free to play educational games, work on arts and crafts projects, or write creative stories or graphic novels, as long as their work for the week is done and they are not being too disruptive. This event gives them something to look forward to during the week, and it allows them to work on their own projects or agendas without the stress of attempting to hide this behavior.

I volunteered during one such event, and as I first walked into the classroom I was overwhelmed by the significant amount of movement and volume of speaking within the room. Students were wandering around the room talking to classmates and friends, bouncing on the edge of furniture, or sprawled out on the carpets with lap desks and iPads. Students sitting at a round meeting table were bouncing on yoga balls and talking about the digital games they were playing. Others were huddled together at their desk clusters, sitting or standing in disarrayed counsel, completing their work in a rushed and frenzied manner. They seemed eager to join their peers and start playing. The students are only allowed to play freely at these events once all of their work for the week is completed and approved by the teacher. As I approached the back of the room, I noticed that the teacher was talking loudly to be heard over the din as she was helping students who were waiting in line at her desk with their questions and work approval requests. During this event I helped the students who were finishing up their weekly assignments, and built clay figures with one group of children who were playing with blue clay.

The energetic social dynamic of these events was similar to the open workshop sessions during the regular course of the week, when students were allowed to work on any outstanding assignments or play educational games. The main differences were in the level of physical activity and the amount of social interaction, which were much more pronounced. Beyond giving the students something to look forward to during the week, these events also provide them with extra time to finish their assignments in class, rather than completing it all at home. Ms. Sellis admitted that Fun Friday and the open workshops also give her the space to get caught up on providing student feedback, and

assessing each student's work more deeply. Rather than simply grading student work, she prefers to give them feedback, so they have a chance to correct their mistakes on their own. She shared that she goes through this correction process with her students until they get everything right. This practice is one practical way that she manifests her philosophy about creating a safe space for students to fail and learn from their mistakes.

Ms. Sellis hopes that her students will be proud of the work they complete, and that the events and workshops will create an interest in learning for them. Mrs. Wake also creates time every day for open workshop sessions in her fourth grade class, which she explains gives her students more time to work on long term projects or reading when they are at home. These workshops give some measure of autonomy to the students, since they can work at their own pace to some extent, and those who work better in social groups have the space for that as well. In both classrooms, if the work was done, then the students were free to work on their own projects, read, or play, which allowed them to follow their own agendas without fear of repercussion. They could perform these agendas alone or in groups, which many students seemed to prefer based on my observations. The students I worked with were intrinsically motivated to work or play together in peer groups, as well as extrinsically motivated through an environment that was designed for social learning.

Trust and Alternate Agendas

Even though the students I observed had the space to work or play on their own terms at certain times, most of their time in the classroom was spent following the schedule organized by their teacher. Student acquiescence to authority figures was sometimes done

out of a genuine need for approval, or to avoid trouble, but it could also be performative when students wanted to follow their own agendas. The attempt to follow an alternate agenda was usually based on teacher proximity, and relied on a mutual trust between students, who kept each other's personal agendas a secret. Whether these alternate agendas, such as sharing stories, joking with friends, or playing with toys, were performed individually or in a group, there was generally no attempt to keep this behavior hidden from fellow classmates. The main concern was to make sure that the teacher or paraeducator did not notice such informal play whenever the students were not enjoying a "free-time" session, when such play would be sanctioned. I was often included by the students in this type of informal play during my work as a teacher's aide.

I took on the role of confidant when I participated in these side agendas, and refrained from using any borrowed authority I may have had to stop them or alert the teachers. For example, during a small group reading exercise I facilitated, the students would discuss the book they were reading, but also movies they had seen recently seen, such as the *Black Panther*, and I participated in this informal conversation in conjunction with facilitating the formal discussion. The group members either listened or participated in the informal conversation while keeping their voices low so as not to capture the teacher's attention. There were moments when I would interject with questions about the chapter the students were reading to get them back on task. This reading group would have met together with or without my aid, so in the end I kept them more on task than if I hadn't participated. It was important that I allow the students I was working with to exercise their own agenda at times, so that I could observe how their informal play

functioned and to develop a rapport with them. I balanced this informal role as confidant with fulfilling my role as teacher's aide and keeping the students on task, out of respect for the teachers I worked with and to keep in good standing with them. This balancing act was somewhat difficult to pull off, but by maintaining an awareness for student and teacher agendas I was able to build a relationship with both groups simultaneously.

During most participant observation sessions, students that noticed the informal play of others did not point it out to the teachers or other teacher's aides. They may watch or listen in, but generally kept each other's attempts at play a secret. The students did not always work together, however, but would occasionally thwart each other's efforts at informal types of play. Classroom rules can be gradually internalized by students to the point that they will constrain themselves or others to adhere to expected behavioral standards. I occasionally observed students reprimanding each other for not being on task, or for completing an assignment incorrectly. Students would police each other's behavior at times, telling classmates to be quiet when the teacher was speaking, or not to bounce on the furniture. These interactions are another type of performance, but based on internalized constraints reinforced by the classroom environment and power structure.

Conflict and Discipline

In even rarer instances, certain students might go to the teacher with information about their peers, if they were perhaps not on task or were doing something incorrectly. In either of these cases, the teacher may lightly reprimand or correct the errant students, but she would also reprimand the messengers for "telling tales" on their classmates. However, if the messengers were reporting on their peers for being disruptive or

disrespectful, then they were given verbal encouragement and reassurance by the teacher, while the disruptive parties were reprimanded. In the interviews, the teachers explained that they frown on “telling tales” because it distracts them from their work of running the classroom and it takes the reporting student off-task. They also mentioned that it isn’t the students’ job to keep tabs on each other, but part of their role as a teacher to keep track of the students. The students are encouraged not to report on one another for trivial reasons, partly because it is a distraction, but it also seen as a challenge to the authority of the teachers. While this classroom policy helps instructors retain some authority over their students, it also leaves space for informal types of play that students engage in.

The teachers I worked with struggled to balance their role as facilitator with that of disciplinarian. The former is performed with the goal of molding students into inquisitive, self-reliant learners and functions as a reciprocal form of power, while the latter is performed as a means of regulating student behavior and functions as a top-down power structure. At the same time, teachers understand that children need to move around and that some distractions are unavoidable. If it was clear that the students were not focusing, the teachers would sometimes reprimand the class, but at other times they might tell the class to stand up and stretch, because they knew the children needed a break.

In the interviews, the teachers reassured me that they did not have disruptive students, even though I witnessed students being distracting in the classrooms. Many of the interviewees admitted that sometimes students had trouble focusing or distracted others, when they are then removed from the social setting and made to work alone, or they lose the privilege to choose where they work. The teachers at these schools do not seem to

define inattention or distraction as disruptive, when in other settings this behavior might be defined as such. They assured me that these were small distractions that were common, and could not always be avoided. Ms. Sellis explained that the students did not want to be removed from the classroom, or made to work alone, so avoiding this isolation was a strong motivator to stay on task, or obey the teacher's wishes.

The teachers all asserted in the interviews that they only use positive reinforcement, but I observed minor punishments that were meted out to encourage students to conform to classroom behavioral rules. The loss of social privileges or the freedom to use the space as they wanted definitely seemed like a punishment to be avoided by the students, due to the disappointment they displayed when this loss did occur, and their attempts to make amends with their teacher later on. It would seem that positive reinforcement is the ideal, but to keep the flow of learning going minor disciplinary enforcement was used to reinforce behavioral constraints. These constraints do not stop the behavior, but they do encourage the students to be more creative with the way they hide their informal play.

Existing social codes can help provide a structure for practices and social interactions, but these modes of control can also inspire creativity (Leeds-Hurwitz 1993). The classroom code of conduct as outlined by the teachers, and reinforced in each grade, give students a structure to follow. This structure also helps them understand how they can create liminal spaces to play on their own terms, providing a way to socially bond with their peers. These liminal spaces are where *communitas* can form, which refers to intense feelings of social togetherness and bonding (Turner 1969). The students relied on these bonds to form friendships and collaborate with their peers when they were on task, and

used those bonds as a social shield when they weren't on task. Control, resistance, and reciprocity are all important components of the social dynamics of learning, which motivate social cohesion and inspire action.

The choice and agency that students enjoy in play-based classrooms are components of reciprocal power as it manifests in this setting. The practice of cultivating playing capital creates “reciprocal exchange relations” (Turner 1974: 63) between teachers and students, and between students and their peers. The teachers and their students create an exchange through the responsibility they share to participate in learning and setting high achievement goals, while the students help each other maintain their autonomy through a system of trust and secrecy. This reciprocity upsets the traditional social structure of the classroom, creating a liminal space for *communitas* to form (Turner 1969). The liminality afforded by activity-based pedagogy changes the social dynamics in the classroom, creating space for reciprocal power that is based on collaboration, trust, open discourse, and shared responsibility.

Power Dynamics in Educational Organizations

It is also important in this discussion of power to explore the power dynamics of organizational networks, including concepts of accountability, assessment, resistance, and performance-based reform. In the push-and-pull power differentials of accountability and autonomy, there is a balancing act in organizational networks between institutional independence and control, and assessment and obligation to other organizations and institutions (Alexander 2000). This struggle can be contextualized through funding incentives and disincentives within networks. Power is exercised by all actors within the

network: private companies pressuring for educational reform, governmental bodies passing broad sweeping policies that dictate local practices, individual schools responsible for their own assessment and improvement, and competition between institutions over funding. Every organization or institution within the network retains some measure of internal control, while managing accountability frameworks that connect them to and cause them to be beholden to other organizations.

This phenomenon illustrates a multimodal framework of power and control in organizational networks that leaves room for shifting power alignments and responsibility in educational settings. The actors in organizational networks influence one another, partly through accountability and interdependence, as well as localized power and control (Niesz 2014). Principals have some measure of power within the network, with the ability to leverage their social network - connecting them to other educators, government administrators and private firms - to maintain their control over the curriculum and pedagogical methods of their respective institutions, despite top-down policy reforms that demand accountability (Koyama 2011). The power that school principals wield is reinforced by their collaboration with the local school board and their teachers. Financial constraints are a consistent concern, but the common discourse in all interviews in this study was much more focused on accountability and assessment in order to retain some measure of pedagogical autonomy and control over the flow of resources.

Actions taken by members of organizations beholden to others within their network are contextualized as resistance to hegemonic ideals, but it is also the result of the forms of reciprocity manifested through responsibility and accountability in these networks.

Organizations are tools that facilitate the generation of zero-sum power, which is used to manipulate outputs in some way, whether that is by encouraging others to work toward goals or to be more competitive in the market (Perrow 1986). Connections within networks can be leveraged to exercise control in a localized way that can affect the entire network once that control is realized. There is a give-and-take in the use of power in organizational networks that allows individual organizations to maintain some measure of stability of practice, even while they adjust to changes dictated by the interorganizational environment.

I observed this type of control through the pedagogies of play that teachers utilize to engage students, while their curriculum is simultaneously adjusted by government policy on educational standards, like the Common Core curriculum. It was also evident in the programs developed for Common Core by private companies, which schools purchase directly from the suppliers. However, the district superintendents and school principals have some control over which programs they will purchase according to their institutional and curricular goals, and which parts of those programs they will employ or ignore. Assessment is used internally to gauge how well students are acquiring or incorporating these toolkits, but also reported to district officials to justify the value of the educational institution. The responsibility that comes with being accountable to an organizational network also seems to be a mechanism that gives power to network actors.

Reciprocity and Soft Power

The forms of reciprocal power discussed in this chapter are made possible primarily because all actors involved are using soft forms of power. Nye (2009) defines soft power

as a method of controlling the behavior of other actors through diplomatic manipulation or offering attractive outcomes, as opposed to hard power, which is exercised by use of force. Policy and negotiation is the preferred method of using soft power between and within organizations and governments (Nye 1990), while smaller groups, like in an elementary classroom, could be said to exercise soft power with rules and systems of rewards and punishments. Soft power can be defined as reciprocal when different actors exercise their own agency to adjust outcomes or interpret policy, which then becomes practice adopted by others within the network. When different actors within the network have differing reserves of soft power and scope of application, then reciprocity is reliant on bounded rationality as discussed above.

Extending reciprocity to the soft power within smaller group settings with hierarchical structures is a bit tenuous in comparison with that of organizations, but this practice can still be observed in particular situations. This connection is more difficult to define, especially in classroom settings, because the reciprocity is not always evenly dispersed among all actors, and resistance is more evident. The covert and subversive actions taken by students to enact their own agendas in the classroom are a resistance to the control of adult authority figures, but I only observed these strategies to be used when those agendas ran contrary to the currently sanctioned task(s). There is also reciprocity, especially in student-centered pedagogies like activity-based learning environments, in which the teachers share their power with their students, who are put in control of directing discussions and activities, as well as the form of their work outputs.

I had the opportunity to observe a completely student-led activity from concept to execution in Ms. Sellis' third grade class. This project spanned multiple weeks and involved the entire class. Ms. Sellis confided that the activity did not directly relate to the lesson plan, but she decided to create it to help her students with their general planning and research skills. The class was planning the field trip as a group, including where they would go, how they would get there, what it would cost, and the time it would take. Since they were dealing with distance and time in their mathematics lesson, she thought it was a good practical application of the skills they were developing. The class spent weeks going through each step of the planning process, at times collaborating and cooperating in small work groups, or coming together as a whole class to touch base on their progress. Ms. Sellis took a back seat during this process, acting as a facilitator during discussions, and helping with the logistics of executing the plan, as well as answering any questions the students had. The students were the primary actors in this activity, as they were in many of the activities and discussions I observed. They were learning to collaborate and cooperate to manipulate outcomes, but in mutually beneficial ways.

Chapter Conclusion

The goal with this activity and others like it is to encourage students to participate as social learners, and take leadership roles in their own education. The teacher's goal is not only to ensure students meet learning outcomes, but to also instill a desire to learn within their students, and ensure that their students can create something they are proud of through their work in the classroom. These outcomes are achieved through building student confidence through positive reinforcement, and creating a physical and social

environment that encourages creative exploration and bonding. Sometimes that means enforcing behavioral constraints, and at others it means that the teachers take a step back and give students the space to find their own path toward engagement. The creative pedagogical methods of activity-based learning also encourage innovative thinking, which is a crucial component of playing capital. The next chapter covers how playing capital and reciprocity work in tandem, and how formal learning environments and pedagogical methods are shaped by cultural and capitalist ideals.

Chapter 5 – Innovative Thinking and Neoliberal Agendas

Activity-based pedagogies utilize structured forms of play to engage students and create informed learners with critical thinking skills with the ultimate goal of creating people who love to learn, understand how to work with others, and value the quality of their own work. There is also another goal that teachers at all levels of primary and secondary education are cognizant of, and which came up during the interviews: that of preparing each of their students to go on to college, and pursue prestigious or well-suited occupations. This goal is pursued by many educators despite the fact that, according to the U.S. Census Bureau, only 34% of adults in the U.S. earned a bachelor's degree as of December 2017. However, this figure does represent a 9% increase in degrees earned since 2000. This focus on degree attainment has also filtered down to the secondary level of education, with a 90% high school completion rate for adults aged 25 and older.

The teachers I worked with emphasized their desire to see all of their students succeed academically, despite personal struggles, learning styles, or talents for one subject or another. They also communicated a strong aversion to passing judging their students based on quality of work or any potential learning disability, stressing that every person has the potential to develop his or her own level of expertise, and that there are multiple pathways to understanding a particular subject. The teachers wanted their students to develop a love for learning and value their educational experiences. They wanted all of their students to consider college as a path that could be pursued.

Toward this end, many of the teachers and paraeducators I interviewed talked about giving their students context for why knowledge was important, showing them how

information and skills can be applied later, or at least they expressed the need to do so. Some of the techniques were as simple as paraeducators, or teacher's aides, or even librarians, talking about their former careers as an example for how math or reading might be important and why the students should care about it. While everyone agreed that application was important and that they sometimes provide it, many shared that they often fall short of their own expectations for providing this context for their students. Some talked about the daily need to keep the students on task to maintain an expected pace within each module as the reason for why they do not always have the time to explain the application for everything the students are learning.

It is understandable that teachers feel that they do not have the time to go beyond the curriculum to provide the students with an application of what they are learning. Some teachers also talked about the difficulty of providing the application of concepts to third and fourth graders, as their foundation of knowledge is still being built, and the main application is to gain the knowledge and skills necessary to proceed to the next grade. Conversely, they all identified these grades as the stage in which students learn the knowledge and skills they will carry with them throughout the rest of their education and for the rest of their lives. This discrepancy highlights a discord in our culture between educational and capitalist ideals that runs so deep it seemed that my collaborators were unaware of it, or at least did not see the connection to pedagogy.

Pedagogy and Culture

Our education system along with our methods of teaching are reflections of what we value as a society and how we find meaning as a culture. American culture is highly

individualistic and functions on a merit-based system of rewards and punishments, catered to the individual and based on his or her personal achievements and failures, which are also attributed to a person's moral character, or lack thereof. American students are taught to take responsibility for their own learning, and their value as a student is recorded with letter grades, while teachers are held responsible as individuals for their quality of teaching, and held accountable based on numerical student test scores.

The accountabilities of student and teacher are different types of responsibility that highlight the somewhat contradictory goals of education in the U.S. The skills and knowledge students gain through formal education and their responsibility to engage in the learning process are associated with the American ideals of social mobility and democratic equality, while the accountability that schools and individual teachers have to the wider public is associated with social efficiency (Labaree 1997). These ideals are connected to the goals in education of creating responsible citizens, who are equipped with the ability to attain desirable social positions, but also of maintaining a healthy economy through worker productivity (Labaree 1997). These conflicting goals highlight a struggle to establish formal education as the mechanism for maintaining both public and private interests in an attempt to balance political equality and social inequality (Labaree 1997). In practice this means that schools and teachers often bear the brunt of public scrutiny about what is wrong with society, when such claims are often unwarranted.

As a culture we have an ambivalent relationship with formal education, as many stress the importance of getting a good education, while simultaneously looking down on

those who appear “too smart” or overly educated. Americans are typically suspicious of intellect and tend to prefer ‘common sense’ over formal learning, but passionately believe that all children deserve a formal education and that this endeavor will bring them more opportunities in their lives (Cross 1990). So, learning is important, but the learned cannot be fully trusted. These conflicting perspectives have a historical basis in our culture, dating back to the early Protestant opposition of formal learning, and continuing through the early twentieth century as a preference for practical knowledge in business and progressive education (Ratner-Rosenhagen 2009). In essence, Americans value education to the extent that it can teach practical forms of knowledge and skills, but devalue intellectual pursuits that would take them farther away from their “natural state” (Ratner-Rosenhagen 2009). Implications with this perspective are that one’s natural state - favoring practical skills over academic ones - is more honest, while an intellectual or career academic operates from a skewed state, one that is too far removed from the issues of “real life.”

These cultural attitudes toward formal education help explain American pedagogy, educational policy, and assessment practices. The focus here in the U.S. is to help children, and later, adults through higher education, learn the skills and gain knowledge that will eventually help them obtain what are hopefully desirable occupations; it is ostensibly designed to either help one maintain their social status, or to move them into a higher status group (Weber 2015). An increased bureaucratization of capitalism, as in the U.S., leads to a greater importance being placed on specialized positions and credentialing systems (Weber 2015). In a capitalist system that relies on an academic

elite, while simultaneously distrusting them, it becomes important to monitor whether academic pursuits are beneficial to the capitalist state or not. This ambivalence toward academics in the U.S. helps to explain the origins of academic accountability that is discussed in chapter three.

Within this system, education serves the needs of the state, and the institutions that are responsible for educating the youth are beholden to that state. Systems of accountability, such as regular assessments and accreditation processes, are there to ensure that individual teachers and schools are fulfilling their role as educators, according to the results that are deemed important to the state. The main goal of education in the U.S. is to impart practical skills and knowledge that will eventually lead to occupations that are financially advantageous for the individual and beneficial for the economy (Weber 2015). As social actions that work in tandem, process and structure, like learning and the economy, inform one another through traditions and creative exploration (Leeds-Hurwitz 1993). It is understandable that people would want their processes, like formalized learning, to support their structures, like organizations or the economy. The issue is in the fact that this relationship usually goes unnoticed by most social actors (Leeds-Hurwitz 1993), which can mean a lack of reflection in the policy design process, leading to policies that may be less relevant or accessible.

The capitalist economic system is a part of American culture, and one that permeates nearly every aspect of our lives. It is the lens through which we view learning and education with the ultimate goal being to create new generations of people who will support the system (Weber 2015), who are trained to conform to middle class social

norms to maintain the economic structure, while having the intellectual freedom to think of new practices and forms of production to keep the system dynamic. Our capitalist ideals and the American ambivalence toward education keeps our focus on profit and consumption over collective benefit, and on practical skill development over pure intellectual pursuits. Considering these views, it is no wonder that our students test poorly on international tests, like the PISA test, that focus on assessing a student's knowledge and their ability to think critically.

Our curricular standards, which are partly structured by educational policies, seem to be improving the rate at which people finish high school and attend college, based on the credential statistics cited above, but this rate of increase does not fix the student performance discrepancy. We have more people with credentials, yet we still test behind other developed nations in math, language arts, and the sciences, regardless of socioeconomic status (Hanushek et al. 2014). The typical response is to blame low income communities for the lower PISA test scores, but when controlling for socioeconomic status students in the U.S. still test far behind other developed nations (Hanushek et al. 2014). Policymakers are especially concerned with student performance, and our obsession with being the best in the world has driven the competitive campaign for national educational reform.

The strength of our education system may lie in our ability to apply knowledge and skills in novel ways. This ability is what is typically referred to as innovative thinking (defined in the next section), and the process of creating innovations is partly fueled by a capitalist desire to increase profits in our culture. While the “real world” application of

knowledge was a relatively minor part of the learning experience in this study, several of the teachers I worked with, who had taught at multiple levels of education, shared that this method becomes a major component of teaching in middle school and secondary education. Innovative thinking is encouraged at the schools where I worked, and its development seems to be the goal for other activity-based systems as well. Students are trained through play and collaboration to be able to innovate in the future at school and during their careers.

Gamification and Individualized Instruction

To encourage children and older students to perform up to academic standards, teachers use a variety of pedagogical techniques to create both extrinsic and intrinsic motivation in their students. The idea of gamification was not cited explicitly during any of my participant observation experiences, and only Ms. Sellis mentioned it in passing, but the activity-based pedagogical techniques I observed seem to use this process as a motivation tool in the classroom. Gamification refers to the process of redesigning cultural institutions or practices to function more like a game, an approach which is principally concerned with providing agency and engagement for the actors (Kim 2015). Other elements of this process include: incorporating a system of achievements, like merit badges or level progression, challenges that participants take on willingly, equipping actors with the appropriate abilities to face those challenges, and giving them a sense that they can have an effect on their environment (Kim 2015).

It is important to note that gamification is not restricted to classroom environments, but can be applied to any activity, organization, institution, or setting (Shea 2014).

Gamification can be a useful technique to motivate people to perform in a variety of tasks that they might otherwise avoid (McGonigal 2011), and therefore has ties to activity-based learning. Gamification utilizes concepts of play and has the capacity to transform the learning process (Kim 2015), creating an environment designed to motivate students to self-teach, which is a goal shared by activity-based pedagogies.

Educators use such gamified strategies, which are designed to encourage students to involve themselves in the learning process. The level to which these strategies motivated students also acted as a support system for the teachers in their role as facilitator. One such strategy is an entire level system for reading, called the Scholastic Guided Reading Program, with online guides for how to use it. While the specifics of this system are beyond the scope of this study, some of the basic elements include the use of levels that are ranked alphabetically with alphabetical ranges for each grade, which can overlap between grades, such as levels J-T for grades three and four. There was also a leveling system in math, which had four levels for each grade, and students got small prizes, like stickers and erasers, when they finished a level. The teachers shared that these leveling systems made their students eager to work hard at each level so that they could progress to the next, and they showed pride and excitement when they were able to advance.

Leveling systems are separate from the traditional grading system, and are designed for motivational purposes, but they also help teachers assess each student's progress. Being able to clearly define what level a student is at in reading or math also helps teachers communicate that student's progress during collaborative meetings with other teachers and administrators. This system provides a convenient and standardized means

to assess whether a student is on track for their grade, is behind and needs extra help, or is ahead of their grade level and needs more of a challenge. While this tool is useful for learning and assessment, it also has a disadvantage, since the students sometimes focus too heavily on their level, rather than on what they are learning. The teachers do have strategies to cope with this tendency, such as reading journals the students keep to show they are retaining what they read, or competitive math games played with dice and graphs to show they can understand ratios and space.

While the teachers at EES and STS seemed to use some elements of gamification, it was unclear whether or not they were doing so intentionally. It is possible that the ideas underlying gamification, such as choice, agency, and skill development, are so prolific in our culture that they have been internalized by many fields and academic disciplines. My fieldwork experience gave the impression that it is more likely the latter, with the exception of Ms. Sellis, who is acquainted with gamification. We value these same ideas in our culture, so it is understandable that they inform the praxis of a variety of fields or processes, including education and gamification. The gamification process through this perspective looks more like a reframing of several American ideals, such as autonomy, practical skill development, and goal-oriented thinking. Gamification is a convenient package that provides a way to make hegemonic ideals actionable, while motivating people to complete what might otherwise be boring tasks.

Playing Capital and Innovative Thinking

The concept of playing capital is based on Bourdieu's (1977) concept of cultural capital, as well as the processes of gamification, meaning that it can also be a tool used to

encourage a certain type of behavior. In essence, playing capital is a resource or skill in learning environments, but it is also a tool to encourage groups - whether students, coworkers, or otherwise - to think in more innovative ways. Innovation can be generally defined as a new idea that changes how things are produced, performed, or structured in a way that adds value or changes how humans relate to that thing (Hargreaves 2004). Innovations do not always have positive effects, but the goal is usually to change the way something is done in order to improve it (Hargreaves 2004). Innovative thinking in learning environments can be defined as the cognitive and creative process that encourages new ideas through social interaction and collaborative participation. It is a process performed with the goal of creating innovation.

Collaboration is a key component during innovative thinking, and creating an innovation relies on the ability of a collaborative team to build a shared knowledge base, which is based on both tacit and explicit knowledge (Nissen et al. 2010). Tacit knowledge is gained through experience and is usually difficult to communicate to others, such as strategies used to win a game or complete a scenario with a desired outcome, while explicit knowledge can be easily translated and includes the type of information that might be communicated through a lecture or a textbook (Nissen et al. 2010). Shared experience overcoming obstacles or working through challenges can help collaborative teams build the trust they need to create a shared knowledge base (Hu and Randel 2014). As people work together on shared goals they develop trust and discover commonalities, at which point they become more likely to share knowledge and other resources with fellow coworkers or teammates. This mutual trust, shared knowledge, and understanding

encourages new forms of thinking, which can be used to overcome obstacles and reach goals.

The types of structured and informal play that I observed encouraged students to build cohesive social bonds, and the shared experiences of working on assignments or projects, and playing together or working through conflicts, helped them to build a mutual trust. The students I worked with were encouraged to think innovatively when they were asked to find creative ways to show how they know what they know, or to show what they learned in different ways. This type of thinking was also encouraged when the students worked in groups to solve complex problems in their math or science sections, which required finding creative ways to use strategies they had previously learned to complete tasks at multiple stages of these activities. For example, Mrs. Wake would often assign groups to work on complex math problems together that would require that they consider all of the strategies they had learned thus far and pick a combination that they thought would best solve the problem. Each team would typically come up with their own unique combination of strategies to solve these complex problems, and there was no single correct way to solve them.

Encouraging their students to find their own unique path to success in their learning experiences through activities, group work, and self-reflection were important components of the teaching philosophy held by my informants. This philosophy was contrasted in our conversations with traditional forms of teaching through rote memorization and conforming to singular ways to approach problems. They explained that this form of educational praxis was a valuable way to keep students engaged and

motivated, which could stave off burnout and hopefully create a genuine desire to learn. For the most part my observations supported these intentions, but there were still one or two students in each class that hated the formalized learning format no matter how hard the teacher tried to make it more fun or interesting for them. When I worked with these students I found it useful to check in with their mood and ask how they were doing, and I used humor to work through the assignments with them. Sometimes they were simply bored and did not want to fill out what must seem like endless amounts of worksheets, which are a part of the Common Core curriculum as a means of practice for the student and assessment for the teacher.

Ms. Sellis agrees that the personalized approach is best: she sees her students as individuals with their own thoughts and feelings worthy of her respect. She confessed that she hates those worksheets and uses them as little as possible. She does not feel like they show that her students are internalizing the material in a way that will allow them to apply their knowledge in novel or creative ways, which is why she encourages them to use other tools to capture what they have learned, such as with annotated diagrams or videos. It seemed like she cared more about making sure her students were engaged and nurtured – academically, socially, and emotionally – so she preferred these alternate forms of assessment, which was supported at STS.

Connecting Playing Capital to Reciprocal Power

Both schools cultivated an environment that was supportive of activity-based pedagogy, and explained this practice as a major strength on their websites, but communicated it in more practical terms as a robust offering of programs and challenging

curriculum. My fieldwork led to the key insight that these schools, and perhaps others that share their philosophies, favor creative use of skills and innovative thinking in their students over conformity of practice. I did observe certain educational traditions that were upheld at these schools, however, such as social hierarchies based on age and an individual's role within the institution, as well as a method of social conditioning through positive and negative reinforcement meant to encourage students to conform to a particular system of behavioral standards. Ms. Sellis explained that these behavioral constraints are necessary because the students are so young, and they need to be constrained to a certain extent to help them focus and to avoid too many disruptions. Otherwise, the goal is to give their students the space to explore who they are as learners and how they fit in with the classroom community. The students at these schools are assessed individually, but encouraged to be social learners.

Developing innovative forms of thinking through play and collaboration is important in education, because these qualities are valued in our culture, and specifically to maintain a capitalist economic structure. Financial innovations, such as crowdfunding, social impact bonds, or benefit corporations, add complexity to the American capitalist system, and help protect against bubbles and crises, or can at least make them occur less frequently (Shiller 2013). Innovations also help systems and practices change along with the current cultural environment, keeping them relevant to the people that use them (Shiller 2013). Encouraging innovative thinking through play at a young age in formalized education environments creates learners that are comfortable collaborating with their peers, able to generate new ideas, and have highly developed creative problem-

solving skills. While American students are currently only performing with middling results in global academic testing, they are being trained to practically apply knowledge to be creative or innovative in their careers.

The globalization of economic markets has made innovative forms of thinking a valuable trait in students. The students I observed were being prepared for success not only in their educational careers, but also for their professional ones, something their teachers were consciously aware of. In the interviews, the teachers spoke of the curriculum as something that would prepare their students to move ahead to the next school grade, but something that can also impart the knowledge and skills they might use in some areas of their lives, or in future careers. Ms. Sellis organized an application project that required her students to write about the subjects they had learned about in class and the skills they had gained, while associating these factors with two or three different professions they were personally interested in. This project seemed to give them a deeper appreciation of what they were learning when they were able to see the bigger picture of what they could be working toward. It also encouraged them to think creatively about how different pieces of knowledge might fit together in different professions.

Innovation is part of the engine that fuels production in globalized industries (Sorrells 2016), and the innovation process requires thinking creatively and deeply about whatever one is trying to change. In our globalized world, multinational corporations comprise the economic elite that control a great deal of wealth, which often means they wield a great deal of soft power (Sorrells 2016). They typically exercise soft forms of power to affect business and trade policies with the goals of increasing profits, lowering costs and debts,

and minimizing regulations (Shiller 2013; Sorrells 2016). Corporations rely on financial innovations to manage debts and grow (Shiller 2013), but as global entities they also rely on other forms of innovation to aid in intercultural communication, negotiations, and branding (Sorrells 2016), as well as to improve production, employee workflow, and intracompany knowledge sharing (Hu and Randel 2014). As a system within this cultural and intercultural environment, education serves the needs of the economic elite (Lamont and Lareau 2015), who provide financial rewards to those who support the system through a combination of stasis and change (Weber 2015; Leeds-Hurwitz 1993). Thinking innovatively is a practice that does not come naturally; it needs to be taught, and the teachers I worked with were teaching this practice through structured play in the classroom.

Chapter Conclusion

By cultivating a playing capital, students are being taught to play with using soft power, especially at elite institutions, like the schools in the Rochford community. Soft power is reciprocal when different social actors are able to exercise their own agency to affect outcomes or manipulate the behavior of others. The relationship between structured and informal types of play create different levels of exchange between the students and the teacher that trains them to discover their own source of power and use it in a social setting. Without realizing it, the students are learning about bounded rationality when they use sight and sound blocks in the classroom to covertly follow their own agendas, which is a form of resistance, but also a source of power the teacher shares with them when they are given the responsibility to use workshop time in the classroom. The

students juggle this responsibility with play, helping each other maintain multiple agendas at a time. There is also reciprocity in structured play when the teachers take on the role of facilitator, giving the students the authority to choose the best method of communication for them, what strategies they think are important given the current problem, or what methods would provide the best structure for an activity. These students are not being trained to be good workers; they are being trained to become innovative thinkers, and thus the next generation of leaders.

Chapter 6 – Teaching Leadership and Playing Capital

There is more to playing capital and education than preparing students for their future occupations, increasing profits for the economic elite, and perpetuating a socioeconomic class. Students that are learning through activities, structured play, and collaboration are developing a general array of leadership qualities, which may set them on the path to take on leadership roles as they grow older. Whether they take on such roles or not, this practice focuses on helping them to know their own strengths and weaknesses, as well as effective ways to cooperate with others, which can aid them in their lives in general. Pedagogical techniques that focus on teaching leadership assume a particular set of qualities and skills must be developed, based on a variety of theoretical perspectives on leadership, all of which are informed by cultural ideals (Denhardt and Campbell 2005).

In the literature on leadership pedagogy teachers are encouraged to promote particular qualities and skills in their practice, guiding their students to develop an ethical awareness, understand how to engage in collaborative projects, and cultivating adaptability to deal with unexpected challenges (Denhardt and Campbell 2005; Stephenson 2011). In practice, teachers use this format to train their students in community engagement and service learning, as well as project facilitation, intercultural communication, and innovative thinking techniques (Denhardt and Campbell 2005; Stephenson 2011). These qualities and practices align with the American ideals of independence, autonomy, and innovation, rather than a collective identity, tradition, or fixed social hierarchies, although there is a simultaneous shift toward collective engagement as a way to create meaning. This shift is changing the way that cultural

capital is transferred to students in formal education environments and the nature of that capital, which has the potential to create a ripple effect into other areas of American culture as these students grow and participate in their daily and social lives.

Cultural Capital and Leadership

As discussed in chapter one, the schools of the Rochford community are college preparatory schools and the students are encouraged from a young age to go on to college once they graduate from high school. According to a recent RHS report, out of the graduating class of 205 students in 2018, 95% would be attending college and another 4% planned to go to college after taking one year off. This report claims that RHS is recognized as one of the best high schools in the nation, and received the Gold Medal Award in 2018. The school report is explicit that the goal is to encourage students to be leaders who can embrace change and think critically, which are important attitudes and skills for the innovation process. This is the environment that the young students I worked with were being prepared to thrive in, and the playing capital they were developing was adding a new dimension to the cultural capital they possessed from a very young age.

Students cultivate cognitive, social, and emotional knowledge and skills as part of the learning process in formalized education. They also develop a particular type of cultural capital, dependent on their sociocultural environment, which can be linked to the way that social classes are maintained (Lamont and Lareau 2015). Cultural capital is associated with socioeconomic class and communicated through language codes, attitudes, and behavior (Bourdieu 1977). Social classes are reproduced through a transfer

of cultural capital, which occurs in an individual's family life and during their experiences in formalized education (Bourdieu 1996). Activity-based learning is not an exclusive technique reserved for elite social classes, nor is playing capital something that only students at elite schools can develop. Elite schools like the ones in Rochford are able to provide more robust activity-based systems than schools with fewer resources, and in many cases these students are coming from family backgrounds that are already providing the cultural capital necessary for them to succeed in an educational system that caters to their social class.

It is possible that, while not an exclusive technique for elite institutions, playing capital will serve to increase the cultural capital disparity between wealthy and underprivileged communities. Bourdieu (1996) argues that the school-mediated mode of reproduction is hidden through generalized statistics and a partial transfer of cultural capital, which helps social classes maintain control over entry through covert means. As discussed in chapter five, American industry is focused on innovation as a path to growth, as a mode of competition, and a technique for staying relevant with culture change. Students that have both the cultural capital necessary to maintain their membership in an elite social class and the playing capital that demonstrates their belonging into an innovative social group will have a distinct advantage over those who perhaps have not had the opportunity to cultivate these social resources during their formal elementary education.

Such social barriers are not immutable though. Students who have the opportunity to develop the cultural capital necessary to achieve positions normally held by another class

have the capability to resist such exclusionary tactics (Bourdieu 1996). Activity-based learning in all its forms, from discovery learning to interactive learning or self-directed learning, is a pedagogical technique that has been growing in educational praxis for the past twenty years (Bolenbaugh 2000; Goldstein et al. 2011; Jahreie et al. 2011; Oliver 2008; Savery 2015; Schill and Howell 2011). As these approaches to learning become more widespread they will provide children of different socioeconomic classes the space to develop a cultural and playing capital that may give them the freedom to pursue more advantageous careers later in life. They may even be equipped with the knowledge and skills necessary to develop their own career paths, whether independently or within the companies they work for.

An Exploration of Playing Capital

As a potentially new dimension of cultural capital, playing capital is a concept that offers new ways to think about education and learning, and a resource that presents the potential for culture change as well. Playing capital is transferred through activity-based pedagogies, which offer practical and playful methods of practicing a complex and diverse curriculum, and an easy way to give students the opportunity to apply what they have learned. At the same time, students are given the freedom to direct the course of their learning process in ways that grant them some measure of autonomy, which is simultaneously a boon and a challenge for them. Learning in this environment is more social, and reinforces cooperation, collaboration, and consensus, which are less hierarchical forms of social interaction and more democratic or egalitarian.

The activity-based pedagogical methods I observed created engaging ways to reinforce the curriculum with structured play, and a logical method of applying what the students were learning. In my volunteer work I found that every module in each subject was designed with an activity that the students could engage with to help them practice what they were learning. These activities were usually both practical and playful in design, such as with a dice game I helped facilitate in Mrs. Wake's class. During this activity the students competed in groups of two by rolling two dice and filling in a grid with colored pencils to match the numbers they rolled. For example, if a four and a six were rolled, then the student would fill in a twenty-four square area in the grid, either as a rectangle or an "L" shape. The first person to fill up the majority of their grid without going over the available space won the game. The students appeared to have fun playing together, and the activity also reinforced the mathematical concepts of proportions and volume that they were learning about.

These activities were enough of an application to allow students to enter a state of flow at times, which was dependent on a variety of factors, such as who was working together, the components of the activity, the proximity of other groups, or how loud the class was being as a whole. I could not directly observe whether or not they were feeling a sense of flow, but I could see the effects, which include an intense focus, motivation to complete or continue a task, and a level of concentration to the exclusion of everything else in one's environment. Different stimuli evoked this response for different students, as can be expected. Some students seemed to enter into this state when Ms. Sellis played ambient music in the background during workshops, when Mrs. Wake would read a story

aloud, when the subject matter matched their interests, during free play, or when they were given the space to creatively explore new directions to take an activity. In the interviews, the teachers all spoke of fitting the environment to their student's needs, to find different ways to engage them, or nurture different learning styles.

Developing a playing capital through activity-based pedagogy has the potential to turn students into leaders of their own educational experiences with the capability of being independent critical thinkers and creative innovators. During the fieldwork portion of this study, I observed students who planned activities and discussed concepts during teacher-led group discourse, who freely took on roles during group work and delegated tasks to one another, and who gathered the resources they needed to complete assignments and decided what form their deliverables would take based on their individual strengths. The teachers explained how they lay the ground rules for behavior and establish classroom practices through simply discussing this with their students at the beginning of the year. That is when they introduce the protocols that encourage students to behave in the confident ways I observed, which they continually reinforce through gentle reminders when students make mistakes, or through positive reinforcements when they acted in ways that prove they are taking ownership and responsibility for their own learning. Some students took to this process naturally, while others struggled with this format and needed extra help and encouragement.

This behavior does not always come naturally, but is a way of thinking and behaving that must usually be communicated and reinforced. Ms. Sellis explained that some of her students struggled with this autonomy, sometimes asking her what she wanted them to do

when they were given a choice, which she dealt with by brainstorming some options with them, rather than giving them an answer. Once playing capital is internalized students exhibit innovative thinking and behaviors, such as taking videos to show what they have learned, or creating a digital comic to tell a story about their typical day in the classroom. For example, the slope experiment discussed in chapter two illustrates playing capital in practice, when the students took the science experiment to new levels that were far beyond what the teacher required of them. The design of the activity and the social interaction encouraged them to find new and creative ways to experiment with the slope to see what was possible.

Student autonomy and innovation are partly nurtured by the tools that are available in the classroom, and the digital technology that both schools are able to afford for their students, which greatly expanded the scope of their creative exploration. Innovative thinking is also encouraged by the expanded rules for behavior that I observed. The students in both classrooms were given the freedom to use the tools and the space as they wanted, and work with their classmates as they chose, as long as they were working on assigned materials or projects, and there was not an exam in progress. Even though the students in both classrooms were encouraged to apply knowledge from multiple subjects for their activities, which can inspire innovative thinking, the students in Ms. Sellis' class displayed a greater amount of independence when designing and executing personal extracurricular projects. The students in her class had iPads available for everyday use, rather than once a week use of Chromebooks in Mrs. Wake's class, which could partly account for the difference in the quality of playing capital their students displayed.

Based on my observations, it also seems like the amount of in-class workshop time that students had throughout the week and how the classroom space was used were correlated to more instances of creative activity. A designed environment, like an elementary classroom, affects behavior within that setting based on the relationships of the social actors who use the space, and the situational and cultural contexts associated with that environment (Zeisel 2006). At EES the students went to a multipurpose room to work on art projects or science experiments, while the students at STS stayed in their classroom for these types of activities. Ms. Sellis' students also enjoyed more open workshop time when they could work in collaborative groups and make progress on their own projects, like creating a graphic novel on their personal iPads. It is possible that her students displayed this drive and motivation, because they were normalized to the idea that their classroom could be used for creative pursuits and they were given the time and materials they needed to explore subjects on their own terms. Ms. Sellis' students displayed a richer quality of playing capital, encouraged through the design of the classroom and activities, and the technology made available to them.

Playing Capital and Culture Change

Those who have playing capital can claim membership in a social group that has a deep understanding of reciprocity, building trust, and creative experimentation. This form of capital is dependent on social participation, collaboration, and cooperation, as well as consensus-building and negotiation, especially during classroom discussions. These forms of social exchange represent more anarchistic types of communication. Graeber (2004) defines anarchy in terms of egalitarian or democratic social structures, and this

social framework resembles the forms of interaction that take place in an activity-based classroom. The different types of social interactions I observed in the classroom were cooperative, even when some activities encouraged a competitive form of social dynamic. When the students were set up as competitors in classroom games they still found ways to maintain a dynamic of collaboration through social engagement, such as building camaraderie through jokes or forms of assistance.

Playing capital is the capacity to think creatively and work democratically with others, which can transform social interactions in other settings beyond the liminal space of the activity-based classroom. In the activity-based classroom, liminal spaces are entered whenever the students are participating in activities, experiments, or games. These liminal spaces offer a break from typical social structures, giving participants the space to relate to each other in new ways and form *communitas* (Turner 1969). This is a practice that participants - in this case, students - might carry on once they re-enter regular society, meaning when they are at home, and even as they age and work in other environments. These pedagogical methods can result in socializing children to prefer egalitarian practices in the long term, because they may associate this way of relating to others with social discourse and group participation in general through their learning experiences. This association has the capacity to affect the way students work with and relate to others in school, in other areas of their lives, and in their future careers.

There are modern examples of successful anarchistic or egalitarian projects, such as Mondragon in Spain (Graeber 2004), which has inspired many other worker-owned cooperatives around the world (Whyte and Whyte 1991). Worker-owned cooperatives are

businesses or organizations without an explicit or codified social hierarchy, in which the employees or partners are also the owners, who work together through collaboration, consensus-building, and cooperation (Whyte and Whyte 1991). Activity-based learning environments and playing capital encourage forms of social interaction that reflect those practiced in worker-owned cooperatives. It is possible that if the students I worked with have internalized playing capital, they may prefer to work in cooperatives when they get older, as these types of business structures offer a fluid social dynamic that might be more familiar. As they are being groomed to take on positions of power when they get older, some of the students at Rochford schools may incorporate these egalitarian forms of social interaction in more formal ways in corporate or private practice settings.

Once equipped with playing capital, these students may be poised to be future innovators of social structures, favoring more egalitarian practices and behaviors. As discussed in the previous chapter, capitalism as a system relies on innovation to stay relevant with cultural change, and a capitalism that is designed to encourage reciprocity can help achieve social goals and begin to address social ills in ways that are significant in a changing system (Shiller 2013). Reciprocity in a capitalist system may manifest as worker-owned cooperatives, softened social hierarchies, or other forms of democratic ownership that have yet to exist in the U.S. Such changes would also have an effect on the way that people use soft power with the potential to increase citizens' emphasis on negotiation and hybridization. Playing capital is a tool that can help people experiment with social, economic, and political structures to create dynamic cultural systems that can continue to be relevant for the people that use them.

Discussion and Final Conclusions

A major goal of this research was to discover how play was significant in formal education, and how activity-based pedagogies change the learning process. There are also many factors that affect how learning is practiced in classroom environments, which led to the additional foci of education policy, the accreditation process, organizational networks, and resistance play. I conducted two case studies in elementary classrooms to see play and activity in action, and to better understand how these actions relate to the social aspects of learning. I conducted fieldwork at a public and a private school to juxtapose the pedagogical techniques in these different environments. I worked with a third and a fourth grade teacher, one at each school, because these grades are foundational in a student's educational career, and these grades are typically when standardized testing begins. My participant-observation experiences influenced the reciprocal power and playing capital hypotheses developed in this document, which are explained as new or reimagined forms of soft power and cultural capital, based on the systems of exchange and experimentation I observed.

Working as a teacher's aide gave me an intimate view of the daily interactions between the teacher and their students, and between the students themselves. This work was often difficult and unyielding, and I was well aware that this experience was still only a fraction of what the teachers go through on a daily basis, year after year. I developed a new appreciation for the patience and dedication required to teach, and while this work has many challenges and difficult moments, it is nevertheless highly rewarding and fulfilling. Teachers work through these challenges all while keeping constant track of

each student's progress and searching for new and better ways to communicate the curriculum and practice the knowledge with them in interesting ways. The children could oftentimes be quite frenetic and unfocused - understandably, given their ages - and working to keep a group of twenty or more children on task and paying attention can be rather trying for the adult supervisors in the classroom, myself included.

The work is relentless, but the teachers I worked with never stopped trying, and they confided that they feel like they are always learning from their students. Ms. Sellis explained that her role as facilitator allows the children to take the lead in discussions, and that the children frequently come up with new ways to apply the curriculum, like making a comic about a science experiment they did in class to communicate what they learned from it. By sharing responsibility in the learning process, when completing projects, collaborating in group activities, or creating a safe learning environment, teachers enter into a reciprocal relationship with their students, exchanging a portion of the power that accompanies their role for the students' benefit. This exchange constitutes a reciprocal form of power in the classroom setting, the outcome of which includes: greater student confidence and autonomy, a higher degree of intrinsic motivation to engage with the learning process, more self-reliance in completing tasks, and a higher degree of self-teaching. By taking on this role of facilitator, teachers encourage their students to develop the skills they need to be lifelong learners that are socially engaged, capable of mutually beneficial collaboration with their peers and thinking creatively about complex problems.

Some of the most significant insights about play and education discussed in this document relate to the connection to cultural ideals and what activity-based pedagogy does to the learning process. Playing capital has been hypothesized as a unique type of cultural capital, based on the social and cognitive impacts of play. Playing capital is also a resource that one can cultivate, which promotes creative experimentation and innovative thinking. These elements are important to the activity-based learning process, and the student's success in this format, which have been related in this document to our culture's focus on innovation and competition. There are possibly more layers to playing capital, depending on the sociocultural environment and economic and temporal factors, which can be developed with further research. This hypothesis would need to be substantiated with further research as well, which would need to include the study of other playful environments. If it does hold up to further scrutiny, then longitudinal studies could also be helpful to study the long-term effects of playing capital on the social dynamics in organizations, social clubs, and other socially interactive settings, like games, or performance protest.

Activity-based pedagogies are helpful to engage students in the learning process and encourage them to take a leadership position in their own education, as well as a useful format of immediate assessment for teachers as they observe and interact with their students. Conversely, this format can become an issue considering the importance of accountability in our culture. Playful pedagogies rely more heavily on the teacher's personal assessments, which are difficult to easily quantify, since these assessments are necessarily qualitative in nature. Such qualitative assessments of student progress work in

the accreditation process and for intra-institutional collaborations, but they cannot provide statistical results for public or governmental scrutiny like standardized tests can. We rely on and expect quick and easy to digest pieces of information in our culture, which statistics can provide, but they do not paint the whole picture of what is happening in the classroom. Statistics are helpful when comparing pieces of information and to understand trends and probabilities, but not when one's goal is to understand how creative, knowledgeable, or technically proficient students are, or what their range of skills might be.

As is common in research, some of my original expectations based on personal biases and initial research were either fully or partially subverted through the fieldwork and analysis conducted during this study. I expected the two schools to have more differences in curricular content and pedagogical techniques, which was admittedly based on personal bias and experience, but I found that the pedagogical techniques and curriculum were very similar at the schools where I worked. The main differences were in the individual teaching styles between the two teachers I worked with, and the prayer framework practiced at the private Catholic school. The expectation was that I would find certain systems of control and resistance in the classrooms, based on the initial research, and while I did observe these social processes I also noticed that the social interactions between teachers and students were reciprocal, which can be attributed to the emphasis on learning over teaching in current educational philosophy.

Other research expectations were upheld in these small settings, although the scope of application of this knowledge is limited. There were differences between the schools in

this study with regards to adapting policy, and how their organizational networks affected this process. Both principals collaborated with others to construct a curriculum that aligned with the learning outcomes of their institutions and Common Core curricular standards outlined through education policy. The public school principals collaborate together and with the local school board members, while the private school principal collaborates with her teachers and the local diocese. Perhaps Mrs. Kendricks at EES does collaborate with her teachers as well, but this component did not figure prominently in her description of the curriculum design process. Both principals have external constraints they deal with in the form of policy and governing bodies, but it seemed that Ms. Granger of STS has more control over policy adaptation at her private institution. It is difficult to conclude whether this difference in autonomy is common to all public or private schools, but it seems to be the case in Rochford. Despite this apparent difference, both principals communicated that they had some level of autonomy to interpret policy as it relates to curricular design.

Reciprocal power can exist in settings where a social hierarchy is lessened to promote some other benefit, such as student autonomy in activity-based classrooms or egalitarian structures in worker-owned cooperatives. It also can be found in large organizational networks in which soft power is used to exact control without direct observation, such as with education policy and the bounded rationality that accompanies its implementation. Accountability and shared responsibility among actors in social and organizational networks leave room for the reinterpretation of social roles and codes of conduct through structured and informal play in classroom settings, and through interpretive play in

hierarchical networks. Reciprocal power may include resistance, but is not completely defined by it, rather reciprocal power involves the empowerment of social and network actors to lessen disruptions to operative functions in complex systems whatever the scale. That empowerment can be intentional as with structured play in activity-based classrooms, or California's nuanced approach to the adoption of Common Core curriculum. It can also be unintentional as with informal play in classrooms, or the internal assessments schools perform as part of the accreditation process.

This study is limited to the two case studies I conducted, but can be expanded in future research to include other environments. These findings and analyses regarding activity-based pedagogy can be compared to case studies conducted at other schools in the Bay Area. Studies of schools in a variety of socioeconomic environments can prove useful for testing the hypotheses of playing capital and reciprocal power, and potentially expand upon these ideas. Such studies will also help continue to outline the extent to which activity-based pedagogies are practiced, as well as their variety. Reciprocal power has the potential to provide a useful framework for fieldwork conducted in other complex environments, such as any organization, network, or governmental department.

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