How the Interplay of Technology, Public Policy and Teacher Discourses in Education Construct the Teacher Subject

by

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Abstract

This study applies a Foucauldian critical analytic to investigate how different discourses that are present in one Alabama public school are shaping various aspects of the teacher-self. In an environment of increasing technology-mediation of teachers' work that coincides with public policy reforms that aim to systematically manage the activities of teachers through performative practices, this study looks at how these powerful forces impact interactions between technology experts, school administrators and teachers. Primarily through interviews with fourteen school administrators and teachers at one Alabama High School, this case study maps out technology, public policy and teacher discourses to offer a description of how these discourses operate to subtly constitute teachers as normalized subjects by producing knowledge and inducing the effects of power. Bandeen's (2009) and Gore's (1995) frameworks provide the deductive design for data interpretation. By applying these models, teacher retellings are examined for signs of structures of thought and discursive truths that characterize particular ways of thinking about the nature of education, about the meaning of a teacher's work, and about the various possible representations of a teacher's self. The findings demonstrate how teachers reconcile their own personal experiences and professional ethics with the static 'ideal' images that are projected by different discourses and represent teachers in particular ways. In the localized context of the school, teachers resist and alter discourses to produce other possibilities for the critical teacher subject positions they actually occupy. The main contribution of this study is to bring into view

ii

how teachers powerfully question and resist the constraints placed upon their conduct and draw

on their personal relationships with each other to constitute their own ethical teacher self.

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Table of Contents

List of Figures

Chapter I. Nature of the Study

Introduction

The purpose of this study is to use Foucault's critical method as a lens to uncover how different discourses in one Alabama public school are shaping various aspects of the teacher-self. I focus on how teachers relate to technology, public policy and each other, and the challenges and opportunities that are involved. I point out the various ways teachers aim to become ethical subjects which is frequently in opposition to the values, principles, rules and programmatic strategies enacted by technology and public policy discourses that they interact with in their daily work.

Primarily trough interviews with fourteen school administrators and teachers I attempt to map out technology, public policy and teacher discourses in the localized context of a single Alabama high school. These discourses shape how teachers interact with and understand the world, themselves and each other. They operate to subtly constitute teachers as normalized subjects by producing knowledge and inducing the effects of power.

For Foucault, "discourses are about what can be said and thought, but also about who can speak, when, and with what authority" (Ball, 1990, p. 2). His definition of power centers on the relationship between who is speaking and what is unspoken – between what knowledge is privileged and what knowledge is marginalized. Discourses operate to discipline human behavior by cutting off or foreclosing the ability of individuals to make choices. However, discourses can be contested, transformed and disrupted by those who are subject to them. Foucault (1980b)

looks at a discourse as an "instrument and an effect of power, but also as a hindrance, a stumbling block, a point of resistance and a starting point for an opposing strategy" (p. 101).

Technology, public policy and teacher discourses represent differing epistemological points of view of what it means to be 'normal'. They shape 'relations of power' in which knowledge is used to justify the integration of commonplace procedures, processes, methods or techniques that conduct the everyday actions of individuals and become routine. Sometimes the different discourses overlap and are mutually supporting, but they also frequently collide in what Foucault calls "strategic power games" that focus on the struggle over the process of reasoning that defines the present actuality or 'truths' embedded in subjects (Foucault, 1984, p. 18). In schools, there exists an agonism or tension between how technology, public policy and teacher discourses view the 'right' way to teach. Discourses make available certain 'ideal' teacher subjects, but other unexpected subject positions emerge from the intersections and collisions of discourses. The major finding of this study is that teachers can and do deicide and to constitute themselves in different ways than what is anticipated.

The significance of my study is in analyzing how teachers are simultaneously responding to the rapid application of technology in education in an atmosphere of accountability reforms. There is a clear overlap between the goals of technology and public policy discourses, but technology also frequently supports the contrary aims of teachers and introduces its own outside interests to education. This study provides authentic examples of how teachers experience technology and react to public policy, which are sometimes seen as one and the same. It is significant because it gives a voice to teachers by revealing their engagement with power/knowledge relations in the setting, how they resist the disciplinary techniques of regimes of power and how their subjectivity is shaped by the competing outside interests and by their

own self-determination. This unique focus differentiates the study from other published work and makes it a valuable contribution to the literature.

The knowledge produced by this study will hopefully encourage educators to reflect on their situation and think critically in different ways about the impact of discourses on their psychology and daily lives. It challenges educators to consider how the benefits and promises of technology and public policy can be fully realized without compromising their ethical values or limiting their freedom to teach how they think is best.

In this chapter, I will first situate technology and public policy discourses in a broader politicize national context. Next, I briefly explain how Foucault's theories can be used to examine the systems of thought that reinforce discourses in education and produce normalized, disciplined subjects. Finally, this chapter ends by presenting the problem statement, purpose, significance and limitations of this study.

Background

The rapid modernization of education through technology is dramatically changing how educators teach and how school administrators manage. Teacher discourses assert that the ascendancy of accountability ideology as the dominant political force that is guiding public policy is also another concealed driver of the technology shift. In this section, I summarize the categorical imperatives that justify the technology shift and represent the 'truths' of technology discourses. These beliefs overlap with the capitalist rationalities that reinforce public policy discourses that frame the nature of education as functioning to support economic interests. I also characterize the rhetoric of oppositional teacher discourses that is based on criticisms of the rationales that characterize wider technology and public policy discourses.

Promise of Technology

The values and principles of technology discourses in education are exemplified by Willings and Levine (2009) in their industry sponsored white paper, *The Digital Promise: Transforming Learning with Innovative Uses of Technology*. In this report, the authors rationalize that schools need to keep up with rapid "pace of technology innovation in other sectors of our society…[and] embrace the digital promise that can propel childrens' learning" (Willings & Levine, 2009, p. 13). They encourage schools not to wait for research that would confirm the efficacy of technology because "digital media are already a prevalent fixture in the lives of contemporary students [and] students [need to] be prepared for the workforce of the 21st century" (Willings & Levine, 2009, p. 4).

In addition to the numerous ways in which technology can practically enhance learning experiences by making instruction more engaging and collaborative, technology is defined by Wellings and Levine (2009) as more than just a list of advantages over traditional ways of teaching; it is believed to represent a completely new approach for 'rethinking' or 'reimagining' education around the ideal of personalized, self-directed and just-in-time learning. Willings and Levine (2009) point out that technology makes schools "more relevant, [is an] essential tool for inquiry-based learning…[and] supports learning beyond the traditional school [by allowing students to] communicate and learn for the real world" (p. 4). For them, these promises add up the possibility of one big 'prize': tailoring instruction through adaptive software and connected devices to "address the individual needs [of students],…further engaging learners and differentiating instruction" to empower students to self-direct their own learning, which is believed to be the key to reigniting their interests in learning and overcoming the barrier of them being "bored or disengaged" (Willings & Levine, 2009, p. 5).

Having covered the urgent need for teachers to embrace technology change, Willings and Levine (2009) shift focus to appeal to public policy interests. They claim that technology can help to achieve the reform goals of *Race to the Top* not only by directly supporting student achievement, but also by setting new more rigorous standards for education. Referring to a new definition of literacy adopted by the National Council of Teachers of English (NCTE), the authors argue that technology represents a new part of curriculum content which requires students and teachers to be proficient in it (Willings & Levine, 2009, p. 6). They also argue that "data systems can help educators move students toward meeting higher standards…[and] help school leadership teams pinpoint the needs of learners, select or craft interventions, and monitor progress" (Willings & Levine, 2009, p. 7). The authors alternatively frame technology as a tool for measuring results, assessing programs, tracking progress and producing evidence of teacher and student performance. They believe technology-enabled data collection systems positively facilitate "data-driven decision making" that is deemed necessary by recent public policy reforms (Willings & Levine, 2009, p. 7).

Even though many teachers embrace the sensible benefits of technology as outlined by above by Willings and Levine (2009), some opponents to the technology-centered change counter that there are no "technology shortcuts to good education… [and] technology is unable to substitute for good teaching" (Toyama, 2011). Toyama (2011) argues that technology "at best only amplifies the pedagogical capacity of educational systems; it can make good schools better, but it makes bad schools worse." He also refutes the essentialist claims of technology by calling them "myths" that hide the technology's "poor historical record" in education (Toyama, 2011).

Opponents of technology change also contend that hidden within the new technology are performative and data-driven perspectives on education that compromise the integrity of the

profession. From this view, technology is being misused to facilitate standardized tests that hold

teachers accountable for student achievement, which inevitably leads to erosion of teachers'

freedom. This view is epitomized by Gerald Conti's famously resignation letter in which he rails

against technology-enabled accountability reforms:

> …my profession is not only devalued, but denigrated and perhaps, in some quarters despised. STEM rules the day and "data driven" education seeks only conformity, standardization, testing and a zombie-like adherence to the shallow and generic Common Core, along with a lockstep of oversimplified so-called Essential Learnings. Creativity, academic freedom, teacher autonomy, experimentation and innovation are being stifled in a misguided effort to fix what is not broken in our system of public education… (Strauss, 2013).

Additionally, opponents argue that the technology shift is partly driven by corporate self-

interests, rather than the promoted noble goal of enhancing learning. It is believed that education

represents the possibility of a new markets for technology companies that they want to exploit

and many teachers see their reasoning as just a marketing for their products. For example, Sirota

(2011) claims that the new era of accountability has resulted in a "revenue jackpot for testing

companies and high tech firms, even though many of their products have not objectively

improved student achievement."

As highlighted by the arguments of both proponents and critics of the technology

'revolution' in education as outlined above, the interaction between technology and teachers who

use it is characterized not just by its effects on what teachers do, but also by disagreements over

the nature of technology itself. Technology experts attempt to frame the change as

simultaneously advancing the interests of both public policy and teachers while pushing their

own unique agenda of wholly technology-driven learning. Technology provides teachers with the

tools to make their jobs easier, but teachers recognize that the advantages come with the 'catch'

that teachers have to change what they do to meet the expectations of outsiders who they believe

do not understand what it is like to be a teacher. Technology not only enables the work of educators, it also constrains what and how they teach. The contradictory views of technology experts, school administrators and teachers about the nature of learning is a source of tension that characterizes their relationships. Each of these perspectives represents competing political interests or 'discourses' that struggle over which 'truths' are legitimated as the official way to think about education.

Intersection of Technology and Public Policy Discourses

As briefly mentioned in the preceding section, public policy discourses take advantage of technology to meet the demands of accountability. March, Pane and Hamilton (2006) refer to the "data-driven decision making" focus of public policy as a new "mantra of education" that emerged with the *No Child Left Behind Act* and continues to play "a prominent role in federal and state accountability policies" (p. 2). It is believed that continuous data collection is needed to "meet certain criteria with respect to grades and subjects tested, the reporting of test results in aggregated and disaggregated forms, and school and district accountability for the improvement of student performance" (March, Pane & Hamilton, 2006, p. 2). The authors point out that the data-driven models behind public policy reforms emulate management technologies "from industry and manufacturing, such as Total Quality Management, Organizational Learning, and Continuous Improvement, which emphasize that organizational improvement is enhanced by responsiveness to various types of data" (March, Pane & Hamilton, 2006, p. 2).

The technology of public policy – electronic databases, learning management systems and online standardized testing – are purported to produce objective data that school administrators can use to logically break down the intangible elements of education into manageable pieces that can be measured. Selwyn (2011) describes these systems as "based

around the activities of reporting, measuring, monitoring assessing and accounting –

'rationalized' procedures for producing knowledge of what is happening rather than supporting

teaching and learning" (Selwyn in Perelman, 2014, p. 91). The systems produce data that

demonstrates student and teacher performance in relation to common standards – to monitor

progress and show evidence of learning. This reasoning assumes that data allows administrators

to identify and diagnose performance problems, and thus improve education.

Digital technology is believed to be ushering in a new era of accountability and

transparency. Electronic records of a student's progress supposedly remove the arbitrariness or

mystery round the grading process by making it visible to others. They make schools and

teachers accountability by revealing "the transparency of whole school working practices"

(Selwyn in Perelman, 2014, p. 91). Through the data, it is shown what teachers are doing, which

makes public and transparent their performance in the eyes of others and thus enables them and

their schools to be held accountable. The combination of digital technology and performance

measures give parents and the public a way to monitor and inspect teachers. It follows, that top-

performing schools will be recognized and rewarded and low performing schools will be shamed

and forced improve or shutdown (Steinberg, 1998).

Based on performative models forged in the private sector, learning management systems

provide relevant data to school administrators to make informed management decisions and to

teachers so they can self-assess whether they measure up to the public policy expectations. Ball

(2003) explains that business-like technology is "closely inter-dependent in the processes of

reform…[and] plays an important part in aligning public sector organizations with the methods,

culture and ethical system of the private sector…that offer a politically attractive alternative to

the state-centered, public welfare tradition of educational provision" (p. 216). In this sense,

public policy is not only leveraging technology to govern education; technology is manipulating public policy to adopt corporate management values and practices. Ball (2003) contends that public policy technology rests on creating a "new environment" focused on "monitoring systems and the production of information" (p. 216). He defines 'performativity' or accountability as "a technology, a culture and a mode of regulation that employs judgements, comparisons and displays as means of incentive, control, attrition and change based on rewards and sanctions" (p. 216).

These performative systems may appear practical and objective, but Ball (2003) asserts that they "engender what Lyotard (1984) calls the terrors of performativity" (p. 216). Ball (2003) clarifies: "…teachers, as ethical subjects, find their values challenged or displaced by the terrors of performativity" that become the grounds teachers' personal struggle against public policy reforms (216). Ball (2003) argues that the technology of public policy reforms "are not simply vehicles for the technical and structural change of organizations but are also mechanisms for reforming teachers (scholars and researchers) and for changing what it means to be a teacher, the technologies of reform produce new kinds of teacher subjects…This is the struggle over the teacher's soul" (p. 217).

National Public Policy Reforms

Public policy discourses assert that the United States is losing its economic edge over other countries due to a 'failing' public education system and in order to fix the apparent severe achievement gap between American schools and the rest of the world; education systems must be radically reformed (see *A Nation at Risk: The Imperative for Educational Reform*). In the 1990s public policy reforms usually included three components: raising content standards, establishing performance standards for teachers, rigorously assessing students and implementing

accountability systems (NCES, 2003, p. viii). The National Center for Educational Statistics

(NCES) found that most states had implemented these policy components, which they define as:

> *Content standards* define what students should know and be able to do, while
> performance standards indicate how well students must perform to be considered
> proficient in a given subject area. *Statewide assessments* measure student progress toward
> attaining the goals defined by content and performance standards, and *accountability*
> *systems* are intended to collect the information necessary to hold schools and school
> districts responsible for the performance of students (NCES, 2003, p. viii).

In the previous decade, public policy reforms underway in the United States were focused

on solving the perceived 'ills' of education by continuously fine-tuning common standards and

ratcheting up standardized testing. In 2001, President George W. Bush authorized the *No Child*

Left Behind Act. In short, the purpose of this law was to establish testing mandates to raise

standards of academic achievement (US Department of Education, 2001). At the core of the law

was the policy to "use student scores on standardized exams to determine whether schools are

succeeding or failing to make Adequate Yearly Progress" (Hursh, 2006, p. 16). The

consequences of not meeting this goal include:

> …a set of progressively more stringent sanctions including permitting students to transfer
> to another school, corrective action and provision of supplemental education services,
> reconstitution (including replacement of school staff), and restructuring (including state
> take-over, reconstitution as a charter school, or private management)" (Lipman, 2006, p.
> 36).

During his first term, President Barack Obama implemented some changes to public

policy called *Race to the Top* that gave states the opportunity to request exemptions to some of

the requirements of the *No Child Left Behind Act*. Under this program, schools also receive extra

federal funding if they can demonstrate that they have developed and implemented common

standards and high-quality assessments, and have made significant progress in raising

achievement scores (US Department of Education, 2009). *Race to the Top* prompted 48 states to

adopt Common Core Standards for K-12, which has triggered these states to implement a uniform curriculum (Common Core State Standards Initiative, 2012). In its current reiteration, *Race to the Top* has incorporated a new focus a preparing students with technology skills to fill jobs in an increasingly global and digital world (see *National Educational Technology Plan* and *College- and Career-Readiness Standards*).

Through these successive public policy reforms, the rules that govern education in United States are defined and legitimated by law. They produce discourses that reinforce certain political positions that are presented as the 'right' ways to view the nature of education. They systematically privileged or marginalized certain beliefs that define what is considered 'normal' conduct and modes of thought, and this ultimately has subjectifying effects on teachers. For teachers, the rationales of public policy compel them to question their own reality, but this internal reflection often leads them to conclude that public policy's truth claims make no sense, as I discuss in the next section.

Collision of Public Policy and Teacher Discourses

Critics of public policy reforms counter that 'empirical' accountability models are inadequate for many reasons. The argument runs that the dominant accountability ideology is largely based on an oversimplified cause-and-effect chain of reasoning that does not actually improve education (Sloan, 2000; Linn, 2000; McNeil, 2000). Furthermore, it is argued that deeper understanding, subtlety of thought, creativity, critical thinking, perseverance, leadership and sensibility about self and the world cannot be measured by the multiple-choice questions included in standardized tests (Yeh, 2001; Paris, 1998; Madaus & O'Dwyer, 1999). Researchers critique the scientific validity arguments supporting standardized tests procedures and assessment models (Camilli & Bulkley, 2001; Cizek, 1996; Downing & Haladyna, 1996; Kortez,

2000). Opponents are also concerned about the negative effects of accountability models, which are thought to compromise good teaching (Hoffman, Assaf & Parris, 2001; Shepard, 1991). And finally, many educators are especially concerned about the effects standardization may have on minority and 'nonstandard kids' (Ohanian, 1999; Kohn, 2000; Popham, 2001).

Teacher discourses contend that the knowledge underlying public policy reforms is dominated by behaviorist notions that exaggerate the effectiveness of test scores as a decision-making and motivational tool. For example, Kortez (2000) questions the assumptions of testing policies that "rely on indirect measurement of teacher performance; that is, the quality of teachers' performance is inferred from students' scores" (p. 3). He says that test scores are "fallible in two senses: in the traditional statistical sense that they include measurement error, and in the sense that they are vulnerable to corruption or inflation" (Kortez, 2000, p. 4). Kortez (2000) concludes that "increases in scores on accountability-oriented tests are not sufficient evidence that education has really improved, and imposing these tests is insufficient as a means of encouraging improvement" (p. 24).

Many educators oppose accountability reforms on the grounds that when tests are used to compare and rank teachers it has negative consequences on learning. Gunzenhauser (2003) warns about the consequences of result-driven education:

> From a scientific standpoint, high-stakes tests cannot do all that policy makers want them to do. Because of the high stakes attached to the tests, policy has had the unintended effect of encouraging a default philosophy of education: a vision of education that values highly what can be measured, and more problematically, it values most highly the measurement itself (p. 54).

It is believed that data-driven reforms attempt to limit teaching to prearranged curriculum and teaching practices that are aligned with the tests in order to inflate scores. Gunzenhauser (2006) clarifies: "…teachers find themselves compromising their educational visions, engaging in

practices such as 'teaching to the test', constricting the curriculum, devoting precious resources to test preparation materials, and drilling students on practice tests" (p. 244).

To contrast the differing perspective, supporters of accountability reforms assume that knowledge attained through testing of one's performance level is somehow immediately empowering and an effective weapon against educational failures. Public policy discourses support the belief that assessment data is the 'cure' for failing schools, 'bad' teachers and underperforming students. Teacher discourses counter that this attitude facilitates shortsighted strategies to education that overlook underlying social, economic and environmental factors. Most importantly, teacher discourses are concerned that interventions encouraged by these models have the effect of reducing teacher autonomy and actually harm schools by encouraging bad teaching. These stances, characterize teacher discourses that stand in opposition to the dominant public policy discourses.

Unique Corporate Interests of Technology Discourses

Notwithstanding the opposition of teacher discourses, public policy of the *No Child Left Behind Act* and Obama's *Race to the Top* are pushing schools to meet benchmark standards for students' proficiency in core subjects as measured and reported by standardized testing systems. As a result, new electronic standardized testing technologies have become big business, which introduces a hidden driver of the widespread technology adoption in schools that has little to do with the hyped promises of technology to enhance learning. As I mentioned earlier, critics of technology change contend that technology companies are primarily motivated by profits. For example, Burch (2006) uncovers that third party suppliers have turned standardized testing into a multi-billion-dollar industry in the United States.

These ed-tech corporations not only create standardized tests, they use the *No Child Left Behind Act* as a mandate to provide full-service solutions that "align tests with other aspects of districts" reform agendas (Burch, 2006, p. 2590). They also pair these services with another performative technology product, student information management systems, that track student traits and learning activities. By integrating testing data, with information about students, these companies automatically link test scores with other data about students to facilitate the inspection of schools in relation to common standards (see National Center for Education Statistics). School systems are using these data collection tools to evaluate educational outcomes and drive management decisions. Burch (2006) comments about the realities of the private sector's involvement in education's accountability-driven technology shift:

> The firms that once simply developed the tests now also play an important role in designing the interventions for failing students and schools. Firms that once simply provided raw test score data to district administrators now make decisions that shape how schools and districts will interpret that data, and even the structures through which they communicate. Firms that once served students with severe emotional and behavioral needs now are responsible for educating students whose only 'special need' is their poor performance on standardized tests (p. 2595).

Corporate values also justify the integration of technology in education to support efficient operation of schools. Adkins (2011) argues that technology discourses promise school systems that new technology will reduced costs: "the rapid growth of virtual schools, the dramatic increase in online students, the recession, and state budget cuts are acting as iterative catalysts for self-paced e-learning in the preK-12 segment" (p. 7). Furthermore, blended learning and distance education technology is presented as a solution to budget constraints and teacher shortages (Horn et al., 2014; Dwinal, 2015). It is assumed that it is more cost-effective for schools to outsource classes to online providers than it is to spend money on facilities, personnel, faculty and textbooks for classroom-based learning (Bakia, Shear, Toyama & Lasseter, 2012).

Another economic consideration is that technology discourses pressure schools to apply new digital technologies because they make schools look 'high-tech', which is what policymakers and parents are demanding. Schools face pressure to modernize because increased innovation and cutting edge technology is seen as the backbone of educational change and a way to reinvent education (Sims, 2014). From this view, technology-rich schools are better equipped to enhanced learning and prepare students for the future and will be in a better positon to compete with other schools in the open market that is coming to education (Groff, 2013).

Teacher discourses are concerned that technology's profit motives and corporate interests are imperceptibly pushing for more school privatization as evidenced by the growth of school choice programs. Opponents of technology change, argue that technology is framed as a practical solution to solve perceived performance issues and cut costs in order to instill corporate-like management values and accounting systems into education for the purpose of making schools operate more like private companies. Patton (2014) summarizes this view: "The federal government spends some $600 billion a year on education and the corporations want it. And, that comes through charter schools; it comes through standardized testing; and, it comes through breaking teachers' unions." From this perspective, technology is seen as threat to teacher professionalism, not only because it reinforces accountability ideology, but also because it attempts to shake up and substitutes the conventions of education with a corporate mentality.

Foucault on Discourses, Power and Subjectivity

In the previous sections I have attempted to highlight the antagonist relationship between education reforms and teachers. The differing perspectives of technology experts, school administrators and teachers that I characterize represent separate discourses that are based on various fields of knowledge. These discourses reinforce universal concepts of ethics, justice and

morals that can and do exist as a result of social rationalizations and normalizing constructs

linked to modernity. Each is composed of different truth claims and essentialist notions about the

nature of education that are constructed as alternatives to each other, but eventually loosely

coalesce into rules for governing education.

I am not concerned with any of the points of view reflected in these discourses are true or

not; rather, this study employs Foucault's poststructural philosophy to investigate how these

discourses hold up their knowledge as reliable and valid in order to influence the course of

education, the conduct of teachers and ultimately construct various 'modes of being' that

constitute teachers as subjects (Gros, 2006, p. 512). Following Foucault's methods, I discard the

usual critical models that problematize the outcomes of public policy and the practices teachers,

and look instead at the everyday lives of teachers in the context of one school to explore how

these discourses regulate and normalize them as individuals.

Foucault's Definition of Technology

From Foucault's perspective, nearly everything individuals routinely perform depends on

an interaction with technology that structure their very modes of existence. Foucault's main

focus is on how technology is used in governing to mediate various aspects of the self in society

by constraining or disciplining human action. In his opinion, various forms of knowledge and

power that manifest as modern technology individualize the subject on whom and through whom

it operates (Foucault, 1980a). The effects of power are imposed by technology that forms the

framework for strategic systems that attempt to discipline the conduct of teachers and shape their

identity.

Foucault defines technology as both physical tools and administrative techniques that are

integrated into the routine lives of individuals. When Foucault discusses technology, he uses the

term broadly to denote the commonplace procedures, processes, methods or techniques that conduct the everyday actions of individuals (Foucault, 1984). For Foucault, technology is a kind of metaphor for reflecting on the relationship between power and disciplinary methods in shaping subjectivity.

Constituting the Subject

Most of Foucault's work centers on explaining technology and programmatic strategies in relation to governance and the constitution of subjects. Foucault explains that modern society is a "disciplined society" comprised of "disciplined individuals" (Foucault, Lotringer & Hochroth, 1977, p. 218). In Foucault's view, technology creates a disciplinary apparatus that authoritative power uses to define and enforce normalcy through boundaries, rules, procedures and punishment. For Foucault, technology and policy are inseparable and the influence of technology on individuals is inescapable. Managers situate the work of individuals in institutional norms, practices and complying with rules, guidelines and directives – what Foucault calls the "doings of doings" (Foucault, 1983, p. 187).

Foucault believes subjectivity constituted by modern technology and cultural practices. He defines the techniques that reinforce normalcy and govern human beings as 'techniques of power' (Foucault, 1980a). He uses this term to emphasize how technology is intertwined with modern forms of power. Foucault highlights that technology is not neutral and entirely pragmatic, but rather technology derives from and is continuously perpetuated by underlying moral values and relative views of the world that result in technical control of individuals through knowledge. As Foucault says, technology is situated and validated in a "field of power" that is located in the micropractices of individuals and "bits and pieces" of discourses as "tools or methods" that effect how "limitations operate" on individuals (Foucault, 1977, p. 26).

For Foucault, power does not exist in and of itself. Rather, power is a political discourse and a relationship between individuals and institutions that is mediated by technology, programmatic strategies and social relations. Power is a fluid and historical discourse, which can be positive and negative (Foucault, 1977, p. 194). As Foucault (1980b) says, "power is not an institution, and not a structure; neither is it a certain strength we are endowed with; it is the name that one attributes to a complex strategically situation in a particular society" (p. 93).

Foucault defines the process of discursive formation as "a space of multiple dissensions; a set of different oppositions" (Foucault, 1977, p. 155). Government shapes individuals, but individuals also construct government. In other words, the 'social collective' is made-up of individuals who are both the agents and subjects of power. Knowledge or 'truths' linked to the exercise of power are actually dynamic cultural artifacts. According to Foucault (1984), government simply seeks to use political power and modern disciplinary technologies to fulfill its pastoral purpose of maintaining equivalence in society – governing life, salvation, health, and well-being (Foucault, 1984). Individuals still have a voice and groups of individuals can organize to exercise their agency in opposition to the official norms imposed by institutions.

For Foucault, "power comes from below; that is, there is no binary and all-encompassing opposition between rulers and ruled at the root of power relations, and serving as a general matrix – no such duality extending from the top down and reacting on more and more limited groups to the very depths of the social body" (Foucault, 1980, p. 94). Instead, Foucault (1988c) looks at power as "strategic games between liberties – in which some try to control the conduct of others, who in turn try to avoid allowing their conduct to be controlled or try to control the conduct of the others – and the states of domination that people ordinarily call power" (p. 19).

This definition suggests that individuals have the power to act to define themselves, rather than being merely the passive targets of a transcendent power.

Resistance as a Form of Power

The issue of resistance is central to Foucault's views on power relations. Leask (2009) clarifies, "power-relations can now be understood as being constituted by multiplicity of points of resistance; present everywhere in the power network" (p. 65). Foucault (1980a) describes the process resistances as "inscribed in" power and the "irreducible opposite" of power (p. 95). Rose (1999) expands on this idea: "government through freedom multiplies the points at which a citizen has to play his or her part in the processes that govern him. And, in doing so, it also multiplies the points at which citizens are able to refuse, contest, challenge those demands placed upon them" (p. xxiii).

For Foucault, power is a 'strategic power game' in which individuals constitute themselves. Leask (2009) summarizes Foucault's view of power games:

> The subject is still regarded as a kind of fabrication – but this a self-fabrication…one's relationship with oneself can become the site of a critical refusal of normalizing power: self-cultivation and self-care (ethics) can provide resistance, or elements of resistance, to the wider regime of governmentality (p. 64).

From Foucault's perspective, "where there is power, there is resistance" (Foucault, 1980b, p. 95). Resistance may not be a reaction to powerlessness, but instead the assumption of power used in the interest of forming contradictory discourses (Foucault, 1980b).

Teachers can resist disciplinary power techniques by deconstructing dominant discourses and exposing the politics of truth behind them. Foucault (1980a) says that opposing power involves "detaching the power of truth from the forms of hegemony, social, economic, and cultural, within which it operates at the present time" (p. 131). By exposing 'fictions' in the

dominant discourse, teachers may disrupt it and develop a counter-discourse based on different

set of values, morals and principles that is no longer faithful to the regime of truth, but rather to a

sense of self-care. Foucault (1980b) suggests that discourse in the starting point for resistance:

> Discourses are not once and for all subservient to power or raised up against it…We must make allowances for the complex and unstable process whereby a discourse can be both an instrument and an effect of power, but also a hindrance, a stumbling point of resistance and a starting point for an opposing strategy. Discourse transmits and produces power; it reinforces it, but also undermines and exposes it, renders it fragile and makes it possible to thwart (p. 100).

Avoiding the Repressive Hypothesis

From Foucault's view, resistance is a struggle to be free from the process of subjectivity.

He writes, "Maybe the target nowadays is not to discover what we are but to refuse what we are"

(Foucault, 1983, p. 216). However, Foucault warns of the dangers in seeking another 'truth' to

replace an old one. Alternative discourses also have different ends that are not necessarily better

or worse than the original discourses. Johanesson (1998) explains:

> The very same ideas and practices can be liberating and potentially dangerous, and they can do this at the same time because they begin to circulate through the social body of the opposition as an unquestioned truth. To point out the potential danger of the counter-position is not to reject, for example, subject integration but to emphasize that it is dangerous to naively believe in its good (Johannesson in Zembylas, 2005, p. 32).

Zembylas (2003) emphasizes Foucault's notion that "power works through, not against

subjectivity" (p. 125). Resistance is possible because of power relations, which are themselves

possible because of resistance. They are mutually manifested in the sense that it is difficult to

separate the instruments of power from the effects of power. The current regime of truth is not

completely 'bad' and not totally 'good' either. Zembylas (2003) points out that resistance is

possible "only if power is seen not as necessarily repressive but as something that can have

positive effects" (p. 125). Foucault (1980a) uses the following analogy to emphasize the point that resistance is subjective:

> A delinquent puts his life into the balance against absurd punishments; a madman can no longer accept confinement and the forfeiture of his rights; a people refuse the regime which oppresses it. This does not make the rebel in the first case innocent, nor does it cure in the second, and it does not assure the third rebel of the promised tomorrow. One does not have to be in solidarity with them. One does not have to maintain that these confused voices sound better than the others and express the ultimate truth. For there to be a sense in listening to them and in searching for what they want to say, it is sufficient that they exist and that they have against them so much which is set up to silence them...It is due to such voices that the time of men does not have the form of an evolution, but precisely that of a history (p. 452).

Foucault's above remarks suggest that there is no need to agree or disagree with the stances of resistance – to validate the 'truth' of their being. Foucault (1988b) is only critical of technology when it deprives individuals the potential to shape their own lives into "something quite different" (p. 294). For Foucault (1988a), "a system of constraint becomes truly intolerable when the individuals who are affected by it don't have the means of modifying it" (p. 226).

Even though Foucault is critical of how technology, pragmatic strategies and social relations are used to shape human conduct, he does not attempt to condemn them. He only intends to reveal how technology and management strategies are not neutral and to encourage individuals to reflect on how even though they may appear to practically facilitate the achievement of certain goals they have other hidden effects. To the contrary, most technology and programs in schools cannot be characterized by their coercive and disciplinary functions. As Discourses exist within a wider context as well as the local context, and may be linked to many different interests outside the school's internal goals.

Foucault (1980b) argues that power cannot be explained in terms of a strategy or scheme directed by individual actors. He contends that the "implicit character of the grand, anonymous

and almost mute strategies that coordinate the loquacious tactics whose 'inventors' and authorities are often lacking in hypocrisy" (p. 95). He says that power is relational and a necessary function of the modern world. Davidson (1997) reveals that ideas or theories based on supposed causal forces like influence, social change, crisis, and self-interest, all seemed to Foucault to provide rationalizations that are "more magic than real" (p. 10).

For this reason, Foucault is intentionally neutral in regards to the 'techniques of power' and avoids making any judgments. Why his ideas about technology, power relations and programmatic strategies exhibit a great deal of skepticism about them, Foucault rejects notions that the power they impose is always oppressive and negative. He believes that liberation theories are based on certain contrived truths that initially attempt to disrupt the status quo, but inevitably lead its supporters to enact the same disciplinary techniques, which reinforce slightly reformed power relationships (Foucault, 1988c). There is a great deal of concern on the part of teachers about how the public policy discourses are corrupting the supposedly impartial purpose of technology change in public schools, but this does not mean that an alternative discourse based on other representation of 'truth' would be any less repressive.

Statement of Research Problem

For Foucault, critique involves investigating "how an entire domain of true-or-false statements" are regarded as true and are "taken as serious scientific" knowledge (Sawicki in Smart et. al, 1994, p. 38). Sawicki (1994) notes that Foucault "does not question technology" in terms of the correctness of epistemology, but rather "in analyzing the social effect of our taking them so seriously" (Sawicki in Smart et. al, 1994, p. 38). In this tradition, I aim to uncover the complexity of how discourses mediate social interactions in schools without passing judgment. Foucault's critical analytical methods do not focus on the problems of government, strategy or

policy, but rather on the 'genealogy of the subject' and 'politics of truth'. In Foucault's (1982) own words: "A critique does not consist in saying that things aren't 'good' the way they are. It consists in seeing on just what type of assumptions, of familiar notions, of established and unexamined ways of thinking the accepted practices are based" (p. 456). The Foucauldian research process focuses on investigating the 'truths' behind discourses by examining the historical and political conditions that create the new forms of knowledge on which they are based (Foucault, 1991, p. 79).

In this study I examine how discourses discipline individual behavior and thus shape identity, but I also considers how individuals have the capacity to act upon themselves and how this is tied into the 'regime of power' that operates on individuals to compels them to conduct and modify themselves in a way that reproduces normalcy. Stickney (2012) explains that Foucault opens discourses to problematization by "revealing how and why certain things (behaviors, phenomena, processes) became a *problem;* how at certain historical moments behaviors became characterized as 'mad' or 'criminal', whereas at others they are neglected, and how new subjects of investigation and disciplines emerge" (p. 653). The 'problem' of this study is how dominant discourses in education silence certain things that teachers believe are 'true' and erase certain practices that teachers think are important – how certain language and practices that were once considered essential are made symbols of deviance under a 'regime of power'. I am interested in technology and public policy discourses not because I believe their underlying rationales are flawed, but because they attempt to use their relative rationales to foreclose on other possibilities for thinking about and practicing education.

Foucauldian methods look at the 'breaks' in the 'apparatus of power' where individuals find the space to resist, and also considers how the resistance itself may characterize discourses

(Lemke, 2000, p. 9). This study investigates how teachers exercise self-agency to construct their own ethical selves which is characterized by their resistance to dominant discourses. How discourses work to individualize subjects becomes a concern when individuals no longer have the power to challenge authority and constitute themselves – when they lose agency and the ability to resist. The only reason I would see technology, public policy and teacher discourses as a problem is when any of them deny teachers the opportunity to shape their own lives into "something quite different" (Foucault, 1988a, p. 294). Politically-driven discourses are not problems until individuals who are subject to them cannot change them (Foucault, 1988a, p. 294).

From this perspective, my critique focusses on examining and deconstructing 'regimes of power' in education that privilege some modes of thinking, doing and being that are taken as 'true' and marginalize others. Problems appear when the critical speech and professional goals of teachers are habitually disallowed and the possibilities of what teachers can become are too limited – when the boundaries that define the space in which they work are excessively constrained.

Purpose of the Study

The increasing pace of technology change in education has lead me to ask how it is used to mediate the work of teachers to achieve political aims other than the apparent goal of enhancing learning. Under the current regime of accountability, technology is an instrument of power that regulates and normalizes teachers to 'right' modes of conduct as arranged by public policy, but I also believe that other hidden interests are imbedded in technology – it is not neutral. Furthermore, I contend that teachers find ways to adapt technology to achieve their own professional goals that deviate from the intent of

technology and public policy discourses. My aim is to map out technology, public policy and teacher discourses in relation to each other. I want learn how these discourses construct different realities and frame what teachers can do and become. Ultimately, the purpose of this Foucauldian research is to look at how technology and public policy discourse intersect and collide with each other and teacher discourses to produce unexpected subject positions.

Foucault argues that various forms of knowledge and power that manifest as modern technology individualize the subject on whom and through whom it operates (Foucault, 1980a, p. 98). From this perspective, subjectivity is constituted by modern technology and cultural practices. The focus of Foucauldian-based studies, and this study, is on institutional knowledge and practices that manifest as technology and subsequently influence identity. I aim to uncover how discourses produce subjectivity by deconstructing both the knowledge and power that mediate various aspects of the teacher-self within the context of one Alabama high school.

Specifically, the objectives of this study are fourfold. First, uncover how localized discourses in the school reinforce certain values, principles and practices that constitute social norms among teachers. Second, examine how discourses apply 'techniques of power' to discipline teachers and compel them to self-regulate themselves such that they internalize and reify the norms that construct certain ideal subject positions. Third, describe how educators find certain 'spaces left free' in which to exercise agency and autonomy without directly challenging the rationality of the dominant discourse. Lastly, show how teachers modify discourses with their own knowledge to transform power relations and allow for alternative and unexpected constitutions of the teacher subject potions based on Foucault's ideas of self-care and the ethical self.

Following in the tradition of Foucault, this study starts with the notion of resistance and the tension between structure and agency – between how 'regimes of power' attempt to constrain a teacher's behavior and his or her desire for autonomy based on their own ethical views. This account takes a closer look at how the concepts of resistance and conflict partly explain the complex power relationships between teachers and the technology and programmatic strategies that compose public policy. It identifies how discourses may limit or expand the possible subject positions of teachers and how teachers go about constituting themselves within the context of the current environment. It explains how technology saturates public schools and influences public policy discourses and teachers.

Research Questions

This study focuses on the apparatuses producing power and subjectivity in public schools as sites where the technology and public policy is used as a mechanism of constraining teaching behavior and thought. Special attention is given to new technology, techniques and practices that support the dominant accountability ideology and how these 'regimes of power' accomplish subjectification. The focus of this study is on uncovering how teachers respond to the expectations of technology and public policy discourses and how hidden acts of resistance among teachers produce very different subjectivities from what school administrators expect. The six research questions are:

1. What are the discourses available to teachers in public schools and how are they formed?

2. How do these discourse create systems of power and knowledge that regulate and normalize teachers?

3. How do teachers interact with these discourses to activate different techniques for modifying themselves such that they continue to internalize and reify social norms, which influence their subject positions?

4. How do teachers react to, circumvent and resist their regulation and normalization by these discourses by claiming their own power through the development of counter-discourses?

5. How do teachers practice self-care to reconstitute their identity based on their own ethical views?

6. What static subject positions emerge from the intersections and collision of local discourses?

Significance of the Study

This study differentiates itself from other studies by its unique focus on how teachers are influenced by discourses and how their psychology is affected. Its significance rests in understanding teachers' interactions with technology, public policy and teacher discourses through their told stories. It paints a unique and in-depth picture of how these discourses mediate the practices, values and realities of those who are affected.

Foucauldian research is critical and aims to point out flaws in a 'regime of power', as this study has done. But, what makes this study truly original compared to other education policy studies is the way it uses Foucault's poststructural lens to critically explore what is lost or silenced by the 'technology apparatus' that would work against the interests of dominant discourses. By examining the complexity of what goes on within a school and by discerning the experiences of teachers, the research provides insight into the real effects of discourses. Most studies only examine the results or material effects of policy change, but by focusing on discourse analysis my study transcends the typical way schools are studied, which gloss over the underlying diversity that Foucault's approach makes apparent.

There is very little research that applies Foucault's theories to education, and only a handful of these studies are based on primary research and just a few of them focus on how teacher identity is influenced by technology or public policy discourses (Bandeen, 2009; Hyde,

2007). Most post poststructuralist studies on education focus on the effects of power on students and treat teachers as part of the authoritative apparatus – an extension of a school administration's interests in the classroom (Deacon, 2006). Unlike these studies, this study reveals how teaches are to a greater degree the reluctant agents of power, and are likewise subject to power and often attempt to silently resist it.

This study provides authentic examples of how teachers are experiencing the loss of autonomy and as a result are developing cynical attitudes towards the ideal reinforced by dominant discourses that constrain their work. As shown by the findings of Reed (2001), technologies derived from the accountability culture are forcing educators "to operate in ways that are counter to what they know to be best practices" (p. 21). For example, many educators realize that under the accountability regime the primary goal of education is a passing score, not providing a meaningful learning experience. Educators are frustrated and find themselves in the uncomfortable position of trying to cautiously mitigate the consequences of public policy reforms while appearing to carry out the mandated directives they oppose.

This study is a valuable contribution to the literature because it reveals how technology may serve public policy discourses as individualizing and totalizing practices that aim to instill social cohesion. Technology can function as a "perpetual eye" on educators that imposes "a normalizing process, or a disciplining, through which [teachers] lose the opportunity, capacity, and will to deviate" (Gilliom, 2008, p. 130). Through technology, the accountability regime produces subjects that internalize its values and worldview. Its goal is not to force compliance through intimidation, but to instill within educators an acceptance of the prescribed curriculum so that they do not rebel – to remake teachers into agents of the system so that they self-regulate their thoughts and actions. The benefit of this study is to bring into view the hidden ways

technology is shaping teacher professional identity and also how teachers use certain advantages of the same technology to retain their autonomy and exercise their own power.

The significance of this study emerges in how it questions why public policy discourses overshadow education and how they use technology to influencing how individuals think about schools and learning. Under the current 'regimes of truth', it seems that good teachers are evaluated based on their implementation and mastery of standardized rubrics, good students are measured against standardized test score benchmarks and good schools a graded by the aggregate of these test scores. It appears that good public education is equated with accountability notions of standards and proficiency, which marginalize students, teachers and even administrators themselves. The significance of this study is the potential that it may challenge the way of thinking that determines what we consider 'normal' public education, why it remains the way it is and how else it may be if we were to consider the alternatives that are being muted.

The point of this study is not to denounce education for using technology to apply widespread disciplinary practices. Fiske (1993) recognizes that "...no one would want to live in a totally undisciplined society, if such an oxymoron could actually exist. The conflicts, when they occur, are over the points of control where discipline is applied, not over the disciplinary system itself" (p. 14). Disciplinary apparatuses exist in all organizations and they are not better or worse for anyone who is subject to them. The problemization or generalization of technology and public policy discourses only works to support a different 'regime of truth'. Rather, the significance of my study is in how it may open the door for changes to education that may allow greater possibilities for reflectivity – to encourage educators to begin to see themselves from outside. By unraveling complex power/knowledge relations and making them visible, maybe my

study can support educators in governing themselves to a greater degree. Thus, my study may be the most significant to those to see themselves in the teacher discourses that are presented.

Foucault's critical methods suggesting that in order to understand effects of what they are doing, teachers must grasp how the world of politics and the way they think about their profession are entwined and mutually reinforcing. By adopting Foucault's critical approach, I believe my study is significant because it makes educators aware the effects of what they do to others and themselves as they try to live up to the ideals of the education profession. There is very little research in the literature that describes how discourses shape teacher subjectivity – how technology and public policy mediates interactions to influence what teachers do, how they think, and how they feel about their professional teacher identity. I intend to add to the literature by interpreting the told stories of teachers and administrators at a single high school.

Perhaps the most significant aspect of this study is its contribution to expand the oeuvre of books and articles that draw on Foucault's theories to analyze education. Foucault (1971b) once said, "I don't write a book so that it will be the final word; I write a book so that other books are possible, not necessarily written by me" (p. 162). In this refrain, my study is built on and expands other poststructural studies in education, especially Winiecki (2007), Bandeen (2009) and Gore (2006) that followed Foucault. Principally, my study attempts to support Bandeen's (2009) model that is grounded in interviews with elementary school teachers by applying it to a high school setting. I hope that other scholars will take this work as a platform for their own investigations.

Limitations of the Study

Despite the flexibility of this study's research methods, there are a number of limitations to qualitative research and my Foucauldian perspective delimits this study in many ways. The

frequent critique of qualitative studies is a lack of generalizability. In contrast to empirical research methods that focus on gathering a breadth of information from a broad sample of a population to represent the norm, qualitative approaches seek deep understanding. In qualitative research, positivist notions of reliability, validity and generalizability are replaced with principles of authenticity, credibility, and transferability. Where positivists believe that data is objective and separate from conclusions, qualitative researchers stress that data is embedded in conclusions and is largely subjective.

Foucault's epistemology stresses that a researcher cannot "escape the exercise of power that exists in the formulation of knowledge since power does not exist simply at the level of human interest or intentions, but within and through discourses that purport to produce truth" (Thompson, 1990, p. 4). The researcher is not just an outside observer; he or she is a participant in and the instrument of the research. The researcher affects the situation and this will alter the results (i.e. the Hawthorn effect). As I engage participants to study power/knowledge relationships, my desires and interactions work to constitute the situation and the situation works to constitute me.

As the researcher of this study, I aim to be reflectively aware that my purposeful interpretation of the rich texts that comprise the data is biased because it reflects the political discourses that have shaped my own knowledge and subjectivity. I can only explain my own actions and thoughts through the discourses that have been made available to me. My interpretations and explanations are merely validations of my own experience and my own history and in no way do I presume that the findings are generalizable and represent a certain absolute or universal 'truth'. I do not presume that the results of this study offer explicit answers

to the research questions, but are rather my interpretations of data; and this in itself may be viewed as a limitation from a positivist viewpoint.

Foucault's critical ontology warns of the limitations that accompany arbitrary arguments that are dictated by "universal, compulsory, unavoidable," and practical elements (Uzun & Ucma, 2010, p. 171). Foucauldian analysis is deliberately descriptive and analytic rather than evaluative, and because it is focused on offering a critique of discursive power relationships it is limited. Foucault's opposition to the status quo and modernity is important even though it may be unconventional and some claim that is has no rules (Graham, 2005). It exposes how positivism is constructed and how deeply subjective most scientific logic, truth and traditions really are. From a Foucauldian view, all forms of research methods are not real. Rather, they are subjective notions of truth that are legitimated by authority, and are the products of random and ideologically-driven discourses (Foucault, 1988c). This is a radical notion that is based on the rejection of typical modern ways of analyzing situations.

Bourdieu (1991) explains that qualitative research is difficult because, "To be able to see and describe the world as it is, you have to be ready to be always dealing with things that are complicated, confused, impure, uncertain, all of which runs counter to the usual idea of intellectual rigor" (p. 259). In other words, qualitative research is inventive and does not follow positivist traditions that are taken for granted. It is difficult to conduct Foucauldian discourse analysis and qualitative research while fulfilling traditional conventions of academic research. Foucault's methods are difficult because there are no rules. Yet, his theories are discernible because they offer a model that can be used as a basis for reflection and study. Some who expect a more designed or structured approach to research may view this as a limitation.

Foucault asserts that all research practices are fluid and continuously changing, and what they are in definite terms is not important. What is more important is how they came to be, as is the focus of all Foucauldian-based analysis. The goal of this study is to deconstruct the imbued truths of technology, public policy and teacher discourses as reflected in retellings of teachers' stories at one Alabama high school. The results cannot be generalized. As Foucault said about the significance of his own work: "I'm no prophet. My job is making windows where there were once walls" (Dreyfus in Hyde, 1979). The aim of this study is not to solve the problem, but rather to shed a light on it and to possibly provide alternate understandings that may show the previously unknown possibility of what people are becoming. The alternative poststructuralist approach guiding this study may defy common-sense tradition and readers may question the usefulness, but I believe it reveals the complexities and tensions surrounding the effects of technology in education that only a poststructuralist approach can provide.

Summary

This research aims to uncover how teachers come to be the way they are by balancing the social 'norms' constructed by certain discourses with their own ethical beliefs. I engage in the problem of discourse – the process through which meaning is socially constructed and certain knowledge is privileged while other knowledge is marginalized. Despite critiques that argue Foucault's theories are limited because they disregard agency and deny external reality, I believe the Foucauldian lens of my study allows for an alternative view of how teachers are self-constituting in the institutional site of a single Alabama high school. This research is significant in that "…my analyses are against the idea of universal necessities in human existence. They show the arbitrariness of institutions and show which space of freedom we can still enjoy and how many changes can still be made" (Foucault, 1988b, p. 11). Foucault's discourse analysis

method offers the opportunity to uncover how 'strategic power games' play out in education and how we might learn form this to question the 'order of things'.

Chapter II. Review of the Literature

Introduction

There is an extensive and growing body of work that applies Foucault's poststructuralism to the analysis of educational policy. However, there is very little research that uses Foucault's methods to explore teacher identity. Most Foucauldian research in education is preoccupied with portraying schools as prison-like institutions that dominate and oppress students (Butin, 2003). In this chapter, I focus on reviewing the scarce number of Foucauldian studies that explore how teacher subject positions are primarily made available through teachers' resistance and freedom that operates in a network of power relations. First, I start with the study that inspired me to look into this topic: Winiecki's (2007) Foucauldian study on the effects of mediating technology and data collection on the subjectivity of workers. Second, I review Bandeen's (2009) *priori* model that serves as a guide for the analysis of my data and the studies on which her theories are grounded (Britzman, 1991; Ares, 2008; Gore, 1995). Third, I introduce a compilation of Foucauldian studies on educational discourses and teacher subjectively that are particularly relevant to my research goals. Finally, I trace Foucault's theories that account for how subjects are constituted while discussing a framework for this study.

Primary Sources

Winiecki's (2007) ethnographic study on technology's mediation of work in telephone call center has many implications for this study. Winiecki (2007) contends that the rapid developments in computer and communication technology are "regulating nearly all facets of

work" in the modern age (p. 351). He explains that these technology systems attempt to modify

the behaviors of workers by:

> Combining regulatory surveillance and examination systems and deployment of various forms of training proper use and compliance with those systems, workers are expected to behave in accord with the norms encoded into those systems—norms programmatically consistent with "productive" and "quality" work as defined by the organization (Winiecki, 2007, p. 352).

Winiecki's (2007) study of four call center sites uncovers a complex process where

workers enact counter-tactics to control and management reacts with certain spontaneous "rule-

based" disciplinary and governing strategies to induce conformity through self-regulation. In the

call centers, technology was employed to compel workers to align themselves and continuously

produce data in the form of productivity statistics. Winiecki (2007) notes the unexpected

consequences of this ongoing process in which workers' subjectivity is influenced by how they

"see themselves in the stats" (p. 352). He uses the metaphor of a "shadowboxing screen" to

describe the process where workers reflect the "organization's construction of them, back to

themselves" (p. 365).

In his study, Winiecki (2007) draws on Goffman's (1961) notion of 'secondary

adjustments', which are acts of hidden resistance that workers do in the 'spaces left free' to

affect better statistics and the appearance of productivity (p. 54). Winiecki outlines the effects of

the process of "shadowboxing with data": First, "management orients workers to the stats,

attempting to equate a worker's perception of self with statistics that imputably represent him or

her;" second, "management makes access to promotion opportunities contingent on production

of "good stats;" third, "personnel responsible for agent evaluation can insert (or prevent from

insertion) data that represents a worker in particular ways in the official archive of data used to

produce official ratings of a worker;" and finally, "workers can expose themselves to or hide

from the technology-mediated surveillance system such that they produce statistics indicative of a good agent regardless of real activity" (p. 371).

Winiecki (2007) refers to Knights & McCabe (2000) observation that there is always space for resistance in every modern organization or institution, and traditional hierarchical working relations can usually be challenged. Knights and McCabe (2000) explain that there are "material limits to management's ability to control administrative procedure/system and thereby employee conformance to an ideal set of standards" (p. 422). Notwithstanding the presence of strict managerial power and regimes of power designed to discipline subjects, "staff retains considerable discretionary autonomy" (Knights & McCabe, 2000, p. 422).

Winiecki's (2007) study presents the consequences of the technology mediation of labor – it produces subjectivities that are shaped by management practices which reduce the conduct of workers to statistical measures of productivity and it shows how workers respond to this regime of truth with compliance or with 'secondary adjustments' that give the superficial appearance of compliance. It has implications for my research, because it explains how newly embedded technology adopted from the private sector can have surveillance and disciplinary aspects that can be used to continuously examine, survey and regulate the conduct of teachers based on 'objective' performance standards. Winiecki (2007) points out that when "workers are faced with the notion that any single form of data is supposed to represent the self, one should expect that agonism over subjectivity and subjectification will occur at and around the production of such data" (p. 374).

Even though education is not as highly regulated as the call center described by Winiecki (2007), the work of teachers is becoming increasing mediated by digital communications technology forged in the private sector and refined in higher education that is known as learning

management systems (LMS). Teachers are spending more and more time communicating with students, administrators, parents and each other via a computer. Based on Winiecki's (2007) findings, it could be expected that teachers may also question the objective examination of themselves through statistics generated by electronic systems that monitor their work and respond in unpredictable ways.

In a practical application of Foucault's ideas, Bandeen (2009) presents a study of elementary school teachers that focuses on the effect of accountability policies. Based on the study, she developed a model where teachers are simultaneously regulated and normalized by both local and outside policy discourses that operate in different ways through technology. She writes:

> In order to normalize and regulate teachers, policy discourses apply techniques of surveillance and distribution. Policy uses accountability mechanisms as surveillance, while distribution is reflected throughout the institutional organization and resource allocation. On the other hand, local teacher discourses apply techniques of classification and exclusion. These techniques are related to the ways that teachers determine who is respected locally by creating groups that encourage conformity (p. 186).

Bandeen (2009) found that both the public policy and teacher discourses share techniques of totalization to "assign collective character" and individualization to "assign individual character" (p. 186). The public policy discourses represent a regime of truth that operates to "determine what discourses and practices are recognizable as official and therefore permissible" (p. 186). Bandeen (2009) builds on Gore's (1995) and Ares's (2008) models by paying particular attention to "patterns of power production throughout teacher discourses – particularly as silence emerges to confront policy" (p. 26).

For Bandeen (2009), the interplay between public policy and teacher discourses influences teacher behaviors, the way they see the world, and ultimately shapes their identity in

unexpected ways. She theorizes "policy…as a collection of texts…wield power to frame teachers as either compliant or resistant; whereas, teacher production of relational power is characterized by silences and the negotiation of flexible, shifting relationships" (Bandeen, 2009, p. 149). Her model includes four possible teacher subject positions that surface from the interaction between teachers and public policy: 'silent-survival' (non-adherence to teacher norms; adherence to policy norms), 'vocal-leadership' (adherence to teacher norms; adherence to policy norms), 'silent-resistant' (adherence to teacher norms; non-adherence to policy norms), and 'vocal-resistance' (non-adherence to teacher norms; non-adherence to policy norms) (Bandeen, 2009, p. 190).

Bandeen (2009) points out that Britzman's (1991) article was particularly relevant to her research because it examined teacher discourses. Britzman's (1991) ethnographic study examines the lived experiences of new teachers and the how their practices result in the social construction of their reality. She demonstrates how the practice of teaching new teachers how to teach is a normalizing process that situates new teachers within the education profession. Britzman (1991) explains that when new teachers enter the profession "…an unexpected pressure emerges: figuring the significance of the contradictory realities and competing perspectives on learning to teach and becoming a teacher…there is a disjunction between these two experiences" (p. 2). The personal feelings of uncertainty, self-doubt, internal conflicts and "second thoughts" that emerge in the lives of new teachers as they learn the practicalities of teaching and undergo a transformation of their thinking is a major theme in Britzman's (1991) work and is also of interests to this study.

In her data analysis, Bandeen (2009) applies Gore's (1995) methodical framework for educational studies that presents a typology of Foucault's "major techniques of power." Derived from her ethnographies of education, Gore's model normalizes and operationalizes Foucault's circulating techniques of power (Surveillance, Distribution, Totalization, Individuation, Classification, Exclusion, Normalization, and Regulation) to make them more relevant to narrative research in education and to the analysis of lived realities and experiences of students and teachers (Bandeen, 2009, p. 78).

Bandeen's (2009) study extends Ares (2008) findings which are also based on Gore's (1995) model mentioned above. Ares (2008) enhances Gore's application of Foucault's analysis of power to pedagogy by considering how teachers enact counter strategies to normalizing and regulating power. In applying Gore's typology to her study of technology-facilitated collaborative learning practices in a public elementary school, Ares (2008) documents how students negotiate power, and also resisted power through counter strategies. Ares (2008) updated Gore's (1995) model include two "counter-moves" to power: 'counter-regulation' and 'counter-normalization' (p. 103).

Bandeen's (2009) model is the only example of Foucauldian research I could locate which is based on primary data collection (interviews with teachers) and focuses on teacher identity. For this reason, my study aims to validate and extend the grounded model she provides – I use Bandeen's (2009) and Gore's (1995) models to guide my data analysis and coding.

Relevant Foucauldian Studies in Education

Surveillance and discipline are always key elements of public education. They are exemplified in "simple things like quizzes, tests, assignments, and attendance records, classroom teachers monitor and assess the work of their students" (Gilliom, 2008, p. 307). A number of

critical studies have readily made the connection between assessment and monitoring technology

and Foucault's idea of the panopticon. Ford (2003) explains that panoptic practices are clearly

visible in the spatial arrangements of classrooms:

> …[teachers] align the desks in rows and position them to face the board or the teacher.
> Bells signal the transition from one time to the next, one purpose to the next. From the
> unidirectional gaze of the teacher observing from her desk area at the back, to the
> isolation of students in their individual desks, to the self-surveillance engendered, the
> push toward normalization in classroom organization seems to be self-evident" (p. 12).

> If the distribution of students in space and time do not adequately normalize students,

other disciplinary practices compensate. Ford (2003) notes that the observable disciplinary gaze

of teachers is augmented with hidden surveillance technologies:

> Students are individuated by almost endless schemes of documentation: portfolios,
> dossiers, and report cards. To attendance rosters, we add homework books, writing
> folders, and check-off lists that record individual children's progress against norms
> expressed according to both explicit and implicit standards. Students' individual records
> are important in all school settings. They are the basis for inclusion in educational
> settings, from day classes to special education classes. They are also the basis for
> exclusion (p. 15).

All of this data collection is intended to categorize students and identify those with 'problems.'

The assumption is that 'normal' children are able to function and behave appropriately in the

classroom environment. Ford (2003) writes, "A child who resists, either by failure or non-

compliance is separated, 'marked' as different. If problems persist, the subtle strategies of

classroom organization give way" (p. 15). Students who are persistently 'different' are isolated

from other students and are supervised more closely. Disciplinary systems in schools use liberty

as a reward for appropriate behavior. Failure to comply with behavioral norms leads to

exclusion.

Ford (2003) describes two corresponding processes in which students actively participate

in their own individualization and normalization through documentation:

First, 'registration' refers to the activities in which students volunteer themselves into groups, be they by interest (learning centers), skill level (such as in reading circles) or by actually volunteering for assigned 'stations' like 'board monitor,' students 'register' themselves not as the teacher's proxy but in accordance with the functions of the classroom /school" (p. 16).

Second, 'self-reporting' activities such as "Journaling, self-evaluation, self-reporting in exercise books, are all means by which students self-report within child-centered learning contexts" (p. 16). Ford (2003) continues, "Consequently students gradually take on more and more responsibility for their own supervision. At the same time, it becomes virtually unthinkable to perceive resistance (students' or teachers') as a genuine expression of autonomous disagreement" (p. 16).

Ford concludes that the surveillance of students through a 'virtual panopticon' of data collection and documentation works to individuate and categorize them. In the modern classroom "the categories appear to be 'natural,' and the governing work that gets done as children take on more of the burden of surveillance goes largely unnoticed" (p. 16). This has the result of "making even the covert display of power present in the teacher-directed classroom obsolete. In its place practices of subjectification situate (and rank) students as learners, 'good students,' 'on task students,' 'learning disabled students,' and myriad versions of 'bad students'" (p. 17).

Chomsky (2003) makes a similar observation, "In the fourth grade you're a 'behavior problem.' In college you may be 'irresponsible' or 'erratic' or 'not the right kind of student" (p. 30). This point of view exemplifies Foucault's idea of 'dividing practices'. Foucault (1983) explains, "The subject is either divided inside himself or divided from others. This process objectivizes him. Examples are the mad and the sane, the sick and the healthy, the criminals and

the good boys" (Foucault, 1983, p. 417). Students are 'divided' through the subtle collection

performance data. Foucault (1972) writes:

> The quantitative treatment of data, the breaking-down of materials according to a number
> of assignable features whose correlations are then studied, interpretative decipherment,
> analysis of frequency and distribution; the delimitation of groups and subgroups; the
> determination of relations that make it possible to characterize a group (these may be
> numerical or logical relations; functional, causal, or analogical relations; or it may be the
> relation of the 'signifier' to the 'signified' (p. 11).

However, it is not only the children who are being observed and categorized. The spatial

arrangements of schools give authority hierarchical observation of teachers as well. The teachers

watch the students, the principal watches the teachers, the district superintendent watches the

principals, and so on. Foucault (1980a) explains how the panoptic system works, "You have an

apparatus of total and circulating mistrust because there is no absolute point. The perfected form

of surveillance consists in a summation of malveillance" (p. 158). Surveillance constrains

teachers in the same way it regulates students. Teachers are forced to reconstitute themselves to

satisfy authoritative expectations. But, it is important to remember that the existence of

something that is called `panoptic' is not in and of itself powerful. It is the set of social relations

in which the imputably-panoptic technologies are used that reinforce behavior.

Webb, Briscoe and Mussman (2009) describe how panoptic technology, particularly

high-stakes testing, normalizes both students and teachers through "coercive conformity based

upon the idea of simultaneously watching and being watched" (p. 6). For the authors, high-stakes

testing is "a disciplinary apparatus of schooling that holds educators accountable to produce

stratified student identities through simple statistical deviations of test scores" (Webb, Briscoe &

Mussman, 2009, p. 6.). The authors provide the following comment from a teacher as evidence:

> The district requires teachers to turn all their benchmark scores in 3 times a year. So, the
> principal will collect ours, for the whole school, and then she compiles some data, tables

on the computer, to show where our kids stand for each grade-level on each unit. She takes that to the district and hands it in (Webb, Briscoe & Mussman, 2009. p. 6).

The authors point out that – besides the apparent purpose – high-stakes testing also enables surveillance technologies that enable the continuous hierarchical observation and authoritative judgment of students, teachers and schools (Webb, Briscoe & Mussman, 2009, p. 7). This technology "coerces teachers to perpetuate the sorting of students" (p. 7) and they show how it results in feelings of fear and terror because the "explicit monitoring of performance data can be accompanied with threats of school closure, school reconstitution, teacher dismissal, and penalties of reduced school income" (p. 8). The authors quote Lyotard (1984) to support their argument:

> By terror I mean the efficiency gained by eliminating, or threatening to eliminate, a player from the language game one shares with him. He is silenced or consents, not because he has been refuted, but because his ability to participate has been threatened. The decision makers' arrogance consists in the exercise of terror. It says: 'Adapt your aspirations to our ends – or else' (Lyotard in Webb, Briscoe & Mussman, 2009, p. 63).

As an example Webb, Briscoe, and Mussman (2009) quote a teacher's comment, "They are in the newspapers – I'm hypersensitive to it, being it's my job [at stake], but they're everywhere. They're on the Internet. They compare the schools to different schools" (p. 8). Data collection not only applies labels to students and teachers, but to schools as a whole. The authors reveal the consequence of this process:

> In an attempt to avoid the label, "low performing", schools with few resources narrow the curriculum to the point of "teaching to the test" – a pedagogical phenomenon that reduces pedagogy to attempts to ensure passing test statistics. Additionally, this narrowing of the curriculum to produce the appearance of equality (by making the test scores of a few subject areas equal) actually produces a further stratification of knowledge as other subject areas are sacrificed to dominant subject areas reified by test score requirements (Webb, Briscoe & Mussman, 2009, p. 8).

The accountability discourse compels schools to train students in test-taking skills and "principals and teachers are more likely to increase the use of didactic, or 'drill and kill,' pedagogy in order to encourage the convergent thinking necessary for doing well on the multiple choice tests" (Webb, Briscoe & Mussman, 2009, p. 9). This practice works to further divide schools and communities. The authors explain:

> Affluent schools and school districts whose students come from affluent families are more likely to receive Adequate Yearly Progress (AYP) status and not be as strongly coerced into test-driven curricula and pedagogy. Not surprisingly, schools with few resources (and whose students are of color and/or suffer from economic deprivation) are more often deemed in need of improvement than those with ample resources and thus, likely to narrow the curriculum in an effort to improve test scores and avoid sanctions (Webb, Briscoe & Mussman, 2009, p. 9).

Gunzenhauser (2006) explains that standardized testing technologies are used in concert with other disciplinary technologies reinforce what it means to be normal and categorizing students according to a range of deviations from the norm. In other words, the disciplinary processes of the examination both homogenized and reindividualized teachers and students. Gunzenhauser (2006) explains: "discipline cuts off possibilities and choices, or more accurately the ability of the individual to see choices that have been foreclosed" (p. 249). The obedient and self-disciplined subject willingly engages in self-normalized practices that work to reify the system and also apply pressure on the 'deviant' to bring them into alignment.

Through accountability technologies like standardized testing and data collection, the 'doings' of all subjects in education are under scrutiny the public's broader and collective gaze. As illustrated by the teacher's comments above, the data not only enables authoritative power to continuously observe teachers and students internally, it also allows higher levels of authority and the entire public to view and judge the performance and consequently the 'worth' of schools.

Similarly, Vinson and Ross (2003) expand on Foucault's idea of surveillance by merging it with the concept of a 'spectacle.' The authors contend:

> Education today must be understood according to a setting in which spectacle and surveillance come together, a state of affairs in which discipline is established and maintained as individuals and groups are monitored simultaneously by both larger and smaller entities…State bureaucrats "monitor" school performance within a "micro" setting (surveillance) while at the same time the "public" considers school performance (or "accountability") via media-reported (frequently as headlines) standardized test scores (spectacle). In the extreme, given the potential of new virtual and on-line, audio and visual computer capabilities, these (educational and social) circumstances make available a new disciplinarity, one in which regulation can occur via the absurd possibility of "everybody watching everybody all the time," one that signals a qualitative shift in the mechanisms of the gaze, one conceivable only in light of technological advances and changing political/cultural/economic relationships between the "public" and "private" spheres and between "corporate" and "individual" identities (Vinson & Ross, 2003, p. 10).

Vinson and Ross (2003) assert that authoritative power uses "both surveillance (the disciplinary observation of the many by the few) and spectacle (the disciplinary observation of the few by the many) as conjoint means of controlling individuals and groups" (p. 275). Disciplinary practices and testing technologies not only directly enforce school norms; the knowledge these systems produce reifies and validates the ideology supporting the accountability discourse. This is what Foucault (1977) identifies as a 'discursive loop' where authoritative power produces and determines what knowledge is 'true' and represses alternative views in order to consolidate and reproduce power relationships (p. 27). Vinson and Ross (2003) expound on this idea:

> At the heart of this process rests various news and information media outlets that publish and publicize images of schooling such as test scores. Newspaper readers and TV news viewers represent a public "observing" schools, one that is intent on, moreover, influencing schools to perform – or conform – in a particular way or toward a particular ideal. The repercussions, of course, are great, affecting such factors as property values, reputation, the expansion of employment opportunities, and educational resources. This spectaclarization of teaching and learning has the circular effect of strengthening the conditions of surveillance: As the public views test scores as either too low or contributing to some "achievement gap," they pressure school and other public officials to do something. These officials, in turn, intensify their (and certain allies', including the

business community and teachers' unions) control over curriculum, instruction, and assessment vis-à-vis greater and expanded degrees of surveillance (all of which the public "watches" to see whether or not it is effective – i.e., whether politicians and administrators deserve their continued support). This leaves schools, classrooms, teachers, and students in the middle, caught within a spiraling surveillance-spectacle cycle (p. 71).

Vinson and Ross's (2003) observations make the case that the entire accountability discourse is based on the image or fabricated representation of school performance as presented by media reports, not on any genuine or actual understanding of what teachers do. The public is not looking at schools; it is looking at whether the aggregate test results of schools are improving or worsening. Lower test results support the view that schools are 'failing' and need to be fixed. Higher test scores support the view that accountability reforms are effective and need to be expanded. Either way, the data creates knowledge that reinforces the regime of truth and performativity practices in public schools – a process that very much resembles the data individualizes and totalized in subject in Winiecki's (2007) study that I reviewed earlier.

Developing a Foucauldian Framework

For Foucault, the subject is the product of a historical process in which various forms of power that manifest as technology molds the individual self. In Foucault's view, the subject is a discursive that both produces and is the product of historical conditions. The subjectivity process happens through discursive practices that exist in relation to modern rationality in the forms of politics, ideology, and concepts of truth. Foucault (1980a) writes:

> Truth is to be understood as a system of ordered procedures for the production, regulation, distribution, circulation, and operation of statements. Truth is linked in a circular relation with systems of power, which produces and sustains it, and to effects of power, which it induces and which extend it – a regime of truth (p. 133).

Drawing on Foucault, Woodward (1997) refutes essentialist claims that identity is fixed and unchanging (p. 12). Rather, Woodward (1997) describes identity as relational to others,

constructed through the "symbolic marking" of differences and maintained through social processes (p. 12). She describes subjectivity as including "our sense of self" and as the "thoughts and emotions that constitute our sense of who we are and the feelings which are brought to different positions within culture" (Woodward, 1997, p. 39). Woodward emphasizes that subjectivity exists within local settings "…where language and culture give meaning to our experience of ourselves and where we adopt an identity" (p. 39). She continues, "Subjects are thus subjected to the discourse and must themselves take it up as individuals who also position themselves. The positions we take up and identify with constitutes our identities" (Woodward, 1997, p. 39). In other words, identities are subject positions made available to an individual by discourses that he or she assumes and internalizes, which situate him or her in relation to others within a particular context.

Power relations manipulate and legitimize 'objective' knowledge to reflect dominant assumptions through which the human self is interpreted and constructed. From this perspective, power that is created and maintained through a network of relations and is the basis for the constitution of self-identity. Foucault (1980a) explains:

> In any society there are manifold relations of power which permeate, characterize, and constitute the social body and these relations of power cannot themselves be established, consolidated, nor implemented without the production, accumulation and functioning of a discourse. There can be no possible exercise of power without a certain economy of discourses of truth, which operates through and on the basis of this association. We are subject to the production of truth through power and we cannot exercise power except through the production of truth (p. 93).

In the context of public schools, cultural practices are shaped by power/knowledge relationships that are mediated by technology and exist within public policy discourses. Schools are disciplinary institutions that follow and enforce a set of rules and policies. Working within these boundaries establishes imposes legitimated knowledge on subjects within the particular context.

Foucauldian research explores the "codes of language, perception, and practice" that are observed in the present and represent the particular "order of things" (Foucault, 1970, p. xxi). For my purposes, Foucault's approach reveals how teachers construct their subject position in relation to what school institutions and technology enforce as representing what it means to be 'normal'.

Foucault's analytical methods call for deconstructing the discourses that produces subjects. As Schrift (2006) explains, Foucault "analyzes the various ways that human beings are transformed into subjects, whether subjects of knowledge, of power, of sexuality or of ethics" (p. 63). This involves reflecting on the rules and social practices that shape subjectivity in a particular context. By deconstructing how education is transformed by the technology and public policy discourse, I aim to explore how educators experience the subjectivity process.

Foucault's critical analysis does not focus on the problems of government, strategy or policy, but rather on the "genealogy of the subject" and "politics of truth." In Foucault's own words:

> A critique does not consist in saying that things aren't good the way they are. It consists in seeing on just what type of assumptions, of familiar notions, of established and unexamined ways of thinking the accepted practices are based...To do criticism is to make harder those acts which are now too easy (Foucault, 1981, p. 456).

The purpose of Foucauldian methods is to challenge the things that are held up as being absolutely true or false – to challenge the status quo. Foucault is interested in deconstructing the historical and culture conditions that produce different systems of thought.

Foucauldian research examines how discourses discipline individual behavior and thus shapes identity, but it also considers how individuals have the capacity to act upon themselves and how this is tied into the regime of power that manipulates individuals into

conducting and modifying themselves in a way that reproduces normalcy. The

Foucauldian critical method focuses on unmasking the 'truths' behind discourse by

examining the historical and political conditions that created the new forms of knowledge

on which they are based (Foucault, 1991, p. 79). It is not possible to study the effects of

discourses and their influence on identity without also deconstructing the historical and

political processes that make the them possible (Lemke, 2000, p. 2).

Like Bandeen (2009), Anderson and Grinberg (1998) build on Foucault's ideas to explain

that education systems deploy various disciplinary practices supported by imbued 'truths' that

function to normalize students and teachers in two ways; first, "through the study of discrete

school subjects (disciplines) and by normalizing human subjects (students, faculty,

administrators, and staff)" (p. 334). The authors clarify:

> Disciplinary practice…refers to a set of discourses, norms, and routines that shape the ways in which a field of study such as educational administration and its related practices (i.e., site-based management, supervision, staff development, etc.) constitute themselves. This process of self-constitution entails the establishment of conventions, agreements, and rules that regulate and legitimize current ways of distinguishing among "best practices," desired outcomes, academic rigor, and valid knowledge claims. These discourses, ideas, and routines connect with historical, political, cultural, and economic contexts but are enacted within specific, local, and contingent institutional arrangements (Anderson & Grinberg, 1998, p. 330).

By regulating a field of study, "schools discipline the minds of students by providing one way of

thinking about subject matter" (Anderson & Grinberg, 1998p. 335). The second way schools

discipline subjects is through governmentality:

> …internalization of correct behavior or what Foucault called normalization. Norms, rules, and laws are internalized in ways that do not need external control or surveillance on the part of authorities. Normalization operates through both individual self-discipline and group control (Anderson & Grinberg, 1998, p. 335).

Disciplinary practices provide discursive indoctrination into 'good' thoughts and behaviors that are accepted by authority and ensure the orderly conduct of education. The authors describe the process:

> Self-discipline is also achieved through discourse practices that provide validation for behavior. Terms such as positive attitude, good student, and nice kid are all normalizing discourses in schools that tell students what kinds of behaviors are rewarded. Later, students will be exposed to discourses of the good worker, the team player, and the community builder, which will provide the discursive incentive for subjects to accept authority and the norms and goals of social institutions (Anderson & Grinberg, 1998, p. 335).

The critical gaze of authoritative power disciplines not only students who "know they can get in trouble with the principal if they are caught in undisciplined behavior" (Anderson & Grinberg, 1998, p. 335), but teachers who are also subject to the same decentralized power which ensures they teach in a way that is acceptable to authority even when the representatives of authority are not present. Deacon (2006) reminds us of one of Foucault's key arguments, "Power relations are seldom one-sided, even at their most extreme, but in most instances reciprocal; those who exercise power in the school are caught up in and subjected by its functions just as much as those over whom power is exercised" (p. 184). In Foucault's (1980a) own words:

> He who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power; he makes them play spontaneously upon himself; he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection (p. 202).

Anderson and Grinberg's (1998) application of Foucault's theories are based on the core Foucauldian notion that human identity is molded by disciplinary practices that are themselves the product of competing discourses. Foucault (1977) writes: "Discipline is an art of rank, a technique for the transformation of arrangements. It individualizes bodies by a location that does not give them a fixed position, but distributes them and circulates them in a network of relations"

51

(p. 146). From Foucault's view, disciplinary practices in all organizations are central components in the broader system that constructs human subjects in our society.

Foucault's theory examines not only how power seeks to direct the conduct of individuals, but also how individuals conduct themselves to reinforce or reform power relations. Foucault (1993) explains: "…governing people is not a way to force people to do what the governor wants; it is always a versatile equilibrium, with complementarity and conflicts between techniques which assure coercion and processes through which the self is constructed or modified by himself" (p. 203).

This idea that individuals are self-constituted, hints at Foucault's view that power is not entirely oppressive or negative. To repeat what I noted earlier, Foucault (1988c believes that power is a complex relationship – "a strategic games between liberties" (p. 19). Power involves the interactions between individuals through the application of technology within the context of certain defined rationalities. Rose (1999) expands on this idea:

> …government through freedom multiplies the points at which a citizen has to play his or her part in the processes that govern him. And, in doing so, it also multiplies the points at which citizens are able to refuse, contest, challenge those demands placed upon them" (p. xxiii).

The concept of resistance is foundational to Foucauldian studies and to this study. Anderson and Grinberg (1998) explain that for Foucault resistance rarely takes the form of 'heroic acts', but instead usually comprises "engaging in small acts of transgression against the normalizing tendency of disciplinary power and he implies that these acts of transgression might have a cumulative effect" (p. 346).

As much as the current regime of truth in education endeavors to be totalizing, it is still weakened by small subversive acts on many levels. Teachers and administrators are not simply the disinterested conveyors of educational policy. There exists an agonism between public policy discourses that legitimate accountability practices and the teachers who are required to implement it. State officials interpret federal policy, schools districts interpret the interpretation, and ultimately teachers put it into practice, which allows actors at every stage to make adjustments. The complexity of technology and power offers teachers considerable space to apply their own approach to teaching. As Bowe, Ball and Gold (1992) explain:

> Texts carry with them both possibilities and constraints, contradictions and spaces. The reality of policy in practice depends upon the compromises and accommodations to these in particular settings...our conception of policy has to be set against the idea that policy is something that is not simply done to people (p. 15).

Even though elected officials set educational policy, it is ultimately up to local administrators and teachers to determine how the policies are implemented. This is what Ball (1994) refers to as 'slippage.' Each step of the implementation process is influenced by local contexts that may not be as faithful to the accountability regime as they outwardly appear. Ball (1994) emphasizes accountability may be more symbolic than material and policy studies should "employ a cross-sectional rather than as single level analysis by tracing policy formation, struggle and response from within the state itself through the various recipients of the policy" (p. 26). Ball (1990) points out that disciplinary practices in education occur within a struggle between administration and teachers. When teachers resist through rebellious acts, administrators assume teachers are acting irrationally. Ball (1990) writes:

Oppositional activity within the organization is defined, in terms of the perspectives of the dominant groups, as inherently irrational...The 'problem' is taken to be 'in' the person rather than the system, and collective interests, other than those of 'the system,' are in effect deconstructed. Collective opposition is systematically misrecognized (p. 158).

Teachers commonly find themselves at odds with values and principles underlying educational policy that impacts their everyday lives. Competing discourses surrounding school accountability reforms energize the struggle between subjects and authoritative power – particularly around values and ethics of autonomy, freedom, care for students and ultimately over the possible formations of individuality available to educators.

Administrators, parents and peers may view acts of resistance, opposition or noncompliance as characterizing 'imperfect' teachers that need to be better managed. Management portrays teacher identity as personal, emotional and even pathological. Zembylas (2003) explains the consequences:

By constructing teacher identity as something 'personal' rather than something constituted in assemblages of practices, norms, habits, and so forth, this emotion discourse relied on emotional rules and norms to define, or classify. Such classifications delimit the production of professional teacher-subjects through the knowledge produced, while they simultaneously provide [teachers] with a language to use in talking about pedagogy and performing emotions 'appropriately.' Emotion management, then, is legitimated through social networks of 'professional' knowledge that reinforce the 'rational' process of emotion management (p. 122).

'Abnormal' teachers are made to feel 'worthless' and isolated by emotional disciplinary practices that shame and silence them. Teachers are acted on by authoritative power to become the universal standard of a 'professional.' This archetype often clashes with their authentic or 'true' self. Zembylas (2003) continues:

It is not surprising, therefore, when teachers find themselves resisting the forms of selfhood they are enjoined to adopt. They use their capacity to feel good or bad as a means to draw and extend boundaries around themselves, thus forming particular resistances. Ways of relating to themselves as subjects with unique capacities worthy of respect clash with institutional demands that they be docile and disciplined. The demand

to suffer one's bad feelings in silence and find a way of stoically 'going on' is deemed problematic from the perspective of a more passionate pedagogy that encourages a teacher to express her or his emotions using a particular vocabulary and performance (p. 124).

Zembylas (2003) describes two general strategies through which teachers may resist technology apparatus that attempts to regulate their conduct:

> ...by using such ideas to interrogate emotional rules at the level of constituting the teacher-self, teachers can become aware of the diverse ways in which they perform their emotions, beliefs, energies, and the like, and in so doing begin to transform normalizing techniques of (emotional) self-formation. Two specific strategies were described: (1) becoming aware of the technologies that govern one's emotions and subjectivities and (2) creating strategies of resistance and self-formation through reformulating emotion discourses and performances (p. 127).

These counter-strategies to control emerge from different contexts and experiences. Foucault defines the process of discursive formation as "a space of multiple dissensions; a set of different oppositions whose levels and roles must be described" (Foucault, 1977, p. 155). The ideas and values instilled in teachers by their college education and other experiences often conflict with the objectives of management. In order to counter alternative discourses and discourse disruption, administrative discourses define and enforce 'normality' that binds subjects to a particular way of thinking about themselves and their situation. Yet, the dominant and alternative discourses are interwoven together in a recursive loop shaping boundaries of how power is able or unable to saturate and define the experiences of educators. For example, the public policy discourse often gives credence to counter arguments in favor of local autonomy in education over hierarchical decision-making processes. Furthermore, the profession of public education exerts a certain amount of its own power and influence over shaping the effects of public policy reforms on education. Educators can choose to reshape power relations by questioning the values

and agenda of accountability reforms and exposing the flaws in knowledge that underpins the rationality that justifies the reforms.

Summary

In contrast to conflict theories, Foucault sees the relationships between power and individuals as a dynamic symmetry. Foucault's (1983) foundational concept is that society and individuals co-determine each other's becoming. In his view, government aims to systematically regulate how subjects conduct themselves. This process can involve corrosive practices that limit individual freedom, but more often it produces the 'responsibilization' of subjects by supporting them in making their own decisions within certain defined boundaries.

As the studies reviewed in this chapter demonstrate, the limits imposed by administrative systems often conflict with teachers' professional ethics and result in agonism that leads to feelings of isolation and marginalization among teachers and resistant stances. Yet, teachers still retain an unexpected amount of power and autonomy that is driven by their professionalism and ethics of care. Teachers may refuse to fully comply with the limits and instead do things differently than what the regime of power expects. This resistance usually takes the form of subtle acts or 'transgressions' of covert noncompliance where teachers attempt to retain their autonomy in the classroom and control over their own identities (Goffman, 1961)

Amongst the 'strategic power games' that go on between discourses, technology exists to mediate relations (Foucault, 1988a). The findings of various studies discussed in this chapter reveal how teachers manage to transform technology and reshape power/knowledge relations to construct unexpected subjectivities based on their own beliefs, values and ethics. The results of my study produce corresponding deductions.

Chapter III. Methods

Introduction

This chapter describes the design for this qualitative research study. It begins by explaining the methods that serve as a principal guide for data collection, analysis and presentation; next, it presents an overview of the incremental steps of the methodological approach and how the research design unfolded; lastly, this chapter concludes with a discussion of trustworthiness and reflexivity.

The theoretical basis of this study is derived from Foucault's theories on governmentality, discourse and power. Foucault's ideas are blended with the case study method to explore power relations in an Alabama high school with the aim of situating the work of educators in that school in terms of their authentic experiences of engaging with technologies born out of accountability reform policies. By using the retellings of teachers' stories as data, this study examines how technology facilitates policy and teacher discourses.

The multiple phases of this study's design follow the case study theoretical process as defined by Stake (1995) and Creswell (2007). The three steps of the data collection process include: 1) preparation and pilot study, 2) snowball sampling, 3) purposeful sampling. Each stage of the research facilitates an iterative unfolding that permits the application of Foucault's theories throughout the process.

In total, data collection (not including the pilot study) comprises interviews with fourteen North High School teachers and administrators with diverse backgrounds, experience levels, and

perspectives. Primary interviews were conducted over a six-week period along with some follow-up interviews, classroom observations and document collection.

Analysis and interpretation of the data references Winiecki's (2006) poststructural study on how technology mediates the works of modern tertiary labor to produce subjects and subjectivity. Winiecki (2006) applies Foucault's theories to interpret how technology mediates of the work of employees to discipline their conduct and how workers engage in hidden acts of resistance called 'secondary adjustments' (Goffman, 1961, p. 54). This study also references grounded theory from Bandeen (2009), which draws in part on Gore's (1995) standardization of Foucault's work. Bandeen's (2009) model facilitates the categorization of teacher subject positions in relation to the intersections of public policy and teacher discourses. Following Bandeen's (2009) example, Gore's (1995) typology of Foucault's 'major techniques of power' serves as a conceptual framework for analyzing and presenting the data by deductively identifying themes and mapping power relations.

Inquiry Design

St. Pierre (2011) cautions that qualitative methodology does not offer "a recipe, an outline, a structure…or another handy 'research design' in which one can safely secure oneself and one's work" (as cited in Denzin & Lincoln, 2011, p. 613). The design of this study has emerged from the reading of Foucault's work, the review of Foucauldian studies in education and the study of different approaches to qualitative research.

The multiple phases of this study's theoretical framework blend Foucault's analytical method with qualitative inquiry research techniques that emphasizes description, reflection, and interpretation. This hybrid approach employed is exploratory and descriptive. It collects stories

from research participants about their work, and these told experiences shed a light on how participants see their situation.

Creswell (2007) views case studies as a methodology that involves an "in-depth understanding of a single case or an issue using a case as a specific illustration" (p. 97). For this study, the case study method was melded with Foucauldian discourse analysis to uncover the contextual conditions that are believed to be relevant to the phenomenon under study in the real life context in which it occurs. Interviews are the primary form of data collection and teachers are the primary focus of this study's questions. Other sources are also used, and as the research unfolded, other various exterior elements were also examined.

Miles and Huberman (1994) suggest that a case is a "phenomenon of some sort occurring in a bounded context" (p. 25). This study's approach considers the told stories of a group of embedded units (i.e. teachers and school administrators) working in a single setting (i.e. one public high school in Alabama). The specific case is defined by the physical boundaries of North High School. Even though this study focuses on the individual representatives of a group of educators and understanding participants' emic points of view, it aims to achieve a holistic understanding of the environment – on deconstructing the context in which technologies mediate various aspects of the self in society (Foucault, 1980a, p. 215). Stake (1995) refers to this focus as the "broader instrumental case" (p. 16)

In case studies, analysis typically involves an in-depth description of the case and the research can identify specific themes, issues or situations that are specific to the study (Creswell, 2007, p. 99). The themes included in this case study highlight the material lived effects of discursive conventions, and fields of social practice and meaning-making that constitute discourses. While the focus is on the day-to-day activities of teachers, these material transactions

exist within the broader context of politicized policy edicts, which work to normalize individuals through technology.

The narratives of teachers interviewed for this study are considered within the wider context of ideas, language and meaning of systems of truth. Other artifacts and objects that exemplify policy and teacher discourses are used as sources of data. This data is used to map the wide range or processes and historical developments that affect changing relations. These collected documents and secondary data demonstrate the network of technology that contextualizes the lives of educators.

Throughout the open data collection process, Foucault's theories were applied to conduct and revise interview guides, questions and techniques. Interviews were structured to explore how technologies influence teacher environments and quietly function to legitimate and enforce the dominant political discourse. Data collection aimed to gather information that would allow me to "deconstruct the knowledge and practices assumed to represent rationality and imputed norms" (Winiecki, 2004, p. 81) of North High School.

Case study methods of this study are situated in a poststructural, and particularly Foucauldian theoretical framework, that includes a reflective process to relate divergent teacher discourses to the introduction of technology as tools used to reinforce power relationships and shape teacher identities. Blending Foucault's theories with the case study method offers a model that can be used as a basis for reflection and study, and for applying and extending *priori* models including Bandeen (2009) and Gore (1995).

Foucault contends that modernist notions of identity and individuality are just part of discursive formations produced by power. Objective studies of teachers, for example, work to identify and isolate certain behaviors and values, which are then used to assert/create facts and

knowledge that exemplify what it means to be a 'good' teacher. This knowledge reinforces dominant norms and standards that influence how teachers conduct themselves and ultimately how they view themselves and others in their profession.

In a Foucauldian fashion, the focus of this study is on the relationship between subject and truth. I attempt to deconstruct the systems of meaning-making underlying teaching at North High School and to uncover how discourses are produced and reproduced. I aim to understand discourses by focusing on what is being represented as 'truth' or 'norm', what knowledge is used to produce this representation, what interests are being served by it, how it came to be, and what subject positions it makes possible. The focus of this Foucauldian research, and this study, is not on searching for causes or origins, but rather on how people govern themselves and others by the production of truth.

From a poststructuralist perspective, the concept of 'truth' is a construction that is imposed by modernism and rooted in enlightenment ideals of universal and unquestionable knowledge. The fundamental premise of postmodernism is that reality is in flux – it varies based on perspective and difference. The postmodernist critique of 'truth' looks at how it limits understanding, logic and morality to effect normalization, sense of meaning and common social identity. Poststructuralist practice examines how truth is situated, how it changes and how its limits are opposed, disrupted and remade. For Foucault (1980a), truth is a political discourse that is produced, sustained and directed by the effects of power (p. 133). Drawing on Foucault, Scott defines discourse:

> …a discourse is not a language or a text but a historically, socially, and institutionally specific structure of statements, terms, categories, and beliefs. Foucault suggests that the elaboration of meaning involves conflict and power, that meanings are locally contested within discursive 'fields of force,' that (at least since the Enlightenment) the power to control a particular field resides in claims to (scientific) knowledge embodied not only in

writing but also in disciplinary and professional organizations, in institutions (hospitals, prisons, schools, factories), and in social relationships (doctor/patient, teacher/students, employer/worker, parent/child, husband/wife). Discourse is thus contained or expressed in organizations and institutions as well as in words; all of these constitute texts or documents to be read (p. 35).

Foucauldian discourse analysis is theoretical device for the symbolic ordering of data that focuses on identifying the subject positions of research participants within an arena of discourse and understanding the relationships between them (Keller, 2005). According to Foucault (1972), discourse analysis focuses on "practices that systematically form the objects of which they speak…they do not identify objects, they constitute them and in the practice of doing so conceal their own invention" (p. 49). Ball (1994) explains further that discourse analysis is about "what can be said, and thought, but also...who can speak, when, where and with what authority" (p. 21). In this sense, discourses are about what knowledge is privileged and how knowledge is used to marginalize, objectify and silence individuals.

This study employs Foucault's (1980a) theories as applied by Winiecki (2007) and adapted to pedagogical analysis in education by Gore (2005) to describe the how discourses and techniques of power combine to 'conduct the conduct' (governmentality) of teachers at North High School and that make available certain possible subject positions. To do this, I extend Bandeen's (2009) grounded model to characterize discourses and power relations that afford certain teacher subject positions. Her model is used as a guide for defining primary constructs and interpreting data collected in this study.

Interviewing Preparation

This study focuses primarily on semi-structured interviews with multiple key informants at North High School, but other sources of information are also utilized. Following Creswell's (2007) recommendations, an interview protocol was designed to guide data collection. The

interview protocol included a consent script, description of the study, warm-up questions, inductive questions and closing questions.

A pilot study was conducted to test and refine the interview procedures, which included two semi-structured interviews, three focus groups and two impromptu interviews. Participants were selected based on convenience and access. The initial two foundational interviews were with public school teachers attending graduate school at Auburn University, as were two of the focus groups. The third focus group was with six Auburn University undergraduates studying to enter the teaching profession. Many of these participants had at least one year of teaching experience through required internships. The two impromptu interviews were with one Alabama public school principal and one Alabama school district superintendent from two different school districts.

The initial pilot interviews and focus group discussion were audio recorded, transcribed and coded. The two impromptu pilot interviews were not recorded or transcribed, but field notes were taken. With the exception of two individual interviews, I had no prior relationship with the pilot study's research participants. Participants were recruited with help of Auburn University faculty members in the College of Education who drew from a pool of students enrolled in their classes. The two impromptu discussions were held at each participant's respective schools and all of the other interviews and focus groups were conducted at Auburn University in a classroom or my office.

The interview protocol was revised based on the results of the pilot study as recommended by Yin (2009). Data collected during the pilot study was used to reframe questions and refine research procedures. It was observed during the pilot study that the critical framing of discussion topics tended to inadvertently focus conversations on

criticisms of accountability policies and practices. Pilot study participants would spontaneously offer their general opinion on politically divisive issues, but it was difficult to prompt any in-depth stories from participants about their personal experiences. In the final interview protocol (see Appendix A), the number of inductive questions was narrowed down from more than fifty to about thirty, and certain questions were rewritten to be more impartial and encourage participants to share their point-of-view.

After each interview, changes were made to questions and the interview protocol. What I learned in early interviews influenced the protocol for succeeding interviews. Subsequent interviews focused on gaining more insight into what previous interviewees had shared. Interviewees in later interviews were asked to comment and reflect on statements made during earlier interviews and as a result later interviews were more open.

Setting

The setting and case for this study is North High School, a small city high school (grades 9-12) in the state of Alabama. North High School has about 1,300 students and 90 teachers and staff. At the time of the study the majority of school's students, about sixty percent, are African American. Approximately fifty percent of students receive free/reduced lunch, which is roughly average for the state. In the past, the school was under review by the state for not meeting Annual Yearly Progress (AYP) benchmarks. But last year, the high school reported a significant jump in its graduation rate and in recent years, students at North High School have scored slightly above state averages on achievement tests in reading, science, and writing.

Procedures

The Human Subjects Review Board at Auburn University first approved the study. The school district research committee also approved the study and the principal of the school authorized it. North High School was selected based on my own connection with the principal.

The population for the study consisted of all faculty and administrative staff working at the high school along with any administrators at the district-level that were involved with the school. Key informants were selected because of their first-hand knowledge and experience of the high school. The school principal and I prepared a list of all possible participants to include in the study and collaborated on drafting the initial invitation letter that introduced the research. The invitation letter also informed participants about the goals and research design of the study. The principal emailed the invitation letter to staff, which asked participants to respond directly to me if they were interested in volunteering for the study.

All identified participants who contacted me were emailed a copy of the consent letter with more information about the study and their rights as research participants. I also requested a time to meet with each participant to conduct an interview. Of the first five teachers who responded to the solicitation for volunteers, four were interviewed. The fifth identified participant did not respond to my attempts to setup a time for an interview.

During the face-to-face interviews, participants were presented with the requirements of the study and were asked to sign the consent form. The initial interview protocol was used to interview the first four participants. Interviews were conducted during each teacher's daily free block of preparation time (90 minutes).

At the end of each interview, participants were asked if they could recommend one or more of their colleagues to participate in the study. Through referrals (snowball sampling), an additional four participants were identified and interviewed. After these interviews were conducted, I approached the school principal to purposefully identify additional participants that would help to include more diverse and a broader range or perspectives. I was particularly interested in interviewing science teachers, who were not yet represented in the sample, and also getting the perspective of administrators, including the principal himself. Two science teachers and three school administrators, including the principal, were identified and interviewed. The final interview was conducted with a representative from the school district office who was previously a veteran teacher at the high school.

A total of fourteen interviews were conducted at a time that was convenient for participants over about a four-week period. Interviews were conducted in a teachers' private classroom or in an administrator's office in the school. Interviews were audio recorded and then transcribed into word processing software. The transcripts were imported into NVivo contextual analysis software and coded. Other sources of data include some follow-up interviews, classroom observations, email conversations, field notes and document collection. A camera was used to photograph documents and other elements of the setting that could not be collected.

Participants

In total, four North High School administrators and ten teachers participated in the study. One of the administrators works at the district-level, but was formerly a teacher at the High School. All of the administrators have teaching experience. Teachers range in experience from two years to over forty years and teach subjects including English, Calculus, Chemistry, Reading, Foreign Language, Government, History and Business Technology. About half of the

teachers are tenured. Even though a couple teachers had nearly a decade of experience, they were

new to North High School and had transferred in from a different school within the past two

years. Pseudonyms have been created to protect the identity of participants.

Data Analysis Approach

Having earlier discussed the theoretical aspects of discourse research in this chapter, the

practical approach of data analysis employed in this study includes Foucault's analytical process

of interpretation as suggested by Dreyfus and Rabinow (1983). Foucault's method is to organize

statements that comprise "serious speech acts" according to the discursive representations

(strategies, modalities, concepts, etc.) they appear to characterize (Dreyfus & Rabinow, 1983, p.

48).

Foucault's analytical method reports on the process of discourse formation that represents

an ordered system. It does not focus on the meaning of statements themselves or the bearers of

these statements, but rather on ways of making statements that result from discursive practices.

Keller (2005) explains that Foucauldian analysis "should never equate elements of discourse

with the actions and interpretations of those who [are] addressed" (p. 232). The statements reside

in socio-historical context and reflect a certain way of thinking or social reality that is the focus

of the analysis. The text itself is the product of discourse. Foucauldian discourse analysis

considers not what is said by the text itself, but instead what is the likely meaning of text in

relation to the possible subject-positions of research participant.

The analysis of data in this study focuses on interactions that represent discursive themes

instead of the 'talk' that characterizes individuals. Reading, analyzing and framing the texts of

interview data collected for this study helps to characterize the discourses. Foucault's model for

discourse analysis also emphasizes the search for 'silence' in textual data – that which cannot be said or even thought in a location and under a particular regime of truth (Hook, 2001, p. 13).

Foucauldian discourse analysis emphasizes a diversity of data in addition to textual data. Foucault warns that the meanings of text alone cannot apprehend or fully represent the effects of discourse. He encourages researchers to engage in discourse and explore how various physical arrangements, external politics, and tactical practices embody it. Foucault's analytical approach includes a breadth of data sources that offer opportunities to reveal the many different salient components of discourse. The more sources that are included in the research, the more visible discourse becomes (Hook, 2001, p. 18).

Discourse is mutually produced and inseparable from social-historical events that constitute it. The broader analytical scope of this study weaves together texts with evidence of the physical effects of discourse to highlight the interconnectedness between the texts and the broader policy context. By connecting textual elements to certain material arrangements and to external reference points, the various intersecting networks of power that shape discourses are revealed.

The themes used in data analysis discussed in the next section, abstractly symbolize the order of discursive practices in social fields, the subject positions of participants, and the wide-ranging effects of power. They suggest an evolving understanding of how the speech of research participants represents certain social realties or subjectivities. Keller (2006) explains: "If we consider discourses as more or less institutionalized structures of knowledge production and circulation, it should be clear that there are pre-constituted subject positions for articulation" (p. 232). Keller (2006) emphasizes that these subject positions are "collective identities" which are constructed through discourses that emerge out of symbolic struggles over knowledge (p. 231).

Data Analysis Procedure

This study has been guided by research questions and the concept of discourses has worked to inform the constant modification and transformation of data collection methods and sources. As interviews were transcribed and imported into contextual analysis software, theme categories were considered and reconsidered by closely examining and regrouping sets of indexed data. As the transcripts were codes, additional field notes data of observations and researcher reflections were also entered and connected to interviewee statements.

The first step of textual data analysis involved removing immaterial data; comments that were off topic or irrelevant were eliminated. The data was also coded according to broad groups of respondents and according to the responses to the questions. For example, all of the 'teacher' and 'administrator' responses were tracked separately. All responses to question one were grouped together, responses to question two grouped together, and so on. Finally, the data was made anonymous by removing any references that might reveal the true identity of participants to an outside reader.

During the second step, similar spoken statements that included common phrases, views or beliefs were grouped together into general themes without a preconceived coding set (see Appendix B). During this inductive process, emergent themes, broad topics and specific ideas were identified that reflect the material elements of recorded texts. One statement could represent and be coded according to multiple themes.

Throughout this step, theme categories were considered and reconsidered by closely examining and regrouping sets of indexed data. As new themes emerged or were added, the analysis was revised until the end when a full data set was examined, and a final set of

descriptive themes were identified. These themes encompass all of the textual data from the interviews and provided a framework for describing different perspective of participants.

The third and final step was analysis was deductively coding the interview transcripts for the discursive themes. Transcripts were read through for examples of patterns of relationships between participants that reflect how knowledge is constructed, produced, and authorized, and for what purpose or for whose interest. The textual data was coded according to Gore's (1995) typology of Foucault's techniques of power. The "power tools" included in Gore's framework are: surveillance, distribution, totalization, individuation, classification, exclusion, normalization and regulation.

Bandeen (2009) builds on Gore's (1995) typology of power tools and applies many of Foucault's theories about how subjects negotiate, resist and develop their own power through counter strategies. Her study focuses on questioning, "the ways that teachers produced power among one another – particularly with regard to silence and other elusive practices that operate under the radar of policy regulations" (Bandeen, 2009, p. 77). Bandeen's (2009) grounded approach rearranges Gore's typology to map "two discursive formations of shifting discourses to create a framework that was representative of the divergent power tools of teachers and policy" (p. 78).

In Bandeen's (2009) model, the first discourse, educational 'policy', involves applying rational power tools of surveillance and distribution that align teachers with organizational goals. Policy discourses are characterized by "absolute language, quantitative data, distance or policy from history and production measure" (Bandeen, 2009, p. 122). The second discourse, "teacher", is characterized by the personal power tools of classification and exclusion that work to create groups around shared values and views. Teacher discourses run counter to the views of the

policy discourses and are characterized by "tentative language, qualitative measures, distance of teachers from administrators, and awareness of the necessity of performativity" (Bandeen, 2009, p. 122).

Bandeen's (2009) theorizes that policy discourses "maintain compliant subject positions" and teacher discourses work to align teachers with "certain localized discourses through monitoring themselves and each other" (p. 122). Bandeen (2009) contends: "the negotiation of memberships allows teachers to maintain subject positions that confront, diverge or run parallel to those of policy" (p. 122). She points out that shifts in teacher and policy discourses can produce "theoretical space for the messy and complex teacher subject" (p. 151).

Bandeen's (2009) framing of discourses as a collision between policy's rational stances and teachers' own personal experiences intentionally focuses on teachers' changing views of their role. She theorizes four critical subject positions that emerge at the intersection of policy and teacher discourses: "silent resistance," "silent-survival", "vocal-leadership" and "vocal-resistance" (p. 151). Policy discourses sanction "silent-survival" teachers, while teacher discourses produce "silent-resistant" teachers. The intersection of the colliding discourses can form "vocal-resistant" or "vocal-leader" teachers (Bandeen, 2009, p. 151).

Very similar to Bandeen's (2009) findings, Winiecki (2007) reports on resistance strategies exercised by workers in response to the use of statistics by management to evaluate their productivity. These "secondary adjustments" happen in "spaces left free" unknown to management (Goffman, 1961, p. 54). They are the ways workers can "affect the appearance of quality statistics" while "working in ways other than explicitly disciplined" (Winiecki, 2007, p. 369). Winiecki (2007) develops a model for explaining relationship between management and

workers that produces a worker's image of his or her self that he refers to as "shadowboxing with data" (p. 372).

In the shadowboxing model, the 'true' image of the subject is display as produced by the interaction between how a worker sees him or herself and how the organization sees the worker. Winiecki theorizes that a worker becomes oriented to certain objective standards that are imbedded in mediating technology and this influences their conduct (i.e. the effects of power in Gore's (1995) model), but in-turn a worker can find gaps in the regulatory apparatus for secondary adjustments (i.e. resistance in Bandeen's (2009) models).

Winiecki (2007) explains further that through this interaction of shadowboxing, "both labor and management are continuously able to draw on their background knowledge and values when producing actions that manipulate the appearance of particular images of one's self or one's position to the other – labor can introduce secondary adjustments and so can management" (p. 373). He reveals that the outcome of this interaction between worker and management "is a socially established 'objectivity' that is continuously influenced by its subjects as they are continuously influenced by it. The imputed "objectivity" is actually a set of both ongoing programmatically compliant and agonistic actions with the apparatus, with embedded and obscured secondary adjustments" (Winiecki, 2007, p. 373).

The three Foucauldian frameworks discussed above (Gore, 1995; Winiecki, 2007; Bandeen, 2009) are reflected in the reporting of the data for this study in the next chapter. The terms and concepts captured in these *priori* models are used as deductive themes in this study to code data and are considered as possible fits for analyzing the ways in which teacher identities are constructed by discourse. They were applied to the data to identify and discuss particular

discourses and techniques of power that signify governmentality and immerse teachers in a

network of power/knowledge relations that makes them subjects.

Data Reporting

In this study, the presentation of findings focused on revealing participants' true voice

through the coding of emergent themes, but my interpretative process also relied on examining

previous studies and relating findings to an existing body of knowledge and prior theories. In this

respect, reporting data through a Foucauldian lens was an influential aspect that speaks to the

quality of this study. Lincoln emphasizes that qualitative data or texts "are always partial and

incomplete; socially, culturally and historically;…and can therefore never represent any truth

except those truths that exhibit the same characteristics" (Denzin & Lincoln, 2011, p. 404). From

this perspective, only texts that display authenticity are valid.

In addition, the researcher must make sense of his or her findings through interpretation.

It is the researcher's interpretation of a phenomenon that creates meaning. This point is

supported by Creswell (2007) description of Denzin's interpretive framework that emphasizes:

> …the ability of the researcher to illuminate the phenomenon in a thickly contextualized
> manner (i.e., thick description of developed context) so as to reveal the historical,
> processual, and interactional features of the experience. Also, the researcher's
> interpretation must engulf what is learned about the phenomenon and incorporate prior
> understandings while always remaining incomplete and unfinished (p. 214).

Data for this study is reported in a way to provide a description of the case under study and the

context surrounding it. The interpretation is detailed and illustrated by the inclusion of actual

quotes taken from interview transcripts to exemplify different themes. The narratives presented

in this chapter represent the discursive positions of those who were interviewed. Reflected in the

retellings are the discursive constructs included in subjectivities of participants. Their stories and

language "has both context and function; it is a kind of action. It produces an impression; it

constructs a particular social reality" which this study aims to uncover and makes known (Callaghan & Lazard, 2011, p. 190).

Foucault was skeptical of modernist grand narratives that present themselves as emancipatory based on a subjective worldviews and claims of universal truths. When a researcher interprets data from such narratives, he or she is reifying and making explicit relativist positions of transcendent or universal truth that exercise different discourses rather than reality (Francis, 2003, p. 58). In the reporting of data, this study avoids any problematizations or theoretical dualisms based on modern or neoliberal ideas. This research does not stand for any particular cause or challenge. To the contrary, it does the opposite by attempting to disperse knowledge that reinforces all-encompassing ideologies. Instead, this study is a personal process focused on localized narratives and models of discourse that demonstrate the diversity and complexity of relations – it is a conversation. As Graham (2005) explains, the objective of Foucauldian discourse analysis is not "engaging in a battle of truth and fiction...not whether [a stance] is true, but how its objects might become formed; that is, how is this particular difference articulated and brought to attention and what might be the 'effects in the real'" (p. 6).

Trustworthiness & Validity

There are many perspectives on how to validate a qualitative study. Realist researchers such as LeCompte and Goetz, (1982), Lincoln and Guba (1985), Eisner (1991) and Lather (1993) have developed models for practically evaluating the credibility of qualitative research. Lincoln and Guba's (1985) four categories for assessing the trustworthiness of qualitative research are often cited as the gold standard. Lincoln and Guba (1985), define trustworthiness as credibility (internal validity), transferability (external validity), dependability (reliability) and conformability (objectivity) (p. 300).

In this study, triangulation in data collection was used to address Lincoln and Guba's (1985) trustworthiness standards. Several different data sources were used to give more insight into the topic, including fourteen interviews, observations, documents, photographs, and secondary research. Different types of interviews were combined with varying approaches to explore information from different viewpoints and places that complimented each other. These interviews were conducted in the place where teachers work, were accompanied by the collection of artifacts and were followed-up by several classroom observations and additional questions. The diverse perspectives of the fourteen research participants provided plenty of opportunities to check agreement about experiences among the group and sufficient data to generate themes that accurately reflect the views of participants.

Appropriate methodologies such as reflexivity, external review of coding, and a variety of data analysis methods have also been used to improve the trustworthiness of the research. The use of different sampling methods ensured that multiple, varied, and redundant 'voices' were included that accurately represented the collective case study. The transference of relevant *priori* theories in the design of this study supports its applicability or external validity, and comparing the results with similar studies with similar subjects and context supported consistency of the findings. Furthermore, my dissertation committee provided collaborative supervision to improve the analysis and interpretation of data, and to directly address and monitor my potential bias. Reliability was also addressed in this study by a detailed description of the research so that future researchers can replicate the design.

A codebook was developed to describe the textual data analysis procedure in detail. This codebook along with examples of how data was coded was given to raters to increase the reliability of data analysis. Dr. Strom and Dr. Winiecki from my committee and other academics

served as outside peer reviewers. Throughout the data analysis process, I met weekly with Dr. Winiecki. He advised my data analysis and ensured that my application of Foucault's analytical methods was exact.

The research methodology contains proof of its trustworthiness through strategies of immersion in the field and triangulation of several data sources and different types of interviews. However, this study cannot absolutely guarantee validity. Due to certain constraints discussed in the next section of this chapter, not every voice of every teacher at North High School was documented and thus some perspectives are probably not reflected in the data.

Constraints

It has been well documented that qualitative research can be immensely time consuming and issues such as access to the site, building trust, getting key informants to participate and dealing with sensitive issues can emerge as significant challenges as they have in this study (Cresswell, 2007). Typically, qualitative research in education in which immersion and a richness of data is desired is conducted by participant observers who are already members of the staff at the school that serves as the location for a study. The foray into a public education setting by an outside researcher, whose role was that of a nonparticipant observer, led to many unanticipated complications.

The major problem was a limited amount of time to conduct the study. The search for a suitable site began early during the previous fall semester. Unexpectedly, three consecutive research applications to different school districts were all declined and even though the study was originally planned to begin at the start of the following spring semester, by the middle of the spring semester, permission for a site had yet to be obtained. I later learned that most research

requests made to school districts were declined due to the large number of applications, and was advised to make a connection with a school principal before applying to another district.

Permission was obtained for the eventual research site due to the assistance of an Auburn University professor who contacted a high school principal she knew on my behalf. I met with the principal and a school district administrator to discuss the study and they gave their permission afterwards. Once a site authorization letter was received from the school district and Auburn University's Human Subjects Review Board approved the study, I had only six weeks remaining in the spring semester to conduct the study. I was also informed that data collection could not take place during testing week or during the final week of the semester. As a result, the timeline for this study was only four weeks, but I attempted to make the most of the situation.

Qualitative methods employed by this study were shaped by the short timeline and by problems of constrained and intermittent access to the site and participants due to issues of trust, rapport and acceptance, and limits on the amount of time participants felt they could reasonably give to the study. Typically in qualitative research, these barriers could be overcome with enough time and immersion, but in this situation there was not enough time and I was not permitted to become completely immersed in the setting.

The original research design called for considerably more follow-up interviews, observations and document collection, but as the research unfolded it became clear that the fourteen informal interviews would have to serve as the primary data source for the study. It would have been ideal to collect more data from members of the school, but it was not necessary.

These time constraints also limited my ability to code the data and develop themes during data collection. Most of the fourteen interviews were conducted in just two weeks and up to three interviews occurred in a single day. To adjust to the situation, a strategy was developed for

preparing for new interviews where I would listen to audio recordings of prior interviews. Notes taken during this process were reflected on and informed changes to the interview protocol. This interpretation of the data, which highlighted different perspectives, guided the development of new interview questions and interviewing strategies.

Qualitative research rarely unfolds exactly as planned. Research in the real world in real settings is inherently unpredictable, and qualitative researchers expect to encounter the unexpected. I negotiated the obstacles to my ideal study by making adjustments to my methodology as data collection proceeded. The collected data adequately provides complex textual descriptions and in-depth insights into the perspectives of participants because data were collected "from a variety of perspectives, using a variety of methods, and drawing upon a variety of sources so that an inquirer's predilections are tested as strenuously as possible" (Guba, 1981, p. 87). Enough data was collected to satisfactorily apply data analysis methods and truthfully report on the subjectivities of participants.

Reflexivity

Lincoln's approach to assessing trustworthiness emphasizes a commitment "to a set of stances" (p. 212). Like Foucault, Lincoln (2011) emphasizes that a researcher must be reflexive about his or her own positionality, standpoint or situatedness. Lincoln believes that "qualitative research is a situated activity that locates the observer in the world" (Denzin & Lincoln, 2011, p. 3). From Lincoln's viewpoint, the presentation and interpretation of texts must include reflexive analysis of how a researcher's own position, perspectives and *priori* understandings are brought into the study.

I have endeavored to include reflective commentary through the text of this study. He has also informed the reader of how his perspective, stance and *priori* theories have influenced and

informed this study and particularly how the results were presented and discussed. As the major instrument of data collection, I have tried to be transparent about his experiences, background and points of view.

Summary

This chapter overviewed the blended case study and poststructural methods used in the conducting this study. The focus of this Foucauldian research is on deconstructing policy and teacher discourses and understanding the relationship between them and teacher subject positions. Data was collected to demonstrate the network of technology that contextualizes the lives of educators and supports discursive formations produced by power. It primarily consisted of fourteen interviews with educators and administrators at North High School, located in Alabama, over a six-week period in 2013. Additional data was collected from classroom observations, documents, photographs, secondary research and follow-up questions.

The analysis and reporting of data in this study represents a progression that started with Winiecki's (2007) applications of Foucault's theories to examine technology-mediate labor. Data analysis is grounded in Gore's (1995) formalization of Foucault's techniques of power and was further developed by Bandeen's (2009) model. These frameworks provide a deductive 'design' for data interpretation. However, data analysis is not limited to these models and retains an open-endedness that results to some unexpected findings to be revealed in the next chapter.

Chapter IV. Results

Introduction

The analysis presented in this chapter critically examines the told stories of educators to uncover how technology introduces a new dynamic into the practices and management of teaching. It provides real-life examples of how technology mediates the activities of North High School teachers and how their interactions or struggles with technology shape their identity.

As theorized by Foucault, technology is the apparatus of methods, techniques and mechanisms that conduct the day-to-day lives of individuals in pursuit of particular politicized goals – technology is the *means* through which programmatic *ends* are achieved. Foucauldian research is interested in the 'doings of doings' – how power and knowledge produces the technology apparatus, how it is deployed, how it functions to reify discourses, how individuals comply or contend with it, and how it constitutes subjects and subjectivity (Dreyfus & Rabinow, 1983, p. 187).

To Foucault, a "discourse is the creation and collection of knowledge and methods related to a particular and unified domain, field or discipline" (Winiecki, 2006, p. 6). This chapter first describes three related discourses that frame rational views of education: technology, public policy, and teacher. In this analysis, teacher retellings are examined for signs of structures of thought and discursive truths that characterize particular ways of thinking about the nature of education, about the meaning of a teacher's work, and about the various possible representations of a teacher's self. Reflected in what teachers say are discourses that produce

technology in the form of rules, tools or incentives that lead to certain patterns of beliefs and conduct.

Part one of this chapter describes how technology discourses in education commonly frame technology as the tools, devices or machines that are systematically 'applied' to solve practical problems and achieve programmatic goals (Bouras & Albe, 2007). Even though technology is commonly seen as a separate discipline developed by experts outside of education, recent shifts in education have made knowledge about technology an essential component of school curricula and teachers are under pressure to integrate technology into their classrooms. Technology discourses overlap public policy and teacher discourses, but they also evoke their own particular processes for constituting teacher subject positions that are informed by normalized views related to how technology innovations are rationally linked to societal progress or evolution.

Part two switches focus to how the technologies, strategies or programs of public policy discourses frame a teacher's role in terms of accountability or performative agendas in education. Public policy discourses solidify political and managerial interests that are reinforced through accountability mechanisms associated with Foucault's concepts of disciplinary power and governmentally.

Part three switches focus again to Foucault's particular way of theorizing 'resistance' as a form of power itself. This section describes how teacher discourses produce power through a network of relations, localized truths and shared understandings that allow them to diverge from, confront and disrupt technology and public policy discourses (Bandeen, 2009). However, teacher discourses are not merely determined by their reaction to normalizing power of policy or

technology. When teachers pickup and use various technology, they construct and maintain the 'norms' of their own localized discourses.

All three parts of this chapter follow a similar pattern of analysis. Each part begins by 'setting the scene' with a separate narrative that features one teacher who embodies the values and beliefs of the particular discourses being explored. These stories are presented to give the reader insight into the context of setting and also to give a more thorough examples of the real-life case.

Next, four discursive formations are explored that characterize discourses in education and frame how teachers think about and relate to the technology of each one. First, I describe how discourses constitute accepted forms of knowledge. Second, I consider the goals or aims of discourses. Third, I reveal how the language of discourses reflects certain values and beliefs. Lastly, I describe the technology tools and systems that reify discourses.

I continue my analysis by applying Foucault's concepts on major 'techniques of power' to characterize the particular discourses addressed in each of three parts of this chapter. Foucault refers to certain 'techniques of power' as human *dressage* or management that regulate and discipline the conduct of individuals to accomplish programmatic goals (Foucault, 1988a, p. 104). Technology in the form of systematic programs automatically structure, observe and document the activities of individuals so the values, beliefs and practices of the discourses are reified. These 'techniques of power' reinforce power/knowledge relations to normalize teachers to a certain 'ideal' way of being and to compel them to self-regulate their own conduct. Gore (1995) attempts to "operationalize" or "tame" Foucault's analytics of power by reducing it a tidy typology of eight 'power tools': surveillance, normalization, exclusion, classification, distribution, individualization, totalization and regulation. I demonstrate how these power tools

are recognizable in the particular context of this case study. This method allows for an understanding of the disciplinary effects of discourses on teachers, how power is produced and maintained, and how individuals are governed and made subjects.

Finally, each part of this chapter concludes by theorizing how the technology of discourses in education affects options for teachers to activate different subject positions. Foucault (1994) theorizes that through the 'technologies of the self' individuals reconcile their own past experiences with the 'norms' imposed by discourses (p. 29). Teachers can either adopt or reject the dominant knowledge and practices of different discourses, but either way they are still subject to and enmeshed in the discourses that partly affect who they may become.

Part 1: Technology Discourses

This part of the chapter focuses on presenting the context of how teachers use technology and how hidden within the 'subtext' of their talk about technology is understandings that support wider technology discourses. Real examples of how teachers interact with technology are used to provide an insiders or 'emic' perspective. From this, emerges is an understanding that while teachers' views are shaped by the rationality of wider technology discourses, they are not entirely uniform in their thinking. Rather, how they view technology and choose to interact with it is context specific – partially determined by their own knowledge about the purpose and nature of technology.

Setting the Scene

It is near the end of the school year in late April and I am headed to meet Kim for an interview at her classroom in the main building at North High School. I follow the expansive main corridor that connects the front of the building with science classrooms far in the back. As I navigate through the newly remolded and modernized school, I take in my surroundings. The

walls are painted varying shades of grey (no pun intended) and the floors are polished cement that could be mistaken for speckled white marble. Punches of flat orange-red paint accent the neutral greys. Sometimes a whole wall or entryway will be painted entirely orange-red and thick horizontal stripes of orange-red paint will separate tall spaces. Some vertical pillars, floorboards and railings are painted a dark grey color to add some intensity to the otherwise monochromatic color scheme.

The ceilings above the corridor must be two stories high and the corridor itself is nearly as wide. Above me, suspended galvanized metal pipes, ductwork and rafters are painted white to match the ceiling for a very clean yet industrial look. Elegant truss lighting made from aluminum pipe is suspendered by steel cables from the ceiling like the sort you would see above the stage in a concert hall. This s-shaped track lighting stretches out like a snaking stream down the corridor purposely creating contrasting areas of brightness and shadows on the walls and floors along its path. The overall aesthetic is modern, yet still recognizably institutional.

Overall, the school is superbly designed, contemporary and well equipped, but it still has a utilitarian character. I have visited over forty schools in Alabama during the last three years and North High School is a whole different world compared to most. The majority of public schools that I have set foot in are located in declining rural communities, which are not nearly as well-off as the community supporting North High School. Many are in a dilapidated condition with leaking roofs, broken furniture and obsolete technology. North High School is blessed with an abundance of recourses and teachers have everything they could ask for, which must help the school to recruit top-rated teachers.

The end of the main corridor opens up into a circular courtyard. Many radial hallways funnel into this courtyard like spokes on a wheel. Directly ahead is the science hall, to my right

the English department and to my left are the career technology classrooms. A large double

stairway provides access to more classrooms on the second floor where a curved row of windows

gives a view of the area below. I get my bearings and choose the hallway that leads to Kim's

classroom.

As I wait in the hallway outside of Kim's classroom for her class to end, I listen to the

imperceptible buzz of activity that emanates from students working together in the classrooms

that line both sides of the hallway. When the school bell rings signifying the end of the period,

all of the classroom doors swing open and the hallway quickly fills with a flood of students eager

to get to their next class. When only a couple students still linger in Kim's classroom, I poke my

head in to let her know that I have arrived. She sees me and motions me to sit down in a chair

next to her desk.

Kim's classroom has the same open ceiling with white pipes as the main corridor, but

they smaller in circumference. Windows line the length of the outside wall of the classroom,

filling the room with natural light. The carpet is a maze of turning and twisting grey and red lines

that resemble the random patterns I have seen on computer circuit boards. Student's desks have

white tops, aluminum legs and orange-red seats. They look nearly identical to the desks that

furnish the classrooms at my University.

The classroom is remarkably different from other classroom environments where I had

met earlier with other teachers for my study. Kim's classroom is setup traditionally with school

desks arranged in straight rows facing toward the front – focusing the view of students to where

Kim stands when she addresses the class. In contrast, a technology education classroom that I

visited earlier was setup as a computer lab with tables arranged along the perimeter walls of the

room facing outward at an angle and back-to-back in the center to the room to form a double 'U'

shape. This arrangement makes it easy for students sitting at the workstations to see the front of the classroom and if the teacher walks to the back of the classroom, he or she can observe what every student is doing. In a third classroom where I conducted an interview, desks were set closely together like a traditional classroom on one side, but there was a science lab on the other side with modular lab tables, cabinets and shelves packed with scientific equipment and safety gear.

Even though many classrooms are uniquely arranged with different furnishings and equipment, they all share one common technology feature with Kim's classroom: attached to the wall at the front of each classroom are identical smart boards. All of the classrooms are also equipped with space-age looking document cameras (Elmos) that are kept on a small rolling podium-type cart next to the smart boards. Likewise, instructor desks are usually off to one side of the smart boards at the front of the classrooms. Evidently, teachers need their computers, smart boards and Elmos all to be in reach when they teach. I learned later that these devices are separate parts of an instructional technology system that every teacher interacts with throughout the day.

Kim helps the remaining student with his backpack as she ushers him out the door and then sits down opposite me in her desk chair to start the interview. I introduce myself and explain the purpose of my study. Kim is a newer teacher and she jokes about when she first started her job that other teachers would sometimes mistake her for a student due to her youthful appearance. Like a number of other teachers that I interviewed, she volunteered for my study because she sees herself as a 'technology-using' teacher who wants to fully integrate the latest technology into her instruction whenever she can. Other teachers that I interviewed including

Noah, John, Rachel and Luke are similarly enthusiastic about the potentials of technology and in many ways see themselves as the technology trailblazers of the school.

I open the interview with Kim by asking two related questions: "How do you use technology in your daily work and how has it impacted what you do?" From my ensuing conversation with Kim, I learn that she interacts with technology on daily basis. When Kim comes to work early in the morning every day, the first thing she does is login to her computer and the school's network. Her login identifies her to the system, which gives her access to the school's information systems that track data on students like transcripts, attendance, demographics, discipline issues and grade reporting. Kim also has separate logins to access to numerous other online information systems like the ACT Quality Core website that tracks end-of-course test scores and the Alabama Learning Exchange (ALEX) repository of lesson plans and learning materials. ALEX is a digital repository of thousands of vetted lesson plans, podcasts, digital content and learning assets created by Alabama teachers. Submitted lessons plans undergo a rigorous review process by a committee of peers and University professors for quality and how they meet the Alabama's College- and Career-Readiness Standards (CCRS).

As her students are getting ready for school, she uses her computer to check her email for messages from her colleagues, students, parents and administration. She also posts the day's class agenda on her website along with assignments and links to learning resources. Using the Remind 101 app, she sends out a mass text message reminder to her students, asking them to check her website before they come to class for day's agenda and class materials. She created the website herself and she uses it every day to post class agendas, assignments and lesson materials. Her website hosts a lot of other information as well including links to videos, presentations, quizzes, study guides and students' completed projects.

During class, she may use her smart board to show a YouTube video or use her Elmo to display a page from her textbook. She often tries to engage students with apps like Quizlet. This mobile app is a study tool that lets students and teachers create custom digital flashcards, quizzes, and games that assist with learning. She frequently uses the Socrative, which is a classroom response software that is used for real-time quizzing or polling without the need for clickers – students just use their smart phones. Through this app, Kim presents questions to students, they submit their answers and then the aggregated results populate a graph shown on the smart board. Kim also uses the Pick Me! app to randomly call on students. She uploads her class roster to the app and a 'wheel of fortune' determines who is chosen. There are currently an overwhelming number of apps available to Kim and the other teachers and they are continuously trying out and sharing with each other.

Kim also teaches technology even though it is not her subject. For example, last week, she quickly showed her students how to use a new online presentation tool called Prezi, and then paired them up, gave each of them a notebook computer, and urged them get hands-on with the software. For Kim, technology literacy is an important aspect of teaching just like reading comprehension or critical thinking, and she tries to push her students to learn about technology whenever she can.

During her daily free planning block she starts preparing for the next day's class. Kim downloads the prerequisite lesson plan from the course guide saved in her department's shared Dropbox folder and then modifies it to fit her own personal teaching style. She uses the Internet to search online digital resource libraries and YouTube for multimedia elements that she adds in her presentation. After she finishes, she uploads her personalize lesson plan and learning materials to Dropbox so that her colleagues can review it, offer feedback and perhaps refine it

further for their own classes. Kim reveals that Dropbox helps teachers to coordinate what they teach and ensure uniformity of instruction between the same classes delivered by different teachers, which is the goal of a newly adopted and more rigorous standard curriculum in her department. Dropbox is used to distribute the new curriculum to teachers from day-to-day and to monitor what they are doing.

It is apparent that Kim is steeped in technology, as are John, Noah, Rachel, Luke and some other teachers at North High School to differing degrees. This group of teachers seeks out and actively engages with technology everyday. It is a part of who they are – how they see themselves and how others view them as teachers. Much of what they say reflects a normalized understanding of technology as practical tools that are applied to engage students, effectively organize instruction, make their work easier and assess learning outcomes.

As Kim's story develops, her understanding of technology deepens. At first, technology is portrayed as electronic tools like her smart board, computer and Elmo. Kim then characterizes the digitalization of technology as various software applications and digital media that are applied in conjunction with hard technology to enhance learning. This predominant understanding of the nature of technology as 'applied tools' suggests a passive relationship between technology and students for which technology is instrumental in the transmission of knowledge. In this paradigm, the relationship between technology and teachers is based on performative justifications. Technology is meant to augment what teachers do to make them more effective and further programmatic goals.

Next, Kim describes how technology has moved online to create virtual classrooms hosted by Learning Management Systems like Edmodo and a collection of other cloud-based social applications. Digital technology is applied to situate students in an online class and is also

enables school systems to organize instruction, curriculum and the work of teachers in general. In this paradigm, the atomization of education moves students-teacher interactions out of the context of a school community to decontextualized digital networks, which changes the focus of education from the individual or differentiated to collective or universal instructional methods (Krumsvik, 2008, p. 4).

Finally, Kim believes new technology in education can be transformed by teachers to democratize learning and empower their personal, caring relationships with students and each other. She describes a future where technology contains the potential to make instruction individualized, self-paced, collaborative and flexible – philosophical principals that are at the core of her ethical teacher-identity. This 'interactive' view of technology breaks with policy objectives to reshape technology based on constructivist frameworks that center on context, personal relationships, support and the social aspects of learning.

I ask Kim about where she thinks technology is taking education in the future, and she gives two answers. First, she says her class is already headed in the direction of the flipped classroom model where lectures and homework are reversed. Before class, students watch short five to seven minute video recordings of a teacher explaining the topic and giving instructions – theoretically allowing them to learn on their own and at their own pace. The flipped classroom model reframes the role of a teacher to that of a guide or coach that supports students in their self-directed learning with personalized activities and lesson pacing.

Second, Kim envisions how technology will transform education in the future by helping to differentiate instruction to meet the unique needs and learning styles of individual students. She recalls an article she read last year about a software application used at a Steve Jobs Schools that self-adjusts to the pace, previous knowledge and learning style of individual students. Like

in the flipped classroom model, in this model there are no classes and no teachers, just 'coaches' who support students in self-directed learning entirely through technology.

Even though Kim and her techno-savvy colleagues appear to secure their identities partly in the conventional 'applied' view of technology, later in Part 1 I will demonstrate that they do not have a monolithic response to technology. Their views and the interests of technology discourses do not always agree. Kim and her colleagues are using technology in their own way and by their own rules, which are not always aligned with what is considered 'normal' under the regime truth that is fashioned by technology discourses. Even though this group of teachers are the most enthusiastic about the possibilities of technology, most teachers that I interviewed are uneasy about giving away too much of their power in exchange for technology's promises and they remain skeptical about entirely computer-assisted and distance-education technology, which they associate with remedial and course-recovery activities.

'Truths' of Technology Discourses

Technology discourses attempt to remake epistemological views in education by reducing education to a set of oversimplified economic and social imperatives. These repurposed 'truths' include variations on three familiar modern rationalities: 1) the digital revolution in society is a sign of progress that will inevitably impact education; 2) a new 'net-generation' of students needs and expects to interact with technology to learn effectively; and, 3) economic growth depends on schools adequately preparing students for a techno-centered world (Tapscott, 1997, p. 8). Technology discourses apply these imperatives to frame what teachers do and determine the context of teaching. They give new technology legitimacy and are used to sideline or disregard traditional educational interests.

The first imperative supposes that advancements in technology determine social progress and inevitably lead to positive changes in schools. Following this logic, it is only natural for schools to embrace the cutting-edge technology solutions born from technology trends in greater society. North High School teachers note the profound changes in education due to the pervasiveness of technology in society and they appear to be influenced by it. For example, Emily observes:

> Everyone has a cell phone with Internet. This opens up what the students can do. You can now introduce videos and discussions, online chats and things like that could not be done in the past. It is a whole new world because of the technology that has been introduced.

Ella also reports a similar experience:

> I have one student, he is on his computer Googling it with anything I am talking about so he can have something to add to the conversation. If I bring up something a company is doing, he will go to that company's website to look at it himself – that constant search for more knowledge.

Ella and Emily's comments above reinforces the belief that ubiquity of connected mobile devises is transforming education in ways outside the control of teachers. Their reflections echo an understanding that technology offers students the opportunity to transcend the boundaries of the classroom to enable new ways of learning and communicating.

The second imperative builds on the previous idea that because the current 'net-generation' has grown up with and is immersed in digital technology, it must also be the natural way in which they learn (Prensky, 2001). David seems to reproduce this belief: "It is the culture students a growing up in. Students are digital natives compare to twenty years ago when I started teaching when they were not. I think new interactive technologies are like hooks for learning now." Jane also supports the perspective that students are already immersed in digital technology and this impacts how she teaches: "My students are so driven by technology and their brains are

so overloaded with it. They always want to be entertained. So, you have to find creative ways to present the boring stuff as well as the things they are interested in." Jane suggests that technology has altered the minds of students to the point where she has to change her self to become more entertaining in order to engage them in learning.

The 'net-generation' theory is based on the idea that technology and education are linked – exposure to digital devices in the digital world makes students think and learns differently compared to previous generations (Prensky, 2001). Ella confirms this theory: "They have so much entertainment at their fingertips, so when they come here and they watch you teach, you have to constantly be looking for fun and exciting lessons." Luke echoes this sentiment as well: "It is a constant struggle to make learning enjoyable for the students as much as possible and technology helps with this because they are already immersed in it." Luke and Ella submit that they are competing with technology for the attention of their students.

This theory challenges conventional ideas about education. It follows, old technology like textbooks and blackboards must give way to electronic textbooks and interactive multimedia presentations, and outdated teaching practices must succumb to new approaches to learning like the digital tools that facilitate self-directed learners who no longer need to depend on teachers for getting information. David's support of Learning Management Systems (LMS) applies to this rationale: "If students are 'natives' to this digital age and this is the way they communicate, then an LMS is another great platform to communicate with them." For David, technology is the bridge between teachers and students that overcomes the generational divide.

The third imperative is based on the assumption that education has the responsibility to prepare students with the knowledge and skills to be successful in the workforce. This imperative assumes that without a well-educated workforce the economy will collapse. In the digital age, it

is assumed that technology is driving the economy and the new challenge of education is to prepare students for a digital world.

In keeping with this economic rationale, David believes schools should provide students experiences using the same technology in the classroom that they will encounter in the workplace after they graduate: "Sometimes I feel like there is disconnect between what educators should have and need to use and what kids need and will use in the real world." Ella makes a similar connection between what students need to learn how to do in school to be successful in the workplace after they graduate: "I make them do it on their own, because once they get out into the workplace, they are going to have to teach themselves a lot of things. Their boss is not going to be there to give them every piece of information they need to do their job." Luke adds that it is not solely about work skills, the technology that students are exposed to in school may also prepare them for college: "The good thing is that wherever they go to college they will have to use something and if they have used an LMS like Edmodo already, then college systems like Blackboard or Canvas will not be that hard for them." These North High School teachers have assumed responsibility for teaching about technology in their classes – it represents a new competency.

David believes the integration of technology education into curriculums is justified by the need to overcome the 'digital divide,' which is a belief that expands on the economic imperative of digital preparedness and turns it into an issue digital literacy for the masses. He explains that the lack of digital skills among some students as a problem of socioeconomic inequality: "Digital literacy disparity is the same as socioeconomic disparity. Kids today who are the poorest probably have a smart phone, but that is about all." As is common in 'digital divided' rhetoric, Mary frames the problem in terms of access to technology: "Not all students have a computer at

home. That is an obstacle that you face as a teacher. Not everyone has access." Leah also reiterates this problem: "Many of my kids do not have Internet at home. So for those kids, they have to make some kind of extra effort." As evidenced by these comments, technology discourses reconstruct access to technology as a forceful social justice movement in which teachers play a key role in mending the division.

From a Foucauldian perspective, the social and economic imperatives presented in this section are universal 'truth' claims of technology discourses that are taken as reality. They represent rationalizations that are formed around the use of technology, which characterize neoliberal thought processes that attempt to place technology in broader views of the 'natural' mechanisms of democratic governing, justice, free-market supply and demand economics and nationalism. In doing so, this technology ideology becomes real, effective and powerful because it is intertwined with systems, strategies, tools and programs of education (Rose, 1999, p. 15).

Goals of Technology Discourses

The imperatives discussed previous section link technology innovations to progress in education and ultimately with determining the attainment of economic goals. Technology discourses frame technology advancements as a 'revolution' in education that automatically enhances teaching practices, empowers student-centered learning, and 'liberates' education from the physical boundaries of public schools by enabling students to learn from each other anywhere in the world. Hannon and Bretag (2010) contrast the position and interest of technology discourses and teachers by characterizing technology experts as outward looking and seeing technology as a bridge between education and the technologized world, whereas teachers look to the situated contexts of their current teaching practices and focus on the interactive, relationship building, and communication benefits of technology (p. 116). These two nuanced understandings

of nature of technology reveals a dichotomy between teacher and technology discourses that creates agonism between them as they try to frame technology differently.

Technology discourses endeavor to replace the usual teacher-centered classroom model of education with a technology-centered online model in which students self-direct their learning, learn collaboratively with their peers all over the world, and are connected to all the information they need through the Internet. The language of self-directed and technology-mediated learning is a recurring theme among North High School teachers who have internalized some of these views. For example, Emily describes how technology can transform teaching: "Before, all thirty different students in one class had to get one delivery mode from one teacher, but now when we have technology and devices in the kids' hands, those thirty kids can have thirty different teachers." She continues by recognizing that not all teachers are ready to hand over or empower students to learn on their own through technology:

> Self-pacing is hard for teachers because they have to relinquish control of that delivery and its hard because you want to be responsible for everything that kid gets an understand. Sometimes it easier to feed it to them on silver platter then to have them find it on their own. That is why you are starting to see a shift in education of it going that way, but there are still a lot that are reluctant to try some of the new technologies out there to help in covering their course work.

Noah has embraces the rationales of technology discourses and believes in self-directed learning. He uses Edmodo to allow students to "move as they need to move" or "work through" lessons at their own pace. He sees his role as that of a "facilitator" instead of a "coordinator" of learning and he uses a metaphor to describe the change: "It is almost like a metaphorical shepherd so to speak. You take people where they need to be and point them to the right places." Noah's view echoes the way wider technology discourses characterize the innovative technology-enabled role of the teacher as the 'guide on the side' who allows students self-direct

their own learning and by using connected mobile devices to search for the information they want investigate.

However, some North High School teachers push back against computerized teaching, by arguing that models like Noah's flipped classroom approach are only for "advanced" students who are capable of learning on their own. Emily contends that self-directed methods are "only for a select few" who are "smart and above average" students. After supporting the approach earlier, Emily questions: "When they teach themselves something do they really understand the depth of what it is their teaching or are they mimicking some process they see?" And, she emphasizes why the relationship between teachers and students is essential: "You still have to have the teacher to be able to go even deeper or wider than they ever could by watching a video or reading a textbook."

Technology is often initially developed without any ties to education and separate from the history or principles on which learning is grounded. Teachers themselves are not engineers and rarely develop the technology they use; rather, the private sector employs experts from academia to give existing products an education makeover. Castell, Bryson and Jensen (2002) critically characterize the efforts of private sector technology developers:

> A new breed of entrepreneurial academics gives intellectual legitimacy to commercial and corporate ideologies. New 'partnerships' of designers and developers committed to technology for its own sake now create products for the 'education marketplace,' with little or no experience of, or interest in, underlying educational goals, while explicitly educational theories are supplanted by a re-purposed economistic discourse.

The authors suggest that underneath the outward appearance that technology aims to modernize education, is the underlying profit-driven motive of private sector interests that is far removed from education.

Technology discourses support the interests of companies that want to tap into schools. These outside commercial interests are continuously producing knowledge to support rational justifications that work to convince schools that their schemes are essential for developing new ways of learning. By persuading schools that their 'proven' technology is necessary for educational effectiveness in a rapidly changing techno-driven society, these companies overcome the distance between the private sector and education.

To market to the education marketplace, technology developers partner with education experts to create excitement for their latest repurposed products and digital tools through funded research, pilot-studies, conference presentations and professional worships. For example, Mary learned about Google Documents through an in-service training and Kim recently attended a profession workshop about "doing technology in the classroom" where she learned about Apple's learning apps for mobile devices.

Through the 'research' of education experts, outside technology interests refashion technology discourse in education to spread rationale views that press school administrators and teachers to support, purchase and intergrade their digital products. Schools buy in to the rhetoric of technology discourses and believe they must immediately have the latest and greatest technology. For example, Emily reveals that she has a cabinet overflowing with all the different technology coming into the school form different sources:

> We have a lot of software programs that are purchased through title I funds, federal funds, technology funds. Renaissance Place, for example, for star reading where they can do reading and math tests where they can find line in progression and where teachers can go to differentiate instruction in classroom. I have an entire file drawer of software programs that we use for things such as that.

For Emily, school development is an unending problem of updating equipment and competence to accommodate the technology that is continuously dropped on her desk. Driven by the need to

make a profit, technology discourses inundate schools with cutting-edge innovations and apply pressure on them to keep pace with the latest trends.

Technology discourses characterizations of technology as powerful tools that can transform education drives attention away from the social or contextual aspects of learning to technology considerations such as access to digital devices, teaching the knowledge of technology, and addressing apparent technology inequities. This new epistemology of education creates a 'distance' or separation between the usual old ways of *teaching* and bold new technology-driven ways of *learning* – between conventional teacher practices and technology as an *end* in itself.

This view frames technology in terms of how it may be used in education, not how educational theory may be applied to technology (Castell, Bryson & Jenson, 2002). In other words, technology developers and education experts who offer up technology to be used in education have separate interests that are disconnected or distant from teaching practices. The agenda of these interests is to position technology tools at the forefront of change in education. They promote widespread and unconstrained access to information through technology as a way of connecting students with the world outside the school.

Ultimately, the goal of technology discourses is to compel teachers to willingly relinquish their power to technology-driven learning environments – to get out of the way and let technology take over. Economic and social imperatives are leveraged by technology discourses to create urgency for change that pressures teachers into reforming their traditional pedagogy to match the new tools. Technology discourses attempt to impress on teachers that technology is a catalyst for change, creativity and new ways to teach, which compels them to reexamine their selves based on values and principles that are novel and outside of their professional experience.

Language of Technology Discourses

Technology discourses privilege certain language that frames the application of technology in education as a response to the social and economic imperatives for the information age. Technology discourses assert that education must respond to the demands of learners by providing them with dynamic, flexible technology that engages them with the high-tech world beyond the school. The humanist or modernist views of technology discourses are signified by futurist or visionary language like 'digital generation', 'information revolution', 'connected world,' 'access to learning', 'anywhere, anytime education', 'collaborative networks' and so on. This ideal language of technology discourses is visible in the rich texts provided by interviews with North High Schools teachers, however, it is largely translated into more practical terms.

In the language of North High School teachers, the transformative and progressive aspects of technology is primarily framed as futuristic learning environments where technology enables students to take responsibility for self-directing their own learning. In talking about the future of technology in education, Kim exemplifies this idealize vision of sci-fi schools where learning is personalized to the student and their textbooks are replaced by connected mobile devices. In this model, there are no formal lessons, lectures or classrooms, students learn through software and are their own teachers. Adult 'coaches' are on stand-by for when students ask for assistance.

Noah echoes Kim's vision of the future: "Things are becoming more individualized and more personalized. With online learning platforms and web-based stuff, you can individualize pacing so that everybody no longer has to be at the same point at the same time." And, as a test of the possibilities of technology, John reveals that his class "is nearly all computer-driven." In his class, each student has his or her own individual computer instructor. The courseware John

uses provides his students with content for each lesson, tasks them with assignments, tracks their progress and tests them at the end. When his students are using the system, it entirely changes John's role from lecturer to facilitator of the technology.

Kim references the flipped-classroom approach as the 'ideal' model that blends technology with instruction as the goal she is working towards: "I think that for my class I would like to implement more of a flipped classroom type plan, and I have kind of started doing some of that this quarter." In this model teachers prepare the materials, but learning is no longer centered on the teacher/student relationship. As a technology trailblazer, Noah has already implements the flipped classroom model and he describes how it works:

> I have not lectured in six months because what I have done is either create videos of myself or found some other ones when I did not have time that cover what I needed to teach. I give the kids the links to the videos and we have laptops in the room. If they reach a point where they need to learn something new, they pull the computers out, watch a video and move onto the next assignments.

Noah records his lectures and then posts them online through a Learning Management Systems called Edmodo. This online software guides his students through completing their studies on their own. It is entirely up to the students to teach themselves, but they can ask Noah for assistance at any time. I observed that even during class time, students would watch Noah's videos of his lectures on a notebook computer when the real Noah was assisting another student.

Noah uses technology to create virtual copies of him self so that he can be accessible to his students all the time. Similar, in a previous section, I quoted Emily saying that mobile technology can give every student his or her own instructor. Her language demonstrates the influence of technology discourses Emily is echoing the 'truths' of technology discourses that promote the effectiveness of technology over tradition teaching practices. And, she continues by revealing that technology asks teachers to relinquish their power students: "Self-pacing is hard

for teachers because they have to relinquish control of that delivery and its hard because you want to be responsible for everything that kid gets an understand."

Emily affirms the goal of technology discourses to take center stage as justified by the assumed necessity to make education student-centered. Ella also reiterates this viewpoint when she talks about how technology is "good because ultimately the more students can teach themselves, the more they can take initiative with their own learning." The localized language of North High School teachers reflects how they are merging modernist values and principals of technology discourses into their own historic ethical understandings of teacher practices like differentiating learning and student motivation.

Tools of Technology Discourses

Technology discourses in education are principally characterized by humanist 'truths' that technology inevitably leads to progress and technology 'discoveries' can to be universally applied to improve education. Yet, as noted in the pervious section, the language of teachers in the localized context of North High School mollifies the zealousness of technology discourses with a more pragmatic 'applied' image of technology, which is how teachers mainly think about it. Bouras and Albe (2007) contend that from an 'applied' or materialistic paradigm, teachers see technology tools as the neutral and systematic application of science for the purpose of solving practical problems in education, not revolutionizing what they do (p. 288). This prevailing epistemology or way of thinking mediates much of the relationship between technology disclosures and teachers in educational settings.

An analysis of data from interviews with North High School teachers reveals how they principally see technology as useful tools that save them time and make their lives easier. Kim stresses how the Remind101 app allows her to contact all of her students at once through text

messaging, which makes her more efficient. Rachel's shares a story about the Quizlet app in

which she emphasizes how easy it is for each of her students to have their own personalized

vocabulary list:

> Instead of giving students a set of vocabulary words to study, I ask them to collect words as they read and that they do not already know, and guess at the meaning of the words based on context. They capture the context and then they build their list online in the Quizlet mobile app. Next, I use the list a student creates to quiz them. So, they each have their own unique set of vocabulary words, which would have been impossible to do before. In the past, it would be almost impossible to have individual quizzes, but creating the deck in Quizlet allows them another way of studying. It is electronic and a lot of them love to do anything electronic, and it allows me to individualize what they are doing. Before, I would have to go through 25 different notebooks and write 25 separate quizzes essentially. But, this way it is their own vocabulary and it is what they did not know. They learn because they find it in their reading and it was useful to them.

Another example the app that Jane uses, which makes grading tests a snap: "I use an app where I

can take a picture with it and it will grade my multiple choice tests for me. It will do it just like

that." Noah also favors this app: "I love it. It makes all the difference in the world and if nothing

else it makes my life easier because otherwise I would be forced to grade all those assignments

by hand at the same time and I am trying to check other assignments and monitor my

classroom." These comments demonstrate how teachers commonly frame technology as a

practical shortcut to greater efficient and enhanced teaching practices.

Based on an 'applied' epistemology, teachers speak about technology passively or

conditionally. Where wider technology discourses frame technology as initiating or activating

learning, teachers see it as an object on which students act. Technology is viewed as sources of

information or ways of presenting content that can enhance learning methods, but are not the

methods themselves. This view is represented in how teachers talk about using YouTube videos

and PowerPoint presentations as the extent of their technology adoption. For example, Luke

believes YouTube videos make instruction more engaging and real:

103

It is a lot easier to connect students to the world when you can show them video clips or something. I can get online and show them real world stuff like YouTube videos and things that are happening all over the world that they are able to connect with. Seeing is believing kind of deal.

He interprets the usefulness of technology based on established learning theory.

Like Luke, many teachers value technology because it offers them easy access to online libraries of multimedia materials that makes their instruction more interactive and engaging. John explains why this important: "I am going to put a YouTube video up and the kids are going to watch it. These are fourteen year-old kids. They come in here and you have to get them interested some how." Kim's emphasizes that the Socrative app she uses is beneficial because it encourages her students to interact:

I will ask a question and they will enter their response on the app and it will pop up as a graph and we will talk about that. Just by letting them insert something on their phone, they are engaged and now they want to talk about it. If I had them just raise their hand, they do not care.

She continues by giving a concise characterization of her 'applied' view of technology: "I am really just more worried and interested in that they are engaged and here with me. If I can do that through technology, that is helpful." Kim is suggesting that if technology tools are not discernibly useful to her, then she is not interested in them. Teachers are looking for ways to relieve the burdens of their workloads and enhance their existing pedagogy, not make their lives more complicated or diminish their central role in education.

Teachers believe that effective instruction must accommodate the learning styles and unique needs of individual students; a principal referred to a 'differentiated' instruction. In Rachel's earlier Quizlet example she values technology because it allows her to differentiate instruction by allowing each student to build his or her own personal list of vocabulary words. This notion is also reflected in how Luke talks about the advantages of Edmdo and the flipped

classroom model that allows students to progress through class content and learning activities at their own pace. As I quote Noah earlier: "things are becoming more individualized and more personalized." Rachel provides another example of how technology allows her to differentiate instruction:

> We are supposed to be able to walk into a room where you have 25 levels of ability and needs and we are supposed to be able to address them all. There is a website called powermylearning.com and it allows me to add any differentiation of lesson to make sure I addressing every student's needs. Websites like this help me differentiate. This kid is working on main idea and this other one is working on root words today.

> The language of teachers in relation to technology tools becomes a little more active when teachers use online Leaning Management Systems (LMS) to guide students through a project or organize students into online groups to collaborate outside of class. Luke absolutely "loves" the LMS he uses called Edmodo. He posts his daily assignments in Edmodo with any notes, materials or links to online content. His students then complete projects and homework for his class through Edmodo. Luke credits Edmodo's mobile app with transform his teaching practices:

> All of our classwork is done through technology now. Ten years ago, they did not do it this way. I would give students homework and they would just put in on a piece of paper and turn it in. Now, they submit it online and they do not actually have to write anything down. I have them do their classwork on a program called Edmodo. One-half of my students do their work on their smartphones. They do not even touch a PC because there is an Edmodo mobile application.

But still, when teachers as North High School use an LMS, it is viewed as an extension of the physical classroom and how a teacher organizes and leads learning. For North High School teachers, LMS's are primarily communication tools used to share information with students and their parents that make their jobs easier and students more responsible for learning outcomes – they are not viewed as technology-driven instruction in and of themselves.

North High School teachers typically see the tools of technology largely in relation to empowering teaching practices – they perceive technology through the lens of their professional experience. They are focused on how technology can be applied specifically to their situation to make their work easier and the possibilities it has for building relationships, offering more opportunities for interaction, and enabling deep and enhanced learning – how it relates to their distinctive pedagogical practices. They accept the rhetorical evidence that technology is generally effective at improving instruction, but they adapt technology to their own professional values and principles.

By extending teacher's 'applied' image of technology, technology discourses gain inroads into education because the tools are presented as neutral, practical and nonthreatening. However, teachers leverage this epistemological viewpoint of technology to maintain an effective distance between the field of teaching and the body of knowledge advocated by technology discourses. Generally, teachers associate the essentiality of technology with notions of societal progress, but teachers have differing, context-specific viewpoints that develop from dealing with technology on a daily basis rather than a fixed epistemological standpoint.

Techniques of Power in Technology Discourses

In Gore's (1995) typology of Foucault's major techniques of power, she defines individualization as: "Giving individual character to oneself or another" (p. 178). In contrast, totalization is the "specification of collectivities [and] giving collective character" (Gore, 1995, p. 179). Teachers are assigned individual character as belonging to certain classifications of groups based on how they measure up to collective or prescriptive 'ideal' of what a teacher should be.

The totalizing effects to technology discourses can be seen in teachers' individual narratives. For example, David says: "Students are digital natives compared to twenty years ago when I started teaching." In his observation, he is applying collective character to students based on a principle spread by wider technology discourses. This illustrates how some teachers have internalized the knowledge or 'truths' that support technology discourses as a result of totalizing tactics – totalizing knowledge which they also apply to themselves and other teachers, not just students.

Some aspects of what it means to be a 'good' or 'bad' teacher are derived from wider technology discourses and are enacted through the relationships that teachers have with others in the context of their work. Administrators are compelled to measure teachers based on certain mandated technology competency standards, and they also totalize and individualize teachers based on technology discourses. For example, Mary, an administrator, attempts to totalize teachers by saying that "most teachers" do not use the technology that is freely available to them. Next, she individualizes teachers by attributing certain traits to this 'non-user' group such as they may be reluctant to use or uncomfortable with technology:

> Here, I find that teachers do not use a lot of technology in the classroom, which is kind of surprising because they have a lot. They have the accessibility to technology. I do not know if it is because they have taught for so long without technology that they choose not to use it because they feel like their teaching is good without it or if they are not comfortable with how to use the technology. I see more than anything here the teachers use the smart boards to project notes on so the kids can take notes. I do not know if I would say that is the most effective use of the smart board because it can do a whole lot more than that. I almost never ever see kids using technology in the classroom.

In her interview, Mary praises Noah as demonstrating the 'ideal' way to use innovative technology to which all teachers should aspire. Noah's belief in the value of standardized curricula and student-centered learning is supported by the aforementioned "net-generation"

social imperative. In the following quote from Noah, he uses the rhetoric of technology

discourses to, like Mary, paint a totalizing and individualizing image of other teachers by

applying a hypothesis for why they are not matching his example:

> I think everyone is privy to their own opinions, but I also think people will have to let go of the traditional view of education and move toward what is best for students if that means not having as much control and not doing the same PowerPoint for another five or ten years to have all the attention on you, then so be it. We have to get away from that because the generation has changed and therefore culture has changed. If you are not teaching with culturally appropriate methods, then you are not serving so to speak.

In Noah's comments above, he refers to the 'problem' of doing the same things for "five

or ten years" and Mary says "they have taught for so long without technology that they choose

not to." Theses comments imply that they think age or experience is a factor correlated with

technology competence. Later, Noah reveals how he believes his young age and the young age of

one of his colleagues is a determining factor of their mutual success: "We're both pretty young

and pretty forward thinking." Similarly, Kim believes that being young helps and she portrays

one older teachers as being a barrier to fully implementing a new digital curriculum in her

department:

> Until now everyone has done their own thing and this is a new concept of meeting together and discussing how you are going to teach together. But, he does not sit down with us. He may think he does no have anyone to meet with or collaborate with because he is the only one who teachers his class.

However, she says this issue is about to resolve itself: "He is retiring, so he is moving out, and

we will have a younger faculty in the department, especially now with him retiring."

As revealed above, the practice of measuring teachers according to 'objective' levels of

technology competence, enthusiasm and use, facilitates both totalizing and individualizing power

techniques. In this process the conduct and character of teachers is 'normed' against an

exceptional local group of technology leaders in their school, official technology standards for

teachers and schools, and the common rhetorical points of view supporting technology discourses in the public realm.

The image of the 'ideal' technology-astute teacher is inscribed in the official texts of state's policy in the form of technology competency standards. Teachers are required to demonstrate how they participate in "ongoing, intensive, high-quality professional development that addresses the integration of 21st Century technologies into the curriculum and instruction to create new learning environments" and how they "achieve acceptable performance on standards-based performance profiles of technology user skills" (Alabama State Department of Education, 2015, p. 79).

Schools measure teachers by their amount of involvement in professional development on technology topics, level of technology competency, positive attitudes towards technology, and use of technology in the classroom. Sometimes, this combination of criteria is referred to as technology 'self-efficacy', which is the idea that teachers believe in and take responsibility for their technology capabilities – actively seeking out professional development opportunities to improve their technology skills and then choosing to dutifully demonstrate their technology abilities in the classroom.

The all too familiar language that labels teachers as 'techno-natives' or 'techno-immigrants' is common rhetorical chorus in technology discourse (Pensky, 2001), but the connotations they carry is a source of agonism among teachers. Teachers who do not willingly hand over their class to technology are seen as not being savvy enough to keep up with the future. Linked to the assumptions about performance is that older teachers are to blame for resisting the radicalization of education through technology.

Individualizing teachers by relating their age to their level of technology competence seems to have had an impact on the more experienced teachers in the localized context of North High School. Susan's story is sort of the reverse of Noah, Rachel, John and other members of techno-cutting edge. In their normalized view, she represents the typical 'old' teacher that is holding education back. In introducing herself to me, Susan says that she has been teaching for 40 years and "if you ask any of the students here, they will tell you immediately that I am the old one who will not let them use a computer." Susan describes herself as "very old fashioned", which "has a place" in her class because she believes that students must learn how to do things "by themselves because that is the way I know they will know." She is aware that she has been isolated by individualizing power tactics because of her differing views and conduct, but does not seem too concerned:

> I realize that even in our department I am in the minority with this view, but I want my students to know the subject. That is my basic goal. They can confirm with all the wonderful tools that they have available now. That is fine with me, but they must know the subject. You miss the whole point when you do not see the patterns and see how things work together, and if you are just typing everything into a computer, then you will never see that.

The stories provided above reveal how the power tools of totalization and Individualization subject teachers to the knowledge and 'ideals' of technology discourses – tactics that compare and characterize all teachers as not being techno-savvy relative to a minority of young 'hot shots' who are. Bandeen (2009) believes that "through Foucauldian power tools of totalization and individuation, teachers learn that by acting in certain ways they will either be recognized (calcified) or be erased (excluded) through the reassignments of value" (p. 112). Under the current regime of truth supported by technology discourses, a subgroup of North High School teachers is recognized as representing progress, most other teachers are engaging in the

110

process of recasting themselves according to shifting technology and performance expectations, and small number of teachers who are labeled as 'oldies' are being pushed to retire, excluded, marginalized and slowly erased.

Subject of Technology Discourses

For Foucault, discourses privilege or marginalize particular beliefs, values or actions by referencing the value of imbued 'truths' as a body of knowledge (Dreyfus & Rabinow, 1983, p. 187). Technology discourses establish the knowledge of subjects within their situated context. This knowledge is internalized by individuals and becomes a part of their identity. My aim in Part 1 has been to demonstrate how teachers have assumed different aspects of what technology discourses present as the 'ideal' subject that I call the 'techie' teacher subject.

Through the retellings of North High School teachers, I reveal in Part 1 how technology discourses operate to characterize the 'techie' teacher by circulating the credos that present a picture of the ideal teacher. This subject position is presented as someone who is convinced that technology is the key to advancing education and solving society's ills; feels responsible for teaching about technology in his or her class to spread technology literacy; willingly maintains his or her own technology competence by seeking out professional development opportunities; freely transforms his or her pedagogical practices to conform with technology-driven modes of learning, sees his or her role as that of a technology-enabled coach that takes a backseat to student self-directed learning; and is distinguished by his or her cutting-edge use of an online Learning Management Systems (LMS). Ultimately, a 'techie' teacher is someone who readily relinquishes his or her power to technology-driven learning environments – he or she steps out of the way and lets technology take over for the good of students.

The snapshot of the 'ideal' subject defined above is sketched within the limits set by technology discourses. This narrative is that embodies the imputed possibilities of technology is accepted without much criticism and questioning from teachers. Possibly, this verifies that the techniques and practices of technology discourses that I describe in the previous sections are very productive at regulating and normalizing North High School teachers. The school is purposefully constructing a positive school culture around technology. Teachers are enmeshed in an environment of cutting-edge technology that they are expected to leverage to enhance instruction. The school employs an instructional technology coordinator to manage technology initiatives and coach teachers on how to integrate technology into the classroom. The school has changed its curriculum to emphasize technology skills and employs four business-tech teachers. Finally, North High School teachers understand that the qualities of the 'techie' teacher are encoded into official public policy texts that show up on their evaluation forms at the end of every school year.

I also describe in the previous section how teachers are totalized and individualized based on what technology discourses construct as what it means to be 'normal'. Teachers are measured against official technology competency standards and are observed for behavioral evidence of a positive attitude towards technology. Those teachers who do not measure up to the standards are diagnosed for their individual faults and are pressured to change themselves through coaching, training, and exclusion. The example of a select group of techno-savvy 'youngsters' is held up for teachers to admire as a way to make the promises of technology discourses appear genuine in the local context. It is through these totalizing and individualizing tactics that North High School teachers come to conduct themselves and ultimately transforms themselves into the 'techie' teacher subject.

112

The snapshot of the 'techie' teacher represents how one possible subject position has coalesced and become available to teachers, but it is not the only option teachers have. Other counter-narratives can represent teachers in different ways. A few younger teachers from the 'digital generation' are ecstatic about the self-directed learning possibilities of technology, but for most teachers, the idea of giving up their authority over the teaching process to a computer is a prospect that they are reluctant to accept. As I described earlier, the language teachers use to describe technology is generally passive or conditional as well as positive. Their 'applied' view of technology as neutral necessitates a detached position where technology itself is not as important as how it is used – the technology changes from year-to-year, but teaching practices and class content are irreplaceable. From this perspective, technology tools are useful to some teachers because they make instruction more engaging, interactive and entertaining, but they are not revolutionary.

My above depiction of the way teachers align themselves with technology discourses represents an alternative subject position that I term the 'technician' teacher subject. This subject is someone who is practical and less animated about the possibilities of technology. He or she attempts to fit technology into his or her work, not rearrange their work around technology. He or she also believes that technology should empower relationships and interactions among teachers and students, not replace those relationships and interactions with automated computer-mediated learning.

In the process of governing themselves, teachers choose to reinforce or reform power relations. Foucault (1993) explains that "governing people is not a way to force people to do what the governor wants; it is always a versatile equilibrium, with complementarity and conflicts between techniques…through which the self is constructed or modified by himself (p. 203).

Teachers are not entirely produced by technology discourses – they have other experiences and influences of competing rationalities defined by other discourses to reflect on. The reality of individual subjects is contingent upon complex social relationships that play a part in influencing whether a teacher accepts some of the demands of the 'techie' teacher subject position. In Part 2 or this chapter, I will similarly explore how public policy discourses construct an ideal subject position that is mainly an impractical representation of a 'perfect' teacher rather than an authentic account of a possible teacher subject. As such, the representation is an idealized subject that is in turn used in discourses as a porotype for what they 'should be', when teachers are faced with critical reviews of their conduct.

Part 2: Policy Discourse

In education, public policy discourses "are more or less rationalized schemes, programs, techniques and devices which seek to shape conduct so as to achieve certain ends" (Rose, 1999, p. 20). They construct power through the use of rationales that present certain economic interests as absolute imperatives. The retellings reveal what views, values and activities are privileged and which are marginalized by public policy discourses. Part 2 of this chapter focuses on how public policy discourses produce 'truth', relations of power and a particular reality.

Setting the Scene

As I walk up to North High School's main building, the bell sounds loudly. Seconds later, the row of doors demarcating the entrance abruptly snap open and a flood of students stream out. When I enter the building, I discover a raucous mass of students filling the main corridor as far as I can see. The once enormous passageway now feels overcrowded and constricted. As more and more students join the multitude, some students' voices become a boisterous discord of laughter, shouts, and inaudible babble that is amplified like a musical instrument by the funnel-

shaped corridor. However, some students soundlessly move alone, with several looking downcast, others hustling along and several immersed by their own contemplative thoughts. Others have their ear buds in and gaze intently at their smart phones – insulated from the commotion around them. At different points along the hallway, adults stand and monitor the mass of students, occasionally breaking students' chorus with their voices as they greet them and conduct them along.

Branching off to a nearly deserted hallway of administrative offices tucked away in the back of school, I find Mary. Meeting her for the first time, she is charming and her friendly manner is disarming. She is welcoming and eager to talk, which has not always been my experience when conducting interviews at North High School – some teachers were a little more reticent to speak with me.

The bell rings again signifying the start of the next block and the noisy outside dies down. During my interview with Mary, I learn that her job is to deal mostly with discipline infractions and keeping the school running every day. Between the meetings, responding to emails, mediating problems that arise among teachers, parents and students, managing support staff, and prepping for school events, Mary makes time to conduct classroom observation and professional debriefing sessions with teachers, and she is also organizes instructional audits, teacher evaluations and professional development workshops. Like teachers who are struggling to keep up with the many demands of their job every day, Mary is also just trying to keep her head above water.

Mary says that she cares deeply about kids and some days she misses being a teacher, but she feels that she "can make a bigger difference" by working with teachers on "how they can get better." She sees herself a mentor or motherly figure to teachers who need her help to improve.

To Mary, teachers and administrators are her "family" who she "loves." She attempts to come across as nonthreatening by reminding others that she was once a teacher herself. At the same time, she wants to make a difference by "developing" teachers, which she declares is challenging because teachers may not know they need change or may not want to change.

Mary works diligently to create the conditions for constructive learning with an effective level of distance from the principal, teachers and policy mandates. She faithfully implements polices that she does not understand and maybe does not agree with, but she puts her own spin on policy changes when she can and sometimes she gets to take the lead and apply programs of her own construction. Even though there may be more expedient and forceful ways to "develop" teachers in her view, she knows that her principal is concerned about fostering a positive school culture in which teachers are inspired and motivated. Rather than the going around trying to fix 'poor' teaching and 'underperforming' teachers, the new school principal wants Mary and other administrators to focus on indirectly improving learning by building a supportive system in which teachers "have everything they need." This is a more passive role for Mary than what she was accustomed to under the previous administration.

I ask Mary if the school's administration applies any pressure on teachers to perform or comply with certain policy expectations. She responds by characterizing North High School as "a whole different ball game" where teachers " do not experience the pressure of accountability." She continues by assuring me that unlike the old more authoritative school administration, the new administration does not tell teachers how to teach and gives teachers " a whole lot of autonomy in their classroom." She emphasizes: "I do not think anyone ever says you cannot do it a certain way or you have to do it a certain way." The idea of 'freedom' or 'autonomy' is a fairly common theme throughout my interviews with the staff at North High School. Almost all of the

teachers express a greater degree of autonomy now compared to under the previous administration or compared to other school administrations where they have worked prior to joining North High School. One teacher even said that she has "too much freedom" and rarely speaks with school administrators.

Mary explains that her 'mentoring' role comes into play following classroom observations when she sits down with teachers to: "have a conversation about what is happening, how can you improve, what are you doing well, and if you can help another teacher learn to do what you are doing." These debriefing meetings with teachers are used to iron out differences between what teachers are doing and what they are expected to do. Teachers are supposed reflect on their coach's feedback and make changes to meet the institution's expectations. The process is fashioned after modern continuous-improvement models in which workers are made responsible for self-regulating themselves to improve their performance, which helps to explain why North High School teachers are given so much autonomy.

However, it is not as though school administrators are shirking their supervisory responsibilities. Mary reveals that teachers are subject to a series of announced and unannounced classroom observations by school administrators throughout the year. During these observations, Mary has a form that outlines the criteria she expects to see. She sensibly describes the process: "We go in, and if we see it we check it. It is very simple and that is it." I ask her what the checkmarks mean, and she explains: "If you have a lot of check marks, then you are doing a lot of the things we are looking for." The form reduces a teacher's performance to a set of observable behaviors that reflect certain standards that all teachers are judged on.

North High School administrators are especially concerned about orienting and training new teachers. Mary reveals that new teachers are acculturated to the school and to the profession

through professional workshops, pairing them with peer mentors and also "logistically putting" them next to "stronger teachers" who administrator's "want them to be like." From this conversation it emerges that Mary has a clear idea about who the 'bad' teachers are, and she wants to isolate the new teachers from them. She simply does not have much patience for teachers who, in her view, "have been here too long or those that should never have been teachers in the first place."

Throughout my conversation with Mary, she deliberately tries to come across as being empathetic to the plight of teachers and being 'one' of them too, but as in the examples given above, her more judgmental managerial side often reveals its self. Her duel roles as encouraging comrade and controlling supervisor often conflict. In addition to caring for teachers on a personal level as their concerned friend, she also has the managerial responsibility to achieve public policy goals by "developing" those teachers who she deems as 'failing' but still show promise, motivating those who are reluctant to change and are "set in their ways", and sending the detrimental 'bad' ones on to different careers.

Changing the subject from internal administrative practices to public policy, I impart to Mary some of the concerns teachers have about the common core standards, ACT test and end-of-course exams that are part of recent reforms in Alabama. Mary thinks the standards are "wonderful" and she downplays the concerns as just the usual grumbles from teachers about not having enough time to teach everything required by the curriculum. From Mary's perspective, the common standards and class content are "one and one" and all teachers need to do is cutout the "extra stuff" they are doing and manage their time better. When I ask her if she thinks the ACT test may lead teachers to teach to the test, she once again dismisses the issue: "I think what is on the ACT is a reflection of what our curriculum and what our standards are. So, if you are

teaching to the standard than you are teaching to the ACT." For Mary, the problem is not about

how the data will be used, the tests and the common core standards are absolute and cannot be

questioned; rather, the 'challenge' is how North High School and its teachers will do what it

takes to prepare students to perform well on the tests to make the school look good. Mary is

concerned about aligning teachers' work with the wider public policy goals.

When referring to the source of public policy reforms, Mary often uses the term 'they' or

the 'the state', which infers a kind distance between school administrators and policy makers. To

follow-up, I ask her if the principal helps teachers to understand the policy changes, and she

responds by saying that she feels left out of the conversation:

> The policy has not even been explained to us. We are really the managers of the school.
> We manage everything day-to-day. We do not have a say on anything curriculum wise.
> We are not involved in instruction. I would like to know more about it and I know it
> sounds ignorant, but it is the truth. We have asked to be included in the conversations,
> know what is going on, and go to some professional development, but we are just not part
> of that conversation.

Mary's comment reveals that even though she is responsible for implement public policy

reforms, mandates and regulations; she has no voice in decisions about instruction, curriculum or

public policy. She sees herself as being isolated by both public policy and teacher discourses –

trapped in the middle and shifting between the dictates of top school administrators and meeting

the needs of teachers.

Mary represents a mid-level administrator who is just as much subject to public policy

discourses as are teachers. School administrators like Mary seek to tread lightly so as not to

offend teachers and to keep them on their side. Even though their relationship can be touchy,

administrators and teachers need each others' support and commiserate with each other when

public policy 'hammers' are dropped on all of them from high up and attempt to envelope their

work without their consent or buy in. School's administration has been given a great deal of autonomy to, as Mary says, "do whatever they want." They can and do exert their own power to interpret public policy reforms in ways that mediate their effects to their own favor and on behalf of teachers.

'Truths' of Public Policy Discourses

Public policy discourses relate the purpose of education to the economic imperative of adequately preparing students for the workforce. It is assumed that the economy will plummet unless schools produce highly skilled workers. They problematize education as 'failing' to produce students that can elevate the economy to higher levels of success and growth. To improve schools, public policy discourses sanction performative technology solutions forged in the private sector to modernize schools and make them operate more like private companies. These solutions are justified by certain capitalist ideals or 'truths' that schools must be increasingly competitive, efficient and transparent.

The shifting 'truths' of accountability or performative models in education are encoded into and validated by public policy reforms. The latest policy reforms called the College- and Career-Readiness Standards (CCRS) reinforce the belief that education serves economic imperatives by adding job-specific skills that make students employable to the mounting list of common standards. This public policy places vocational training on par with college preparedness and places an importance on producing skilled workers for the marketplace – a focus that originates from the private sector. David, a North High School administrator, describes how the business interests are reflected in the public policy change:

> In discussions with business and industry, in particular, they want kids coming out who are prepared to work. Part of this is having teachers who can prepare students for a work. What does it mean to discipline your time? What does it mean to show up and be ready to

learn or work or what the task is? We want to make sure we are sending out responsible young men and women into the workforce, college life, military, or any avenue they choose; that they are prepared for that. Part of this is life skills, work skills and discipline skills, and I think they have to understand it.

David considers adjusting education to meet business interests as part of the greater good. It is assumed that modeling business practices in schools is a way to prepare students for their future. Speaking form this paradigm, Halle, an administrator, reiterates that the purpose of education is so that students "can go into the workforce, pay taxes and be a contributing member for our society."

Public policy standards are linked to systems that produce data used to measure the performance of teachers. Commonly referred to as accountability, a belief in performance measures applies, as David explains, "increased pressure to do well" because "everyone wants to be apart of a successful school." David, an administrator, believes quantitative measures have the potential of revealing areas in which to improve: "I am for accountability and I think we need to understand where we are and look at our kids and look our data. For too long, we have not looked at our data to see where we are." The administrative challenge for David is how to organize teachers to be more productive as demonstrated by the data, and thus create the high-performing school – a goal that he assumes is self-evident based on the rationale of economic imperatives.

Influenced by public policy discourses, school administrators appear to reproduce private sectors principals and practices. For example, Kim notes that North High School has a continuous improvement committee:

> We have a continuous improvement team. They focus on all the different implementations of changes every year and the new things we are trying to keep improving our scores. Every once and a while, they will bring out data and tell us things.

The 'things' data tells them is how teachers as group perform relative to established benchmarks – whether the schools is performing 'good' or 'bad' in certain areas. Rachel explains further:

> Some goals are based on criteria that are given to us from the state and then the data demonstrates how we are able to move the needle. They look at different subsets of our population and if we are able to improve the performance of these demographic groups.

Another example of a business-like focus on performance measures is the Adequate Yearly Progress (AYP) policy, which is a universal standard set by national No Child Left Behind act. North High School's performance is assessed annually by the state using a set of quantitative measures. In keeping with the principal of continuous improvement, Rachel says that AYP 'bar' would be systematically raised every year to drive schools to do better: "With the No Child Left Behind, there is this idea that we will magically always get better."

Due to Career- and College-Readiness reforms, Alabama is expected to get a waiver from AYP. Alabama will still track Annual Measurable Objectives (AMOs), gradation rates, class sizes, and other accountability measures, but the measurement techniques will change. Halle explains the new system, which is currently being tested throughout Alabama: "Graduate exams are out the window. The way schools are going to be judged is going to be on whether kids are prepared to go do anything after they gradate. Are they prepared to go to college or enter a career?" The old 'bottom-line' that was the graduation exam is being replaced by a combination of ACT scores for students headed to college and certification exam completion rates for those going straight into the workforce.

The above example of AYP demonstrates how public policy discourses institute a kind of business speak of standards, objectives, and measures that represents 'progress' as a set of numbers and computations. David explains that teachers "live in an age of accountability in the past few years, which can be good, but teachers have issues with it." He thinks it is 'good'

because: "We want to know our students are leaning and how we can reach the needs of students when they are not leaning." Continuing to speak for the collective 'we', David says that "educators want our students to succeed and so we put the greatest pressure on ourselves to start with. Sure there are outside forces that want us to do well. No parent wants to send their child to a failing school." David suggests the measures are essential to demonstrate results and to prove to the public that North High School is not failing.

The assumed objective statistics display the 'worth' of individuals and whole school system for the public to judge. Essentially, individuals are watched through the data to see if whether the reforms are effective and whether administrators or teachers 'deserve' the public's continued support (Vinson & Ross, 2003). David infers that the data offers the potential for the validation of a job well done, like a report card for the school made-up of an aggregate of the students' scores. However, Luke offers a story of how his job was abruptly shattered when a different Alabama school did not make AYP:

> I was at a school once that did not make AYP and the principal said that "he did not care what you taught, we are all now teaching for this test." He straight up told us that. I mean he is going to lose his job otherwise. The state was going to come and take over for the school. The problem was that the student-body diversity was about as diverse as you could get. We had to get every single sub-group passing. We had probably eighteen sub-groups that we had to get above a certain line and it was not possible. I think the last year the principal was there, we made AYP, but that was after five to six years. I thought it was ridiculous.

Luke's story may explain why North High School's previous administration was more authoritative – because it reigned under a period of AYP setbacks. It also illustrates how performance measures can apply more than just a little pressure on teachers to produce better statistics even when the teacher's elective subject area is not covered by the test.

Bandeen (2009) notes that business or performative models in education "can render teaching processes invisible while creating urgency around production" (p. 101). When improving performance measures becomes the priority, the extra things teachers do to personalize their instruction are replaced with prescriptive teaching practices. For example, John explains how the administration encourages elective teachers to incorporate learning activities that support core subjects into their lesson plans in order to help raise test scores:

> Now, I have to incorporate writing and language standards in my classroom. Standard number one and two there are for writing. I will put a note on the board and say these are College and Career readiness standards of writing. Basically, what the students will do to meet this standard at the end of my class is called a 'focus free write' where they will write a paragraph of four to seven sentences, answering maybe one or two of the essential questions.

In Luke's story, teachers were told exactly what they should do, but most of the time teachers are subtlety steered towards the business ethics of self-assessment and self-improvement. As in John's comment above and in earlier examples of how teachers make time for ACT preparation to their classes, sometimes teachers willingly follow through with policy expectations that are presented as recommendations or best practices. Ball explains this self-disciplinary aspect of production models: "Teachers are encouraged to 'add value' to themselves, improve their productivity, strive for excellence, and live an existence of calculation" (Ball, 2003, p. 145). As Kourtney says: "No matter how hard you try or how well you do, you are never good enough. That is everybody and not just myself. Most teachers you will ask will tell you that we never feel like we did enough no matter what."

Rachel notes that the "focus on statistics that measures of performance" is the "paradigm I have been under since I started teaching" because she was specifically hired by the pervious administration to improve test scores. She continues: "I see all sorts of infiltration of business

models like the idea of measuring us based on the AP test results….but the idea of continual improvement, the idea that everyday I come in here and I want to be better than I was yesterday, I know that is not always going to happen." She suggests that practice of measuring teachers based on standardized tests, "will impact what we do – there is no help for it – and then what we do to teach to the test is going to impact the test itself." Like David, she explains why she needs the data to prove she is making a difference:

> Even though we no longer have a graduation exam, we still have a need to bring up our students scores and you can see that there is a correlation with a lack of core skills and a lack of ability to perform in those higher-level classes. So, even though the tests originally pushed them in the direction of hiring us because there was a need to make sure we made AYP, there has been a continued recognition that the problem is still there and we may even have helped a certain amount of students.

Even though Rachel is often critical about accountability practices, she still is not against them. Like many teachers, her reaction to policy discourses is mixed. She is cautious about how data can be misused or misinterpreted, but she believes that, even though they are flawed in many ways, the statistics still have meaning.

Production measures render the quality of the work of teachers as the output of the system, which compels teachers to do what is needed to affect better statistics. The data 'conducts their conduct' by showing teachers an image of themselves in the outputs of their work. It objectifies them as a set of numbers – usually aggregate test scores of the class and pass/fail rates. The data disciplines teachers into following public policy's prescription for producing better stats.

Goals of Public Policy Discourses

Policy discourses frame educational goals as meeting certain economic and social imperatives that are unique to the modern age. As I mentioned in the pervious section, it is

believed that students must be prepared with the latest cutting-edge skills to fill employment gaps in a rapidly evolving economy. Shifting economic priorities are used to justify changes to wider educational goals and present them as "free-floating, neutral," [and] 'distant' from education's "acknowledge historical patterns of reform" (Bandeen, 2009, p. 99).

The history of public policy reveals that the goals are continuously rewritten. In 2002, the No Child Left Behind Act introduced accountability to education by holding schools responsible for certain academic outcomes or requirements. The law included financial incentives and penalties to force states to comply with the new model. In 2007, the lack of uniformity among states in how these academic standards were measured was address by the creation of the Common Core State Standards (CCSS). These standards were married with the Science Technology Engineering and Math (STEM) education model designed to produce students interested and prepared for careers in a science and technology-driven economy. In the past few years, public policy reforms have inscribed into law the new Career- and College-Readiness Standards (CCRS) that further align education with wider economic goals. At the local level, all of these reforms lead to the restructuring curricula, reconstructing classroom practices, assignment of new professional standards for teachers and refinements to systems that collect data to measure the performance of students and teachers, and ultimately the success of a school as a whole.

The above changes to educational goals in the form of public policy reforms are usually dropped on schools with little notice or regard for teachers. A number of teachers recognize that public policy modifications fly in from the state without any warning. John says that sometimes the State Department will just "throw something else out and you will just pick it up." Kim believes the state keeps changing direction: "Once the state educationally decides what they are

going to do; we are trying all these different things but have not settled on anything yet." When referring to the new policy, Kourtney suggests that changes to the common standards are delivered altogether in one "package" near the end of the school year and this is how they discover what has changed: "We are just now unpacking the standards seeing what is new." David, an administrator, suggests that he responds to the policy dictates as they materialize: "We will deal with the issues as new laws are passed, we will adjust and move forward however."

When policy is released with little advanced notice, teachers are not given a say in the changes. The top-down design of policy delivers unquestionable edicts against a background of expected silence. Despite some antipathy towards policy that imposes more rules and more rigidity, the 'right' way to deal with sporadic policy changes is to say nothing – just accept it, adjust and move on. This 'silent' position reflects a power relation in which policy discourses subdue teachers through their own self-restraint. As Kim notes: "People may complain about different policies or things that we are trying, but they will just do it for the most part."

After experiencing many rounds of reforms, some teachers begin to see policy change as indifferent and disjointed, which encourages them to silently dissent from policy when it is imposed. For example, Kourtney credits the numerous "whims" of administrators with compelling teachers to just ignore what is requested of them:

> A lot of us, especially people like me who want people to like us, we are going to do whatever you tell us to do. I think everyone is silent because there is so much that they expect of you. You go to a meeting and you are told, "you need to do this, this and this." And, you are like, "sure, I am going to do it," but you just do not do it. It is because there is so much change going on that it is a lot of times we will silently resist because if they are not going to use it anyway or make us do something different next time then why make us do it this time. This is where a lot of the frustration comes in on the teacher level. It comes on a whim. They are like: "This is what we want you to do," you do it and then they say, "oh, that was so last Thursday; there is something new to do now, you do it and fill out these fifteen forms."

Even though Kourtney might otherwise be open to change, the ceaseless barrage of reforms and new rules alienates her from feeling responsible. To Kourtney, the quick pace and incoherence of change is crushing and drains her of her obligation to comply.

Some teachers are silent about policy shifts because they see the changes as a recurring trends or political cycles that reflect the 'mood' or "pendulum" of public policy interests. They identify the shifting neoliberal rationales in policy as disconnected from their local reality. Susan notes: "The one thing I absolutely have noticed in all those years is that the pendulum in education swings one way and then it swings back the other way. So, what was detrimental at one time was valuable at another time. A lot of things in courses and teaching approaches you will see are just rehashes of old models – it goes back and forth." Leah believes that teachers like Susan do not speak out because they are "riding out the trends." Ella believes that veteran teachers are silent because they know new policies will not be given the time that is needed to see their impact and will likely be replaced by the next cycle. As she says: "Things are changing constantly. So, why get on the bandwagon?" Even David infers that the school's administration has to "balance what we are asked to do with respect from the state or whoever would send a dictate or mandate asking us to do something with what the long term going to be."

When policy is implemented without opportunity for discussion or negotiation it is perceived by teachers as dictatorial, and thus distant from their own interests and local context. John talks about how he wishes the state would just come and talk to him because he would "fill their ears full." Like other North High School teachers, John is frustrated that they are not part of the conversation. Susan also says that there is no way the guidelines could have been developed by teachers who have actually been in the classroom in the last five years. John concurs that teachers are left out of the planning stages: "They are there and they have not been in an a

classroom. They do not know what works and they are making the rules, which is sometimes the frustration that you see in teachers." Jane agrees: "The problem with it is when the policies were developed, they had no educators on the developing committees."

The noninvolvement of teachers is a byproduct of public policy that is intentionally developed at a distance from historic teaching practices. Teachers are not included because they are seen as obstacles to progress – as representing the old traditional practices and local backgrounds that policy aims to overcome and expunge. Rapid shifts in public policy are deemed necessary to support the growth of the economy, they represent progress and this is the bottom line. This ahistorical framing of the goals of education creates a distance between policy and teachers who are left out of the conversation and thus react with silence.

Language of Public Policy Discourses

Bandeen (2009) posits that absolute language characterizes public policy discourses (p. 94). Absolute language like "all", "universal", "common" and "unavoidable" are code words that denote certainty and rigidity about subjective beliefs that are asserted as categorical 'truths'. Typically, absolute language codes in texts are signposts of exaggeration, bias or extreme views. For example, the absolute language in following statement advances a common imbued 'truth' of policy discourses: "Accountability standards must be integrated into every school in order to ensure the U.S. economy can will survive and thrive over the next generation." High-stakes pronouncements like this one are polarizing and attempt to stifle dissent by manufacturing a reality in which people feel like they have no other option but to agree.

Policy discourses are characterized by capitalist rationality that frames the purpose of education as meeting wider economic interests. These sorts of 'truths' are visible in talk of North High School teachers. For example, the following comment from Leah is riddled with the codes

129

of absolute language and typifies this underlying belief system: "We are **suppose** to be **preparing these kids for employment** because that is the **whole purpose** for education is to **boost the economy** and to try to keep kids from being **broke and hungry** by the time they are eighteen."

Reinforced by the 'absolute' knowledge of economic imperatives, policy discourses attempt to drive education towards performative models derived from the private sector. Commonly refereed to as 'accountability', these business-like practices attempt to systematically manage education using mechanistic models that objectify teachers with data. Halle, an administrator, justifies the need for the accountability systems that compare teachers based on their performance: "I think of accountability as consistency. Like, if you have got two teachers and they teach the same thing, and one teacher's kids are always out-performing the kids in the other class, then I think we need to address that issue." As is common in the rhetoric of public policy discourse, Halle justifies her performative principles by comparing education to the private sector:

> Honestly, education is one of the only fields where you are not judged on your performance – where you could be in the classroom, teach all day long and be a pretty crappy teacher. I mean, the kids may not be learning anything. You may think your doing a great job, you may just teach your heart out, all day everyday, but if the kids have not learned anything, then something is wrong. We are one of the only professions like this. I mean, if a doctor went in and did twenty surgeries and nineteen of them were correct, someone would 'red flag' that doctor.

Using absolute language, Halle is making the argument that education is lagging behind other social institutions like health care that have embraced business-like production models as the modern and thus the 'correct' way to organize work. Echoing the rhetoric of public policy discourses, she proclaims that education is the last 'hold out' and should give in to the inevitable change for its own good.

Bandeen (2009) expounds that "policy becomes translated through the layers of implementation, the absolute frameworks represent a divergence from language that teachers recognize and use locally" (p. 95). Teachers recognize the absolute language in the public policy rhetoric that school administrator's pickup to uphold accountability reforms. For example, Rachel thinks that education is being "duped" into adopting capitalist ideas:

> Education institutions have been duped into focusing on business norms because of the idea of constantly wanting to learn and improve and get better. But in education, I know that when the shift is focused to making profits, no matter what they say their mission is, their bottom line is what they care about. They can translate that into being able to serve more students or achieving better outcomes or whatever, but the idea that you can change what we have got going on in a classroom to fit a business model is wrong headed.

With the *No Child Left Behind* act, many of the rationalizations underlying public policy discourses were codified in law. The official standards, regulation and rules of teaching included in the law make public policy discourses even more absolute and unquestionable. As employees of state government, administrators and teachers are bound by the law to enact accountability reforms. As Kourtney recognizes, teachers do not have a choice expect to comply:

> We have to do it because it is the law. As a teacher in Alabama, I have to follow the content standards and I have to present it to the students that come in my class and all teachers in Alabama have to present it the same way. It is good. It is accountability, but also it can tie your hands sometimes with what you can and cannot do.

And, Susan explains how public policy explicitly oversees her work:

> The Alabama Course of Study governs us. We are given a list of topics and objectives and whatever the state of Alabama puts together and we have to turn in for each course our curriculum map, what we are covering, the order in which we are covering it, and the objectives for that. Of course with the Common Core Standards all of those objectives have been numbered and documented and we have all of that. We have to turn that in for each course, each semester, and that pretty well guides what we do.

Susan's comment above describes how the technology of common standards and accountability 'conduct her conduct'. By spreading the practices of accountability across all teachers, certain

customs are imposed and rigid boundaries of what is permissibly are cemented. Backed up by absolute rationales and law, public policy discourses regulate what teachers can do and define what is normal.

Tools of Public Policy Discourses

For Foucault, the mechanisms, techniques and technology of power are the practical or objective means through which individuals are governed and made subjects (Gordon, 1991, p. 3). Public policy discourses implement programs and systems to discipline the conduct of teachers. These systems are forms of power/knowledge that reify 'regimes of truth' composed in part of certain assumed economic and social imperatives that provide the justification for changes to education. From a public policy perspective, technology tools respond to economic and social imperatives by making available system-wide solutions. These systems provide centralized control over the context of learning and produce data that can be used to assesses performance and demonstrate progress towards established goals.

Bandeen (2009) explains that measurable outcomes of teachers' performance "redefines relationships" and "transforms teachers' work into a contest" (p. 96). The end-of-course exams and ACT college readiness test facilitate hierarchical observation and normalizing judgment. The common measures transcend context and allow outside observes to judge the work of teachers based on 'objective' statistics. As Halle says: the teachers "are going to be compared" based on these tests and the test scores will be "tied to the teachers."

The test results show how teachers at North High School compare as an aggregate group to the national norm, the state average, other individual schools and to each other. Aggregate test scores abstractly represent and objectify teachers. They reduce everything they do down to a single number that ranks them in relative order to everyone else. Halle explains how technology

makes it easy to apply this tactic: "We gave the test in December and I pulled it up. I wanted to see which of our teachers have the highest scores. Because that is who you want teaching – you want those teachers explaining to the other teachers what they did." Halle wants to use the data to praise some teachers and compel them into normalizing other teachers into the 'right' modes of teaching.

The comparisons based on aggregate test scores encourage competition between schools, between departments within schools and between individual teachers within departments. In order to effectively compete and produce data that resembles the norm, schools pressure teachers and teachers discipline themselves to produce 'good' stats. In her comment above, Halle assumes that the teachers with the top test scores relative to everyone else are the 'best' teachers. Testing technology furthers an environment where teachers are classified, rated and ranked based on their performance.

From her administrative perspective, Halle "hopes teachers are a little bit self-critical" after seeing their scores, and she bluntly asserts that competition is a good for teachers: "…sometimes a little bit of competition is not always a bad things. You know it has kind of lit a fire under some of their butts to make sure they are not the one who has the lowest score after test time." She relates competition to making teachers feel more responsible: "The teachers feel ownership because their class data was compared to the teacher next door." Halle is asking teachers to identify themselves in the calcifications that the data inscribes – assigning responsibility to themselves for the results.

North High School teachers observe how they are being measured and competition is being encouraged. For example, Rachel recalls that during a meeting with an administrator during which she was given her pass rate, aggregate ACT test scores and a goal was set for her

based on the average of her students' exam scores. Kim mentions that her department gets "incentives for passing the exams." Kourtney says she is evaluated and by the aggregate of "students' ACT test score" and this stresses her out. She describes her response to an incident last year when she learned her "brilliant kids" did not perform well on their exams:

> They came back and said, "We just did not really try. I am sorry." On the inside, I am like: "Oh my God, it is going to look bad on me. It is going to look like I did not teach them." In reality, they just did not want to take it that day and admittedly said so. They got '3's when the highest possible score is a '5'. The US average is '2', so they did better than the average. They should have had '4' or '5's. It made me look like a bad teacher to the administration. They are pushing higher scores and if it would have been a trend that continues, I bet it would address it with me.

Kourtney implies that she is responsible for her students' test scores and her self-imposed accountability is adding to her stress. She believes that the administration considers the test score as evidence of her "looking bad" and they are going to make her answer if the trend continues. Even though she knows that negative outcomes were actually influenced by other factors, she has no choice but to orient to the test.

Teachers respond to the to measuring and evaluating their performance in different ways. Noah seems to embrace it: "Go ahead, evaluate me! If I am not making students learn, then you are paying me for nothing. I think it is what the purpose of the test is, to pass judgment, whether it is the students or teachers." Kim says that the new tests are stressful: "It is just hard for me to not to stress myself out about it when we are giving these assessments. I just struggle with it because they are taking this one test, but how does that assess whether they are ready to leave high school?"

Aside from testing, public policy requires teachers and administrators to comply with the procedures of counting what teachers do through submitting paperwork, entering data into computer systems and compiling reports. Much of the administrative tasks of teaching are

automated by technology. Like most schools across the state, North High School Teachers use a Knowledge Management System (KMS) called iNow to enter grades, comments, attendance, discipline referrals, seating charts, list of assignments, syllabus and so on.

Kim explains that students have access to iNow and "all of their academic stuff is on it, like transcripts, GPA, contact information, past year grades, disability issues, etc." She also reveals that the system issues digital report cards to students: "iNow is where we post our grades for all the classes. I do not even have a hard copy of my grades. Student can print a copy of their grades with my comments from home." Luke says: "Everything the school knows about the student is in iNow," but there are "different levels of access" based on someone's login credentials. The electronic systems cement the outputs of teachers' work and makes this information instantly available to administrators, students and parents, and according to Luke, this keeps teachers honest.

Administrators will often use the system to access information about students and teachers. Luke describes how administrators can "pull up the overall grades of a teacher and use that as part of an evaluation tool essentially." Noah says that administrators will use the data during instructional audits:

> Administrators will go through and check our grades all the time. It is not uncommon. Especially for our audits, we have to print out our grades and take them with us. They will see how many 'A', 'B', or 'C's' and we have to be able to tell them why a certain kid is failing.

From a teachers perspective, the database collects information on students from different sources. However, they understand that data can render digital images of both students and teachers that can be used to subject them to perpetual sorting, ranking and classification. Reports are regularly run not only to, as David says, "understand which students may be at risk…and

intervene before a kid gets behind academically", but also to, as Luke says, identify any "red flags" that administrators need to addressed during a teacher's evaluations or instructional audit. David, an administrator, downplays how the school uses data to distribute, observe and judge individuals: "I don't look at it as big brother is watching you but if something is going on then we need to check on it."

Kim notes that parents have access to the knowledge management systems as well and "they check it all the time." Parents are provided with an online portal to access their student's collected data. Luke explains how this portal makes his class and himself constantly observable to parents:

> I enter grades into the systems and within 45 seconds I will get a text from a parent trying to figure out why their kid got a 'zero'. Technology is specifically facilitating instant communication between teachers, parents, students and everyone else all the time.

The parent portal essential automates the process of providing parents updates about their student's learning activities at school. Luke credits the system with encouraging parents to become active in their students' education. Echoing technology discourses, Luke believes the system creates transparence that allows parents to watch teachers to ensure their students are graded fairly.

iNow distributes teachers relative to their students in their class and widens their continuous observation by giving parents access to the system. The data renders a digital profile of a teacher that reveals patterns of his or her behavior in comparison to others and the institutions' norms. In response to feeling like they are being watched all the time, teachers manipulate the data they enter to produce a positive digital image of their selves. For example, Kourtney admits that she has to be "careful" in how she writes comments about students in iNow. As a result, she avoids entering any needless data and keeps her comments to a minimum.

As she says: "We just know less is more." She also reveals that there is a certain professional jargon that teachers become accustomed that characterizes their textual data. Kourtney describes her technique: "There is a way that you want to word it and you have to be very specific, but very general at the same time. You have to be politically correct all the time. I think it is just common knowledge between us." Leah agrees with Kourtney and adds that because she is still learning the professional lingo she "tends to fall into patterns of writing the same comments over and over again."

Pass rates and the normal distribution of grades in a class are other statistics that are used to 'objectively' audit teachers in addition to standardized test scores and other learning outcomes measures. When the work of teachers is reduced to numbers and policy practices like common standards segments their time by the minute, the reality of their localize context is lost. Most often, administrators do not hear or choose to ignore teachers when they object to being totalized and individualized by data because they believe data is impartial and thus represents the only 'fair' means through which to hold all teachers accountability to the same standards.

David, an administrator, acknowledges the added pressure on teachers to perform: "I think there is increased pressure to do well. Everyone wants to be apart of a successful school." However, his comment implies that he thinks it is in everyone's interest to present an image of a "successful school." He thinks that the pressure originates not from public policy discourses, but from teachers' own professional ethics that compels them to want to continuously improve and meet the expectations embedded into public policy. He is basically saying that teachers are self-disciplining. From his view, teachers recognized the obligation for increased rigor and higher standards, and they appropriately apply pressure on themselves do better. His managerial

viewpoint produces a context that frames teachers as having a predisposition toward and willingness to accept any added responsibilities imposed by public policy discourses.

Techniques of Power in Policy Discourses

According to Foucault (1977), discipline operates through distribution by separating the 'objects of power' (students and teachers) in space by classification or rank. Distribution by classification identifies individuals by their function and rank, and this separates individuals in relation to others. The "art of distribution" makes possible the "supervision of each individual and the simultaneous work of all," which turns the space of the school into a "machine for supervising, hierarchizing, and rewarding" (Foucault, 1977, p. 145). Distribution tactics like grouping or connecting permit the effects of totalization, and distribution tactics such as isolation and enclosing support individualization.

The very architecture of a school works to distribute teachers into organized and isolated spaces that allow for the easy observation and managing of their activities. For example, the layouts of the classrooms in Kim's wing of the main building at North High School enables the inconspicuous observation of teachers by school administrators and their peers. All of the classrooms are identically arranged, however, classrooms on opposite sides of the hall are the mirror image of each other. Regardless of which side of the hallway a classroom is located, the teacher's smart board is always immediately adjacent to the entrance of the room, students' desks are in the center facing the front of the classroom, and the teacher's desk is opposite the entrance positioned up against the far wall. This has the effect of creating repetitiveness in the physical space in which teachers work with which that both teachers and students become very familiar.

Sitting at Kim's desk, I can look out the open door of her classroom, though the open door of the classroom across the hall, to see another teacher sitting at her desk looking back at me. The arrangement of classrooms provides a view of teachers of each other, and it also enables passerby's to easily peer into in every classroom with an open door to see what is going on. When I walk down the hall in a direction leaving the central courtyard, I can see the students sitting at their desks and teachers giving their presentations. When I reach the end of the hall and turn around to walk back towards the courtyard, I can see what is displayed on the smart boards in every classroom.

As described above, the panoptic qualities of school's architecture are evident in the arrangement of the classrooms. If an administrator or a department head wanted to assess whether Kim and her colleagues were all conducting the same learning activity as specified by their department's common curriculum map, they could take an unassuming stroll down the hall to check. Teachers never know when someone of authority might use the architecture of the school to observe them unannounced. Sometimes, they may not even be aware that are being observed by someone outside the classroom. This makes the supervision of teachers invisible, which creates the sense that observation is constant – like living in fishbowl – and this leads to them to behaving as if they are being watched all the time.

In describing Foucault's metaphor of a panopticon, Harland (1996) notes the effects of this power technique: "the exercise of continuous surveillance…means that those concerned also come to anticipate the response…to their actions past, present, and future and therefore come to discipline themselves' (p. 101). He also quotes Foucault's (1979) observation that Distribution techniques "arrange things so that the surveillance is permanent in its effects even if it is discontinuous in action" (p. 201). Because teachers do not know when they are being observed,

they adjust their behavior perpetually. As Kourtney says: "I have gotten used to it now, but at first, not only from the kids but from the administration, you feel like they are watching you all the time."

In addition to distributing teachers in physical space to make them observable to authorities, Bandeen (2009) notes that Distribution "isolates teachers from one another "– teachers are "essentially trapped as going to the bathroom or walking down the hall for food would mean that students are left unsupervised" (p. 109). Kourtney confirms this that it is difficult for teachers to leave their students unaccompanied:

> In the sixth grade you have to walk students down the hall and hold their hand and sit with them at lunch; you cannot trust them as far as you can throw them because they are going to do something awful. You cannot trust High School students too, but you can reason with them a little more.

Ella also comments that she does not have time to do anything else besides supervise her students even when she is present in her classroom: "It is not like you can turn them loose. Even when they are working on their own, I cannot sit here and look up fun activities or alternate ways of teaching because I am constantly having to monitor what they are doing."

Teachers are classified by the classes they teach, and pursuant to these classifications they are assigned workloads and regimented schedules that limit their opportunities to interact with each other. For example, Kourtney says that her free time is taken up by extracurricular activities that teachers are expected to do: "Not only are you teaching, you are coaching something. You do not just come in here and teach, I do fifty-thousand other things that I do not get paid for." And, Halle explains that because planning blocks are scattered throughout the day, teachers never have the opportunity to talk: "Everybody's planning block is different. You may be teaching algebra and never see the other algebra teachers."

Resulting from their classification and rank, teachers are isolated from each other. Leah confirms the severe isolation that can occur: "I have been very isolated here. I do not need validation from others and I do not mind eating lunch by myself, but just some days I would like to speak to someone over the age of 14." Luke also describes how his rank among all teachers as belonging to a specific department isolates his group from the rest of the school: "We are very isolated on this hall. I do not know anyone else besides who is on this hall." Kim reiterates how the distribution in teachers in the space of their individual classrooms produces an overall sense of separation:

> We are all really in our classrooms all year. We have faculty meetings at the beginning of the year with all of us for a couple of days and we have a luncheon for Christmas, but I can count how many times we are all in one place talking about something during a year.

The isolating effects of distribution techniques characterize the physical or contextual ways in which a network of common standards, performative systems and quantitative measures trap teachers within the four walls of their classrooms and automates their work. Distribution is imposed through rigid time schedules, pacing guides, curriculum maps and other prescriptive procedures produced by these systems. Teachers are always playing catch-up with the strenuous and stressful expectations imposed by time schedules and their students, which leaves them no time to intermingle and form relationships. For example, Kourtney characterizes the demands placed on her by students:

> The kids are tough. They are demanding and I have got thirty of them in here that think they run the world and think they are the most important thing in the world and you should answer them immediately and only them and you do not have anything else going on in your life and you do not even have a life. They think I live here – like this is what I do and I do not do anything else.

Their overwhelming schedules operates in the favor of public policy discourses because it forces teachers make use of the 'shortcuts' to instruction that are readily available. Ella gives an example:

> I think most of the time we are teaching what we have at our fingertips because we do not have time to pull in other things to teach. We do not have time to go online and find a lot of different activities. We teach what the book is, which is sad, but when you have to spend so much time on other things, like grading papers, writing in-depth lesson plans, and disciplining the students, it is easier to say to them: "Chapter one here we go – define these terms, read the chapter, answer the questions at the end, and here is your worksheet that has been photocopied out of the book and that is it." Because, that is just easier with everything else on your plate, that is the easiest way to go but it is not the best. I know, when you are just going off the textbook, you are teaching other people's beliefs how it should be taught and what should be taught.

The distribution of teachers in time compels them to follow public policy and give up their power to performative systems. It 'erases' what they would normally do to personalize their instruction and replaces it with predetermined pedagogy that as Ella says above represents "other people's beliefs" and not the way they would choose to teach if they had adequate time to prepare.

Isolated from seeing what others are doing, teachers are left feeling fully responsible for their students' outcomes and become highly committed to improving 'their' scores, which reinforces the power of accountability systems. Leah is an example of a teacher who is very much concerned about demonstrating her performance, as she says: "I am trying to do my job, trying not to complain, and not to make waves because I like my job. I want to keep it." She describes her first year as "sink or swim" with "professional deadlines" that were "very difficult to meet." Even though she says her first year of teaching was "horrible" and her first evaluation was a "nightmare," she believes she is "seeing improvement from last year in terms of teaching and management." She is determined to make herself into a 'good' performer.

Teachers like Leah are more susceptible to rationales of policy discourse. They willingly check their own scores to see their distribution relative to other teachers in their department, school and nation who are also measured by the same common assessment technology. The data makes teachers responsible for their assigned rank and for taking steps to improve themselves within the confines of their classification (classroom) without actually knowing if how they teach is any different from their peers due to their isolation. The data regulates what teachers can do and thus what they can become – their subjectivity – without the need of physical boundaries.

Production and quantitative measure produce data that distributes teachers by rank based on criteria favored by public policy. Teachers are ranked against all other teachers based on their 'quality' as represented by the statistics that are attributed to their work. In the same way that the data may represent the learning difficulties of individual students, administrators use the data to pinpoint trends or markers that signify 'low' performing teachers and then determine what they need to do to improve, which may include redistributing them in some way to subject them to other disciplining techniques. Novice teachers are paired with their veteran mentors on their first day on the job and Mary reveals that sometimes struggling teachers are relocated near 'high' performing teachers with the intent of connecting with a new role model.

Conversely, teachers who are ranked as 'high' performers by the data are held up as 'ideal' models of compliance with policy's expectations, and for this reason they may also be redistributed in relation to others. Halle uses the test scores to determine which teachers "you want them explaining to the other teachers what they did." Sometimes, the "better' teachers (often veteran with seniority) get the more advanced AP classes with 'easy going' high performing kids and the 'worse' teachers (often the newest and youngest) are relegated to teaching the entry-level classes with a more 'taxing' general population of students, thus reifying

their rank within the school socially, geographically and hierarchically. For example, North High School administrators privileged the flipped classroom model when they exhibited the success of Noah's use of the approach. Noah says that his 'ideal' modeling of best practices and achieving improved test scores was awarded when he was "given honors classes" to teach.

At North High School distribution circulates teachers "in a network of relations" (Foucault, 1977, p. 146). It categorizes teachers by the classes they teach and ranks them within their classification relative to others (Foucault, 1977, p. 145). According to their category and rank, teachers are isolated in the geographic 'space' within the school and also by rigid time schedules that burden them with demanding assignments and responsibilities. These systems and associated accountability technology isolate and 'trap' teachers in their classrooms throughout the workday. Performance statistics are also used to separate 'high' performing compliant teachers from 'low' performing noncompliant teachers, which can lead to further refinements of their physical distribution and subjects the other disciplinary techniques of power like surveillance that produce self-regulating teacher-subjects.

The distribution techniques that I discuss above arrange teachers in space and time to enable their observation, supervision and examination. In Gore's (1995) research, surveillance in schools is defined as "supervising, closely observing, watching, threatening to watch or expecting to be watched" (p. 169). Under the 'norms' of policy discourses, teachers are supervised to determine if they are behaving in ways that reflect performative models. As Bandeen (2009) notes: "Surveillance elicits a performance to enact a semblance of compliance" with accountability goals (p. 105). Watching is closely linked to judging, correcting and praising teachers' conduct during which "teacher bodies become aligned with intuitional purposes" (Bandeen, 2010, p. 105).

At North High School, teachers are subject to both scheduled and unannounced classroom observations by administrators that are either formal evaluative visits lasting the entire span of a class or are brief five- to fifteen-minute check-in calls called "walkthroughs." Kim summaries the observation schedule: "Your first year, they visit twice per semester – one time announced and one time unannounced. Your second and third year, they come twice a year. Once you are tenured, they come once every other year." Leah, a new teacher, discloses how many times she was observed over her first year: "Out of 180 days and having the kids 90 minutes a day, I have been observed twice for a full class and once for fifteen minutes at the beginning of a class. Both of the former happened to be the exact same lesson." John confirms that administrators will stay "bell to bell" during an official observation and that he undergoes extra observations from outside district-level administrators due to the nature of the particular class he teaches. Leah also mentions that as a new teacher she is subject to additional "peer observations" from her mentor and department head.

As a tenured teacher, Rachel counters that observations "do not happen" and administrators will only infrequently "breeze through" her class for a few minutes because tenured teachers are "trusted to do what is right." Halle, an administrator, acknowledges that "some months I am really good and get to all the people, go in their class, sit for five to ten minutes, and listen, but other months stuff happens and I do not get to all my walkthroughs."

Based on the comments above, it appears that how much and how often a teacher is directly observed is contingent on their classification and rank and on how an individual administrator decides to apply surveillance tools. Administrators can enact their role as 'supervisor' in different ways. For example, Kourtney characterizes one administrator in

particular as the "The one person you just do not want to mess with. If you are talking to this person it is never positive. He is super negative and very critical on walkthroughs."

During an observation, administrators are looking for visible evidence that teachers are complying with the rules and expectations of the institution. Jane agrees that through classroom observations: "The administration knows who is doing what they are suppose to and who is not." Kim believes she knows what administrators want to see when they visit her class:

> I have my agenda on the board everyday. I have my state standards posted. All those things are stuff you have to do as a teacher. We are required. When the administrators come do walkthroughs; this is what they are looking for. They are looking to see that you have your word wall, that you are doing the vocab, and if you have a plan and your following – the standards and stuff like that. That is the accountability part of it.

Luke describes an observation as a "walkthrough where they come into the classroom, sits there, and takes notes on your evaluation." He continues by noting the administrators are watching for certain signifiers that represent performance standards: "Administrators like to see some sort of 'bell ringers'. They are looking for certain specific things – basically did they see 'x', 'y', and 'z' or did they not see 'x', 'y', or 'z' – like did the teacher use essential questions." Kourtney adds some of the other criteria that administers assess during an observation:

> It is not difficult. They have this form they fill out and they are looking for you to have your common standards, integrate your technology, literacy standards, and you are differentiating your instruction for the kids that need it. They are just basically checking off a list that you are doing everything you need to. When I know I have an announced observation, then I will plan. If you have an announced observation and you want do not do well on it – that is when you want to put on your best show.

As Kim aptly points out above, through direct observations, administrators are gathering evidence about whether teachers are complying with public policy. And, through their knowledge of the criteria of surveillance, teachers can counter the scrutiny of schools

administrators and others by displaying behaviors that give the appearance of at least minimal

conformity – what Kourtney refers to above as a 'show' of professionalism.

During observations, teachers behave as if they are being studied. In Kourtney's

comment above, she surmises that if a teacher understands the criteria, they can pass the

examination by putting on a "show." John describes in detail how he adjusts his lecture format

when an administrator is watching:

> I will go and pull up the pacing guide and I will say to the class: "Okay, today class we are going to cover this…" Next, I will pull my screen up and say: "In the course syllabus this will be standard number 5." An administrator sitting there will see that and I will state it, and I also have it up visually so they can see it. Also, if you look up on my board, right there, are my essential questions.

Noah reveals that he thinks the essential questions are ridiculous, so he has developed an

alternative solution:

> The goal used to be the objective for the day. To make an essential question, what I do is just put a question mark at the end of the objective. It is not very practical for me to have an essential question for a particular day because each student has something different they are working on. So, the way I 'game the system' is to write it on the board. This way, it will make them checkmark the box when they come in with that walkthrough form.

Rachel also compares her routine during an observation to a "dog and pony show:"

> For the announced, I would say that you put on your best – you do your very best. For the unannounced ones, they get what you have got going and you might put in a little more effort, but what you do in a class does take planning and if you do not have the prior planning to put on a 'dog and pony show', you cannot 'wipe' one out.

What administrators see during an observation, even an unannounced observation,

reflects what a teacher has planned ahead of time to visibly display as evidence of his or her

compliance. Surveillance tools compel teachers to prepare a 'script' for every class that they can

pull out and 'lay on' administrators to produce the appearance of meeting standards. On

inspection, teachers must appear to administrators to have transformed themselves to become

more like the 'ideal' image of what a teacher is presumed to be like as measured by a series of check boxes on form. The check boxes or criteria represent certain irrefutable values and principles privileged by public policy.

For some teachers, their position relative to public policy discourses is second nature. For example, Kim notes that "other teachers will, as soon as an administrator walks in, get into teacher mode," but "I do not change anything because we are in it whenever they come in." The 'it' that Kim is referencing is her department's perfunctory curriculum that aligns her lessons to the common standards through default templates. She does not prepare a 'show' for the observations because her performance is automatically consistent with what administrators expect. Compared to other teachers, accountability technology mediates her work more thoroughly.

The procedures of standardize curriculum combine with Surveillance techniques to create a technological apparatus of systematic, continuous and pervasive normalization, which eliminates the stress of getting caught doing anything 'wrong' because teachers are nearly always doing what is 'right'. Some teachers appear to be at least partially educated to a 'regime of truth' and normalized such as they have become agents of their own subjectification under policy discourses.

After a classroom observation, a teacher is given a copy of the official observation form that shows which criteria he or she has met of failed to meet. Mary, an administrator, explains what the checkboxes on the form represent: "If you have a lot of checkmarks then you are doing a lot of the things we are looking for." The observation systematically reduces teaching to a set of checkboxes that represent only what can been seen by an outside observer and allows for individualization and Totalization of teachers based on predetermined, yet continuously shifting

criteria defined by public policy discourses and based on overly simplified behaviorist notions of the human condition. With the surveillance tool, teachers are individually inspected or diagnosed as missing certain absolute qualities of performance and they are ranked or categorized relative to all teachers based on the total number of checkmarks they receive.

Kourtney takes issue with the 'short form' surveillance tool when nothing is checked and the form is returned to her blank and without any explanation:

> They will come through the room and the way they come in is very authoritative – no smile, no nothing, like they are in charge. After the walkthrough, they will put the form in my box. I have had this happen twice. They will put a blank form in the box and it is a slap in the face. I think it is done on purpose because it is like they are saying: "I did not see anything that I think is worth of checking." It is perceived as a bad thing and it hurts your feelings. You start second guessing yourself and having evil thoughts. You get mad and go run your mouth to someone else about it. Then you have others that are super positive and think you can improve from it. We want feedback. People want feedback. I am fine with criticism, I am good with it, but a blank form is a slap in the face. It is a strange thing to do. Why come in if you cannot write something down to give feedback?

For Foucault, surveillance strategies are more about influencing an individual's psychology rather than trying to directly control what they do or make decisions for a person. Surveillance "does not liberate man of his own being, it compels him to face the task of producing himself" (Foucault, 1984, p. 42). In Kourtney's comment above, the blank observation form caused her to "second guess" herself and have "evil thoughts." It was a "slap in a face" to how she sees herself, which triggers her to implore for more explicit "feedback" so that she can know what she is doing 'wrong'. The effect of the blank form compels Kourtney to privately self-examine her own identity.

Mary corroborates Kourtney's supposition that an administrator may purposefully leave an observation form blank. She says the school principal does not want administrators writing comments on the form. Instead, they are told: "If there is something that needs to be addressed,

you can do that personally. Do not put it on there. Go talk to them about it." However, she goes

on to clarify that administrators do not "sit down and talk through it" with a teacher until the end

of the school year after his or her full set of observations is finished. Until then, a teacher's

completed observation forms go in their file. Halle explains the rationale behind the procedure:

> Ideally, what happens is multiple people go in the same classroom and see the same thing. I mean, if we always go into so and so's classroom and every time he is sitting at his computer playing on the keyboard ad the kids are sitting there doing nothing, then we know we have got a problem. Whereas, if I see that just one time myself, I do not know what the circumstance are. But, I think if multiple people see the same issue recurring over time and especially after we have addressed them on it or talked to them on it.

The administrative perspective is that to be fair and objective, observations by different

administrators must confirm a pattern of behavior before it can be brought up to a teacher as a

problem. Furthermore, she adds that an identified performance problem does not become a

serious issue until after a teacher is repeatedly warned. Teachers are given a chance to self-

regulate their behavior before more punitive actions are taken.

Through Surveillance tools, administrators at North High School continuously confront

teachers with imbued impartial 'truths' about themselves to compel them to 'confess' their faults

and self-correct their conduct. Halle is accurate when she says that administrators at North High

School never tell teachers exactly what to do. Instead, the evaluation of teachers at North High

School resembles a kind of counseling session. Mary describes the ritual of the debriefing

session from an administrator's viewpoint:

> We split up the teachers and we meet with them one-on-one during which your observations are read to you about what you did. You listen and then sign. Afterward, we have a conversation and we talk about it. It is a conversation of what is happening, how can you improve and what are you doing well.

Mary sees her role as kind of helpful coach who aids teachers in their career. During the

confessional debriefing session that Mary describes above, teachers are compelled to validate the

'truth' rendered by the observation, and take responsibility for correcting their mistakes or deficits by speaking to how they are going to change themselves. Surveillance takes on the form of self-inspection or self-analysis. Foucault bevies that "self-examination is tied to powerful systems of external control: sciences and pseudosciences, religious and moral doctrines" that underscore public discourses and are supported by a "cultural desire to know the truth about oneself," which "prompts the telling of truth; in confession after confession to oneself and to others, this *mise en discours* has placed the individual in a network of relations of power with those who claim to be able to extract the truth of these confessions through their possession of the keys to interpretation" (Dreyfus & Rabinow, 1984, p. 174). The affect of an examination is not to oppress or silence teachers, but rather it is to create a connection or a relationship between school administrators and teachers – to make them visible and to define them in certain ways as individuals so that they can be talked about in an objective fashion and they readily talk about the 'truth' of themselves in terms of their performance, professionalism and pursuit of a career in education.

The ultimate example of confessional 'truth' telling comes at the end of school year when a teacher 'sits-down' with the principal for about fifteen-minutes to go over his or her official evaluation documents in typical bureaucratic form. Kim gives her take on the meeting:

> The past couple of years, they judged us on if we are meeting set of teacher standards like ethics or our repertoire. There is a list of things that they check 'yes' or 'no' on how are you doing these things and we get a copy. Then we talk about with the principal and hear if he feels we can improve on anything. We set goals at the beginning of the year and then another at the end of the year.

Based on Kim's comment above, a teacher's final yearly appraisal focuses on objectives in which the expertise of the ultimate authority in the school is used to counsel teachers to help maximize their productivity and avoid their early exit from the field. The evaluation is based on

a participatory activity of mutually constructing a set of goals that a teacher will use to remake

his or her self into a 'better' individual. By becoming complicit in their surveillance, teachers are

at the same time disciplined and liberated – by accepting responsibility for changing themselves,

they become their own supervisors and deflect the gaze of the authority.

Kourtney thinks the evaluations are just a formality and do not really amount to much,

but she has heard that some teachers have been heavily criticized during their meetings with the

principal. She reports: "They will sit down and talk you through your evaluation. Now, I have

heard of teachers who have had tough times with their evaluation. I have heard stories where in

the fall, they did not have anything right."

Leah admits to being one of those teachers who had a "tough time" during her first-year

evaluation:

> When I went through my first evaluation, it was horrible. The principal did not come
> right and tell me, "you suck as a teacher," but he did say that there is a lot of work to be
> done and these are the two main areas I would focus on next year. He basically told me:
> "We are not going to fire you and the only way we would fire you is if you just refuse to
> do what we are asking you to do. We hired you for a reason." It is very supportive and
> nurturing too for a teacher. There is always help somewhere if you need help with
> something.

Like a doctor kindly sharing the good news with his seriously ill patient that he has found a cure,

the principal informs Leah that she still has a chance at a life as a teacher and she will overcome

her challenges. Leah responds with a renewed determination to prove her worth, and she takes

comfort in knowing administers are available to "nurture" her through the process of becoming a

professional teacher. Leah has agreed to work under constant self-surveillance, reinforcing what

Foucault (1977) refers to as a circular relation between 'truth' of the need for performance that

defines what is 'right' and the power of disciplining practice through self-regulation:

Knowledge, once used to regulate the conduct of others, entails constraint, regulation and the disciplining of practice. Thus, there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time, power relations (p. 27).

Surveillance is not just about the classroom observations or any other single tool. It is a collection of pervasive techniques that manages the details of teachers' life. Aside from the more obvious hierarchical observations of administrators, North High School teachers talk about a new policy called 'instructional audits'. Audits take place throughout the year, and they are mainly for common core teachers. Halle gives a brief history behind the audits:

Three years ago we got a new Principal, and I think the first thing he said was like, "we have teachers that teach the same thing that do not even talk. Not that they do not like each other, they just do not sit down and talk to about the curriculum." I think he saw that as a high priority that needed to be changed. I think it is just now beginning to take effect this year for the first time with the key implementation of what we call instructional audits.

Halle is not concerned about individual teachers – her responsibility is to the whole population or what she calls the "bigger picture." She wants teachers to talk and coordinate so they become united behind common objectives that she thinks will equalize them. She justifies her view by giving an example that I have heard from other administrators and teachers a few times before when they talk about common standards:

Now, I look at 100 teachers. I know the battles we fight, like the parents talking at the ball field about certain teachers. It is usually about one teacher is way too hard or another teacher is way too easier. And, if those teachers would come together and be consistent we would not have all the mouths running at the ball field.

In her comment above, Halle is once again considering the safety or wellbeing of all the teachers under her care. In Halle's paradigm, she expects that through audits teachers will come to manage themselves as a group and thus minimize differences in how they teach. In modern management practices, workers are supposed to be active and initiating and should not need to be

told exactly what to do. They should take charge, self-govern themselves and collaborate like professionals in the private sector to pursue their own career advancement. Mary expounds on how this is the manifesto of the current administration is for administrators not to dictate or manage too much and instead make themselves a resource to teachers, but expect teachers be professional, ethical and devoted to their craft.

In a neoliberal paradigm of organizational management, individuals are free, but they must be self-critical and self-regulate and they require leadership, objectives, values and programs to develop their skills. In discussing the 'technologies of the self' that individuals use to transform their selves, Foucault (1988b) describes these practices of self-development as: "...permitting individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being" (p. 18). The audit at North High School is one such tool in which administrators help teachers into a new way of being. Halle continues by describing the audit process she is involved with:

> Every few weeks we sit down with all the teachers and ask, "where is your curriculum at, what are your kids struggling with, why did your kids do so bad on this chapter test, and what did you do different?" We facilitate those conversations. We have a print out of their grade book, so if your class average is a 61 and your score is a 79 and you teach the same subject, "what is happening, why are we having that?"

Leah verifies Halle's characterization of the audit process:

> We use a curriculum map, which are our standards and we write down what activities we use to teach those standards and the dates we teach those standards. We have turn them in at the beginning of the semester. They are suppose to be audits we are suppose to have with the administration and guidance about at risk students, people who are failing and to make sure we are still on par with the curriculum map we turned.

Both Halle and Leah describe the audit process as kind of accountability in which teachers are measured by statistics and they have to explain themselves. In this sense, audits appear to be

154

another top-down form of surveillance like classrooms observations, but Halle is convinced otherwise:

> So, I think having the audits has gotten the conversation going about what we want you to do. I think our culture is definitely shifting more to that we want teachers to collaborate, to talk, we want you to know that if you are struggling with something, go to another teachers and ask them about it. A teacher, who is a first year teacher here, emailed me yesterday and said: "I just think that in algebra, we are spending too much time reviewing. Is there anyway we can get the algebra one teachers and the eighth grade math teachers to sit down together and find out exactly where they ended in eighth grade and where we need to pick up in Algebra one." I am like, that is a dream, a new teacher is saying I see issues and I want to do something about it and here is a solution.

From Halle's point of view, teachers should be self-disciplined so that administers do not need to step in to correct problems. She believe that when teachers take responsibility for managing them selves according to the expectations and goals of the institution, they are liberated from her supervision. Kourtney confirms that she feels free as long as she stays within the limits set for her:

> I have complete freedom. As long as I am meeting the standards, I have to turn in my lesson plans every week – they are checked by two different people and the Principal. That is all approved and I turn in my curriculum in the beginning of the year and I turn in one again in January. So they know what we are doing.

In the modern school where teachers are 'free' subjects, surveillance is coaching, guiding, advising, training and collaborating. Together, these disciplinary techniques "serve as an intermediary between" administrators and teachers; "…linking them together, extending them, and above all…it assures an infinitesimal distribution of the powers relations" (Foucault, 1983, p. 153). The official classroom observation procedure is a pretext for a sit-down conversation or counseling session with teachers. Surveillance culminates in teachers self-regulating their own behavior to achieve collective education goals that are continuously

reiterated by public policy discourse as common standards, learning outcomes, and production measures.

Subject of Public Policy Discourses

Public policy discourses induce teachers to follow what governmentality ascribes as the 'right' mode of work. During periods of policy reform, school administrators attempt to restrict the space in which teachers can operate. In the previous sections, I have attempted to identify the distinguishing features of policy discourses and discuss how they regulate and normalize teachers by circulating a 'regime of truth' that validates what is considered ethical and moral behavior. The rationales of public policy discourses are encoded into law as educational standards that are used to validate performative management practices which, in turn, are use in attempts to shape the teacher subject. What I show through my analysis of the teacher retellings is a romanticized narrative that denotes an 'ideal' subject position, which is aligned with policy discourses that I call the 'partisan' subject.

Management of an institution like a school is a "calculated or rational activity… that seeks to shape conduct by working through [the] desires, aspirations, interests and beliefs [of individuals], for definite but shifting ends" (Dean, 1999, p. 11). As I presented earlier, the *ends* is preparing students with cutting-edge skills to be successful in the workforce and to meet wider economic interests. The *means* is system-wide solution based on performative models forged in the private sector that focus on common standards, outcome measures and performative practices. Common standards attempt to regulate what teachers can teach (curricula) and how they teach (pedagogy). Outcome measures perpetually sort, rank, and classify teachers who are face-to-face with these common standards. Performative practices supervise teachers and exert pressure on them to self-discipline themselves.

Public policy discourses attempt to indoctrinate teachers into the 'good' ways of thinking and behaving according to the norms, rules, and standards imposed by public policy discourses. As evidenced by the retellings of North High School teachers, the ideal 'partisan' subject is someone who does not just adopt policy reforms; he or she defends policy goals and takes the initiative to see them accomplished without the need for encouragement from administrators. The 'partisan' subject is someone who looks to outcome statistics for validation of a job well done and thinks competition among teachers is productive; is self-critical, strives for excellence and continuously looks for ways to add value to himself or herself; prioritizes teaching from prearranged curricula over his or her own personal teaching style; dutifully documents his or her own work to make their activities visible to administrators and parents to ensure 'fairness' and transparency; and has a boundless positive attitude about and the will to try new teaching practices, technology and the latest trends. The 'partisan' is absorbed by public policy discourses and has no issue with teacher freedom.

The discursive statements of North High School teachers who have assumed the 'partisan' subject position reinforce the positive rationales that compose public policy discourses. As title implies, the 'ideal' subject is someone who sees himself or herself as an agent, supporter or follower of progress – his or her primary mission is to contribute to a successful school however it is defined. A 'partisan' is someone who needs to succeed and wants the recognition as a 'top-performing teacher'. Typically, I found that teachers who assume this subject position are new to their jobs and are thus vulnerable. They are concerned about being seen favorably by administrators and producing positive measures of their performance. Or, they are veteran teachers who are working towards graduate degrees in Educational Leadership and intend to eventually advance to administrative positions, and thus modeling a managerial attitude.

The 'partisan' subject position is further reinforced by 'techniques of power' that impose what public policy discourses privilege as 'normal' conduct. However, it is important to note that power tools are not about controlling or dominating teachers. Instead, they are about monitoring and maintain the boundaries of the space in which teachers are 'free' to work – boundaries that, in this case, are built by public policy discourses (Foucault, 1977, p. 141).

As I noted in the previous section, distribution tools facilitate the direct surveillance of teachers through unannounced walk-throughs, classroom observations, instructional audits and other form of overt and covert data collection. Teachers are then confronted with information produced by surveillance during debriefing sessions with an individual presented as a friendly coach/counselor/advisor authority figure. During these sessions teachers are gently compelled to confess their 'faults' and accept responsibility for self-regulating themselves into acceptable modes of thinking, speaking and behaving.

The 'partisan' subject is a static and essential archetype that is legitimized by public policy discourses, but is rarely fully grasped by teachers because it is counter to teacher discourses. Teachers are confronted with this improbable ideal, but what actually emerge are disrupted subject positions. Bandeen (2009) terms one of these alternative possibilities as 'silent-survival', and my analysis of the retellings of North High School teachers confirms that this reframing of the compliant teacher subject is more true-to-life. I see this subject position as a 'conformist' teacher subject – someone who believes that voicing his or her concerns is futile and adjusts to the demands of public policy by succumbing – someone who drifts with the tide.

Bandeen (2009) explains that the 'silent-survival' or 'conformist' subject position is indicated by "the willingness to be a 'team player' for the support and endorsement of new policy" and "avoiding any discourses associated with negativity" (p. 115). Teachers may

complain among themselves, but they show self-restraint and as Kim says, "they will just do it for the most part." Teachers operating in 'conformist' mode will not vocalize their opposition to policy reforms – they want to stay, as Kourtney says, "under the radar" and "not stand out." As I demonstrated earlier, teachers become disillusioned by a recurring cycle of policy changes, and as a result disengage and do the minimum of what is expected in order to keep their jobs. The 'conformist' subject is someone who grudgingly aligns themselves with new policy goals and has learned to "cope with policy discourses through silence" (Bandeen, 2010, p. 116).

As in Part 1 where I concluded by presenting two distinct subject positions shaped by technology discourses, above I contrast the 'right' model for teacher compliance with public policy discourses with a 'real' one that emerges. The 'partisan' teacher is a vocal advocate for public policy reform, whereas the 'conformist' subject is also aligned with public policy, but feels pressured into it. So far, I have characterized teacher subject positions in terms of technology and policy, and in the Part 3 of this chapter I will unravel the layers of teacher discourses. There are other unexpected subject positions to be revealed that emerge out of the intersections and overlaps among technology, policy and teacher discourses.

Part 3: Teacher Discourses

Foucault (1988c) believes that opposition against the 'regime of power' – resistance and the struggle for identity – is the focus of Foucauldian analysis. Following in the tradition of Foucault, Part 3 of this chapter explores the multiple points at which teachers "are able to refuse, contest, challenge [the] demands placed upon them" (Rose, 1999, p. xxiii). In my analysis of the told stories of North High School teachers, I look for the 'spaces left free' in the disciplinary apparatus where teachers find the opportunity to resist and to transform what is considered legitimate knowledge. Typically, critical resistance is not overtly enacted; instead, it takes the

form of what Goffman (1961) terms 'secondary adjustments', which are subtle acts or 'transgressions' of covert disobedience where teachers appear to be compliant while "working in ways other than explicitly disciplined" (Winiecki, 2007, p. 369).

Setting the Scene

Today, I am in a rush to find Kourtney's classroom because it is starting to rain. Her new classroom in the main building is still being remodeled, so I look for her in a small village of temporary classrooms located in what was previously an outdoor football field adjacent to the parking lot. The white windowless modular buildings that compose the village look like the temporary housing units that FEMA keeps on standby in case of a natural disaster. I arrive at Kourtney's classroom just before the bell rings.

Kourtney invites me inside the classroom as she politely apologizes for the cramped conditions. I pull together two desks in the middle of the narrow room and setup my microphone as Kourtney turns off the noisy air conditioner so that we can hear each other speak. I begin the interview by asking Kourtney to describe herself and her job. She lets me know that aside from teaching, Kourtney is very busy organizing fundraisers, putting on dances, and serving on the yearbook committee. She describes her position as being "perpetually in high school" and confesses that she is reliving her own positive high school life experience by being socially involved in the school.

After my usual opening questions about technology adoption, midway through my interview with Kourtney, I ask her how she feels about the most recent round of public policy reforms. In her response to the question, Kourtney emphasizes that common standards can sometimes "tie your hands," but for the most part they are just a "framework" that she says are "open to interpretation." She proclaims that she has "complete freedom," but seems to contradict

160

herself by listing all of the requirements she must fulfill to show that she is complying with public policy:

> I have to turn in my lesson plans every week. They are checked by two different people and the principal. That is all approved and I turn in my curriculum in the beginning of the year and I turn in one again in January. So, they know what we are doing. We have audits where we have to meet together and they check where we are and make sure we are on track.

Kourtney has 'freedom' within certain boundaries defined by public policy discourses. She reiterates: "As long as you are on track, grades are in and you are doing what you are suppose to be doing, then I can teach however I want to."

I follow-up by asking Kourtney what some of those 'things' are that she is supposed to be doing, and she explains that when "administrators come do walkthroughs they are looking to see that you have an agenda on the board, that you are following standards, that we use essential questions and stuff like that." She also mentions that there is a "mentality" that teachers in her department must coordinate their instruction to "do the same thing." Following the same curriculum and "staying pretty close together" is important because Kourtney explains that her class shares the same midterm and the same common assessments. She rationalizes that it is only "fair" to students to cover the same content if they are going to be assessed with the same tests.

To me, the practices she describes above seem controlling, but Kourtney thinks the common standards are "good" because they represent "accountability" and she "likes to collaborate." From her viewpoint, her freedom is not a problem. She is more concerned that the public policy reforms are making education more rigorous and are increasing the quantity of what needs to be covered in her class, which in her view is putting "a lot more pressure" on teachers that "can get a little overwhelming" as they try to dutifully implement all of the requirements.

If she has one issue with the public policy reforms it is with standardized testing. Thinking of the welfare of her students, she is convinced that the new standardized tests "put some kids at a disadvantage." Before continuing with her criticisms of standardized testing, Kourtney pauses and asks me in a hushed voice: "Is anyone else going to hear this? I am going to tell you the truth, but it is just the two of us, right? I am not going to lose my job am I?" Up until now, I have been getting the 'party line' from Kourtney about public policy, but her attitude is shifting as our rapport builds – she is about to break her silence.

Kourtney has doubts about standardized tests because some "schools are being punished for when they are not meeting the benchmarks being set for them even when students make significant progress." She is conveying to me a fundamental principle that many other North High School teachers also conveyed to me: it is not rational to hold all students accountable to the same standards because students, schools, families, communities and teacher are all different.

Kourtney believes that the public policy focus on being "results driven" is having negative affects on education. She is concerned that teachers are focused on showing students "how to take a test so that our numbers look pretty" and the consequences are that students are not taught "how to be a productive citizen, do not know what life is all about, and cannot think for themselves." Kourtney expounds more:

> We are teaching them to think the way we want them to think, not for themselves – get the right answer on the test. It does not matter how you find it; it is 'A'. That is great for standardized testing, but that is not how the world works. They are not becoming critical thinkers.

Kourtney is particularly concerned about how test scores are used to judge her performance. She thinks the statistics are really about observing her work, not assessing the learning outcomes of students. To this point, she says: "They are assessing me. The kids are not

held accountable; I am. The tests assess my ability to control them and to teach them whatever they need to learn, but I cannot make someone learn." In Kourtney's view, the tests not only unfairly judge students; they unfairly hold her responsible for factors outside of her control. She says that learning is "a choice that students make" and even if "I set myself on fire, some kids would not even bother to look." Kourtney means that no matter how hard she tries to be entertaining and to motivate students, some will never want to learn, yet she is held accountable for their test results. Echoing a counter-rationale that I have heard from many other North High School teachers, Kourtney also questions the validity of performance measures:

> I think you are not getting an accurate picture and this is where the disconnect happens. We are more than numbers. There is more happening in the classroom than the numbers show. They cannot be in the classroom and we need to have a more subjective process. As teachers, we have so much more that we look at.

Her comments suggest a clash of models between the dominant quantitative methods of public policy discourses and the alternative qualitative methods for assessing performance that she and other teachers favor. I ask Kourtney if teachers have developed any 'tricks' to effect better test scores and her response reveals that teachers have no choice but to try to influence the test results in order to survive:

> If they are not looking at the whole picture and if they are only looking at the scores, it sets itself up for 'gaming' the system. It makes it necessary. I think you have too because if that is the only thing they are looking at, then you learn what you need to do and you do it. That is life. I cannot think of anything where people are being sneaky. I think that is everyday. I think you just try to get by everyday.

> Kourtney's comment above reveals that teachers feel compelled to defend themselves by, as she says, "gaming the system." Considering this disclosure, I ask Kourtney if she sometimes does not follow the public policy 'rulebook'. She admits that she goes "off road" sometimes with her students and she "throws in stuff that might not be in the common standards." She

rationalizes that she cannot follow the rules all of the time "because otherwise you would drive yourself insane." She expounds that "there are so many rules, and you are not a 'robot' and cannot be." Recalling her earlier comments about all the 'things' she is supposed to do, she candidly reveals her true feelings:

> It is a joke between all of us and honestly a lot of this is a joke to me. I have to do it to keep my job. I think it is stupid. When you do see administrator coming, you will do things, you will check your boards to make sure they are right. You feel like you need to put on a good show for them. You want them to be proud of you and you want to succeed. You want to look like you know what you are talking about and you are doing a good job – no one wants to be a 'bad' teacher.

Classroom observations are probably having an affect on teachers that administrators may not understand. The pressure to be seen as a 'good' teacher by authority figures produces a kind of conformity that is a frontage.

As my conversation with Kourtney develops and my rapport with her increases, she departs from her initial 'conformist' or 'silent-survival' subject position to reveal a secretive resistant side of herself. Kourtney has adopted certain counter-rationales to public policy discourses that give her the 'space' in which she can work in unauthorized ways. Her comments reveal that North High School teachers collude to put on a 'show' for administrators during classroom observations so that they can appear to be meeting expectations. She characterizes the relationship between administrators and teachers as a 'game' where teachers try to produce the results that administrators want to see without actually fully executing the obligatory practices in their classrooms.

Near the end of the interview, I ask Kourtney how administrators react to teachers' small acts of resistance and she assures me that North High School teachers have a "great relationship" with administrators who "listen" and are "respectful." To Kourtney, public policy reforms are

written by "politicians who do not have any type of experience in education whatsoever. What they say sounds pretty, but unless they are here everyday they will never understand." She believes that administrators feel this way too and that "we are in the trenches together – trying to make it through." Teachers and administrators do not have an adversarial relationship. As Kourtney notes, they will let teachers "bend" public polices to do what is best for students.

'Truths' of Teacher Discourses

Even though public policy discourses attempt to 'conduct the conduct' of teachers, the relationships between dominant outside political forces and teachers lives within the context of the current school environment is complex and messy. Foucault (1980a) poses that the essence of power is a struggle over 'truth claims' that is constructed and reconstructed in discourses and permeates social relations (p. 27). Public policy discourses attempt to shape the subjectivity of teachers, however, dominant 'truths' conflict and clash with teachers' desires for freedom and their own ethics of care – ultimately teachers constitute themselves. Bandeen (2009) theorizes that where public policy discourses are based on rationale imperatives, "teachers produce power among themselves through shifting relationships" (p.119).

Teachers resist the way public policy discourses frame teaching in mechanistic terms by producing their own localized 'truths' to justify their decisions to, as Kourtney says, "go off-road" with their instructional practices. Primarily, teachers emphasize that 'others' perceptions of them are erroneous because they do not understand what it is really like to be a teacher. For example, Kourtney rationalizes that the politicians who make the laws will "never understand" and this is where the "disconnect" occurs. John and Jane agree that teachers are left out of conversations about public policy because the people who wrote the rules have obviously "never

been in a classroom." Their point creates a distance between themselves and public policy so that they can feel less obligated to comply with the rules.

Teachers contend that public policy discourses unfairly treat teachers like "robots" because they are understood only in relation to their subject. For example, Jane claims that there is more to teaching than just the content of a course and there is more to her role than just representing her subject matter – her job is that of "a surrogate mother, cheerleader, an educator all rolled up into one." She goes on to say that "teachers are more than our subject matter" – their primary responsibility is to "…care, connect and show students that they are important and not just a warm body in the class." Ella reiterates this view: "I may be the only positive influence a student has in his or her life" and "you have to raise them too and I do not think people know that this is that part to it… you have to be a friend, parent, counselor, role model, or psychotherapist some days." In their language, teachers reveal certain understandings that support them in resisting the way public policy reduces their work to merely as measures of academic outcomes.

In the above comments, North High School teachers emphasize that their work is about relationships, not producing results. Teaching is important, but it is the least stressful part of what they do. For example, Ella says she dreams of having a day where she could "teach content all day," but she says that "is not the reality." As a result of the many demands placed on teachers, Ella says that teachers can be "drained" of their will to teach unless they have "coping skills to diffuse stressful situations" that occur nearly every day with their students. Mary adds that there is no way to "describe to someone the amount of work teachers" have to do and Kourtney says she does not just teach, she has "fifty-thousand other things" she does every day.

In addition to portraying teaching as an exhausting profession that is based on building one-on-one relationships with students, teacher discourses also characterize 'others' as not having empathy because they lack experience as teachers themselves. For example, Kourtney reveals her feelings: "This is the most thankless job. You have to really want to be here and not because anyone is telling you you are doing a good job. You rarely hear that." Techers cultivate a resentment or contempt for authoritative power that bolsters their resistant position.

Teacher discourses present a picture of reality based on their connection with each other. It is from a collective appreciation of the ethics of care, a shared sense of subjugation, and teacher comradery that teacher discourses create the conditions for opposing other discourses. This construction of reality romanticizes the struggles of teachers and creates different conditions through which teachers are assumed to be motivated. For example, Jane hypothesizes that the 'real' reason why teachers want to teach: "As a teacher, seeing my students learn and overcome their obstacles gives me motivation – it is the reason I love my job. I get up every morning and I am here by 5:30 because I enjoy my relationship with my students." It follows that Jane maintains her commitment because "…we still have and hopefully will continue to be able to keep the independence that allows to teach our personality and our teaching style, and deliver the material specifically in a way that our kids can understand it."

Foucault (1971a) characterizes resistance not as a reaction, but as the assumption of power through the forming of contradictory discourses (p. 211). Teacher discourses are based on a shared sense of isolation and mutual experiences of coercion under other regimes of truth instituted by public policy discourses. In Jane's comment above, she relates her freedom to teach how she wants with her personal purpose or identity as a teacher. She is willing to compromise

and teach what is required in exchange for being allowed to teach in her own way. Jane

expounds on her philosophy:

> We are here for the kids. Do not get me wrong – I do my curriculum and I administer
> ACT prep. But, what is the point of education if students cannot analyze something? If
> they want to take the initiative, then I will give them a little bit of free range and let them
> do that. You have teachable moments and sometimes you have to grab them. We are still
> driven by the common standard and the curriculum and I think it is good. You have to
> know where you are going in order to get there. So, we all have to do it, but you also
> have to have some autonomy to let your kids bring their own ideas into the learning
> process.

Jane's example demonstrates how teacher discourses are interwoven into other discourses to

change the structure of the power relations and resist normalization. She demonstrates an

awareness that meeting the expectations of public policy discourses is necessary. Bandeen

(2009) theorizes that "teachers are acutely aware of the required performances of their

job…[that] become visible as an official story – a party line" like the one Kourtney gave me

earlier (p. 132). North High School teachers are compelled to assimilate the directives of public

policy discourses, but they have the freedom within certain boundaries to make secondary

adjustments (Goffman, 1961, p. 54). Teacher discourses produce the power to give teachers the

space in which to, as Kourtney says, "bend" the rules sometimes even when administrators are

watching.

Goals of Teacher Discourses

Teachers definitely recognize the goals of public policy discourses and from a

professional standpoint they are obliged to blend performative values and principles with their

own personal approaches to teaching. However, teacher discourses do not define the goals of

education terms of accountability or quantitative measures; but rather the indicators of success

are qualitative and subjective. The credos of what it means to be a teacher reflect the ethics of

care to which teachers ascribe like 'making a difference', 'watching students grow' and 'being a role model'. As Jane says, the role of education is not just to transfer knowledge, it is "to make citizens who can read, comprehend, think for themselves and question what is right and wrong." Ella shares a story which demonstrates how she validates her work:

> Some students have come back to tell me that I made such a huge difference in their life. I automatically think of two boys. They were going down the wrong path, but they were so smart. I pointed out to both of them that: "you can go so far in whatever you want to do because you can standout." They took that and ran with it and they have both turned out to be wonderful adults and they have really tried.

Rachel also believes that teaching is about the "personal satisfaction" of knowing that sometimes teachers make a difference in the messy lives of students: "Once in a blue moon one teacher out of one-hundred has a chance to make a huge difference. You see it happen. Years later, you will see a former student write a thank you to that one teacher." It is through these shared stories about their life-changing relationships with students that teachers measure achievements.

For administrators, the goal of education is, as Halle says, "to make sure those kids master those standards," but for teachers the focus on standards limits what students can learn. Leah believes the goal of education is to build "coaching" relationships with students in which teachers "role model the skills and let kids figure things out for themselves." Leah believes the trend of making standards "more difficult" and "raising the level of achievement" is having the opposite affect of what is intended. She says it transforms teaching into following a standard "routine" and set of "instructions" that has little to do with whether students have "actually learned math, history, etc." Leah wants students to follow their interests so they have an intrinsic incentive to learn, but when teaching is construed as a set of "step-by-step" common procedures and standards that require students to do things "exactly to the letter" then "it punishes students for thinking divergently." Teacher discourses reason that students are unique and they need be

allowed to grow and learn in different ways, and public policy's cookie cutter approaches to learning encroach on teachers' freedom to differentiate instruction.

Motivation is a big concern for Leah and most other North High School teachers. For many teachers, their challenge is not teaching their subject, it is simply motivating students to care about or become interested in learning. Leah says that the biggest problem she has is: "A lot of kids do not want to be here and so they rebel against it. They do not like being here. They see it like they are in jail." When relating to her first year teaching, Rachel says: "I think the thing that surprised me most was exactly how uncurious and uninterested many students are." Noah agrees that "motivating students is a very big deal. It is so incredibly challenging to find a student's desire to jump in or to foster that desire." Mary says there is a point when a teacher realizes that "students are not there because they want to learn about your lesson for the day – some are there because they need to eat lunch and that is what they showed up at school for or home is so bad that they came to school instead." Mary's comment suggests that teaching is an emotional endeavor, not a rational one that can be easily quantified in terms of only a fraction of what teachers themselves believe they do, and the values teachers can realize.

Leah continues by explaining how she is exhausted from trying to motivate students all the time: "It is a constant struggle. Even grades do not motivate them. They have to be pushed constantly to do the smallest things." However, Noah finds satisfaction in discovering and trying creative ways that "allow students to move as they need to move." Noah proclaims that it is "naive to think" that education is a "perfect little world" where "all students are equal" and there is "only one way" to learn. Noah stresses that teachers need autonomy to express their own teaching style and adjust to the individual needs of students.

Taken together, the divergent goals of teacher discourses that I discuss above, lay the groundwork for denying the rationales of public policy discourses. For teachers, it unreasonable to hold them accountable to quantitative measures of performance when there are so many factors outside of their control. Based on the 'truth' that all students are different, teachers question whether the statistics can be generalized. For example, Rachel contends that students change from year to year and thus cannot be compared: "It is a different set of kids every year, so you are not comparing apples to apples. You are not really comparing how well I did to move this set of students." By questioning the validity of the statistics, Rachel is diffusing the pressure to honor their imbued meaning.

Based on the 'truth' that students are driven by their own decision to become active learners, Rachel also argues that when students preform badly on tests it can have nothing to do with a teacher's performance:

> There is not much recognition that you are dealing with a great big messy bundle of human being. If you are not able to motivate them the end results that is expected may not be a good test score. If you are being honest, then are you going to say that big messy human being that is not capable of doing this right now is getting an 'F', but that's held against you instead of them.

Jane expands on Rachel's view by reasoning that by the time students reach high school, their performance is pretty much predestined: "Students come to you already. You challenge them, but you are not necessarily able to remake what they are going to become." And, Luke gives a specific example of how the socioeconomic background of students is the strongest predictor of their test results: "…like you can expect that a student whose parents are both medical professionals is going to do a lot better than someone who is doing a blue-collar job." The language of these teachers reflects the counter-rationales of teacher discourses that attempts to discredit the 'objectivity' of data collected for measuring teachers against the common standards.

171

Teacher discourses define success in terms of a those inspiring 'light bulb' moments with their students where teachers can see a student grow. Instead of productivity measures, teachers look to shared stories of their 'love' for teaching and how they are creative in the classroom. They criticize productivity measures because they attempt to supersede the subjective qualities of learning value that are important to teachers. As teachers begin to see that 'outsiders' do not understand and are not empathic to their local conditions, they begin to question the rationales of public policy discourses, draw closer together and looks for ways to reshape power relations.

Language of Teacher Discourses

Teachers often use tentative language to temper the zealousness of mainstream views and the often-overstated promises of public policy without directly challenging the regime of truth on which they are based. Bandeen (2009) explains that teacher discourses are characterized by tentative language that diverges from the absolute rationale underlying public policy discourses (p. 123).

Tentative language is exemplified by a conditional 'it depends' viewpoint as represented by codes like "think", "guess", "probably", "kind of", "feel" and "maybe" that reflect conditional perspectives and respectful attitudes towards each other and administration. It is a nice way of disagreeing without getting into trouble (Bandeen, 2009). For example, Jane talks tentatively about how her teaching philosophy diverges from the norm: "I **guess** I do not focus as much as **mayb**e I should on the test because I still **think** with my units, it is more important to make them think." Rachel does not want to directly challenge one managerial practice, so she underrates her own opinion: "Well, this is **kind of minor** but I **think** it has an **almost kind of** a sneaky type of impact." When talking about how her department's new standard curriculum has changed her work, Kim adds a qualifier at the end of her sentence that signals she is alone in her view, and

thus is should not be taken too seriously: "This year, because we are following this new curriculum, I do not have time to breathe, I **feel** like." Kourtney attempts to downplay all of her criticisms of public policy by saying: "I am **probably** super biased with the way I say things."

Teachers will often speak favorably of public policy before stating their criticisms. For example, in my opening 'setting the scene' section, Kourtney proclaims that accountability is "good" before she goes into how it "ties" her hands sometimes. Similar, Jane shares that the "No Child Left Behind Act sounds great on paper – I do not think you would have anyone say all children do not deserve the same quality of education. But, when we forget that all kids are not the same I think that is a problem."

As evidenced above, the language of teachers at North High School reveals code-switching tactics. Code-switching is a way someone tailors what they say in different contexts (Gal, 1988). Teachers learn to develop a language facility for speaking with different stakeholders (students, parents, administrators, and other teachers). From a Foucauldian view of power, code-switching is a form of resistance. Teachers comply with normative rules of speaking about technology to fit in socially – teachers want to act and talk enthusiastically about public policy because they do not want to appear out-of-line or because they simply want to get something by appealing to the logic of administrators.

Emily seems very much aware of this practice: "You have to tell them what they want to hear along with what they need to here. It is a fine weave to get that through. But, you do have to do a song and dance around or you do not get anything accomplished." Earlier, I mentioned that Kourtney likened it to putting on a 'show' for administrators when they conduct classroom observations. Rachel explains that it is sometimes hard to tell the difference between what is an

173

act and what is real: "Once they become part of the norms that you were adjusted to, you would be hard pressed to be able to identify them." Finally, Noah drives the point home:

> It has to do with being intelligent about when you are communicating with a certain person. You have to learn how to be tactful. Certain things push buttons for a student that would not for a parent and other things push buttons for administrators that would not for parents or students. I think we do that because there is a different set of expectations from every one of those crowds. Principals want you to do one thing and parents think you ought to do this while students think you ought to do that. There are three different sets of expectations for all three different stakeholders, and the teacher learns to transform himself/herself to meet those expectations while still managing to get the job done.

Generally, teachers will follow along with the 'script' of technology discourses, but their tentative language and code-switch deflect public policy's desired preeminence over of their own localize teaching practices. Bandeen (2009) clarifies: "Their tentative language refuses power held over them. By viewing everything as conditional, tentative, and temporary, teachers maintained their relationships and in turn their power as constant amid changing policy cycles" (p. 125).

It is not just in their verbal language that this occurs. As I mentioned in Part 1 of this chapter, teachers will self-regulate what they enter into databases to produce a positive image of themselves in data. Their 'script' is also visible in the lesson plans they submit for approval to administrators. For example, Leah says it comes down to the "legal aspect of it." She writes her lesson plan so it "looks like I am doing what I am suppose to be doing on a paper, – like I am covering the standards and covering the things they want me to – but no one knows the difference between my plan and what I actually do." Rachel concurs with Leah: "My lesson plans that I submit once a week do not give anyone a clue as to what actually happens in here."

Lesson plans are inspected by administrators based on the same criteria that is used to judge teachers during an observation. Kim notes: "I don't know if they read every single lesson

plan I submit, but they are looking for certain things and I assume if they see something interesting, they will pop in that day." Lesson plans represent a kind of 'shadow' of a teacher for administrators to examine for the 'correct' language. Teachers have learned not to include anything in their lesson plans that would give administrators a reason to stop by and 'talk' with them.

Tools of Teacher Discourses

Foucault (1980b) theorizes that a "discourse can be both an instrument and an effect of power, but also a hindrance, a stumbling block, a point of resistance and a starting point for an opposing strategy" (p. 101). Teachers discourse employ their own tools, tactics and technology to disrupt, diffuse and transform power relations. Teachers respond to the dominant 'regime of truth' not only with with compliance, but by expanding the boundaries of the 'spaces' in which they operate.

North High School teachers frequently mention that they are granted enormous autonomy based on their relationship with administrators. Emily portrays the culture at North High School:

> We have that family atmosphere here. We are allowed to do what we want as teachers. There are certain restrictions, but we do not have someone over our shoulders or have a pendulum swing on how we will teach. We have a lot of autonomy and we want to work together. We do not get from administrators what you see in a lot of other school systems. We do not get that "you better get those test scores up" kind of thing. We teach our kids.

Like Emily, Kourtney says she has "complete freedom" as long as she meets those "certain restrictions." Complying with the 'restrictions' in exchange for freedom is a a kind of social contract teachers make with administrators. Rachel explains that if administrators "really wanted to see what happens in the classroom or how a teacher really works" this would require "some serious monitoring" that would "intrude on the trust relationship."

Halle, an administrator, confirms that the focus in on the goals of education, not on changing teachers: "I do not care how teachers teach, but I want to make sure those kids know those standards and they are ready for the next thing." Jane concurs with Halle: "It does not matter how you reach the goal as long as you have accomplished what the goal is." John reveals that teachers "constantly adjusts the framework of what we are going to teach that is put out by the state – we have the opportunity to make it individualized for our particular classes." The friendly relationship between administrators and teachers allows teachers to "bend" the rules under the condition that they continue to produce the results that make them and the school look good.

The mutual contract between administrators and teachers to share responsibility for achieving the dominant goals of education is an effective tactic for getting teachers to self-govern, but teacher discourses can take advantage of this relationship to push the boundaries of what is considered permissible. Left without much supervision, Rachel notes: "You get to a point where you realize that no one really has a clue what I am doing in here, so how can anyone tell me how to do better?" Referring to the 'truth' that outsiders cannot understand teaching, Rachel discredits any guidance they may attempt to provide to her, and takes it on herself to, as she says: "…read, attend workshops and piece together things I think will be helpful to me." Rachel access a different body of knowledge to justify her teaching practices.

North High School teachers, especially those who are tenured, repeatedly indicate that they have a respectful and productive relationship with administrators They do not always feel silenced and afraid to voice their opinions. For example, Noah says that at his old school he was silently surviving, but due to the more open culture at North High School he has undergone a transformation:

176

I just go straight there when I complain. I am not going to be resistant, even if I do hate it. The principal and the rest of the administration make themselves so accessible and available that I do not feel like I need someone to mediate. I was living in fear before then - trying to get tenure and not to offend. I was so self conscious and paranoid about what I did. I do not feel that way anymore.

Similarly, even though Kourtney is often disillusioned, she sees herself as a vocal leader who does not hesitate to take a complaint to the principal: "They will listen to me. They do not always address thing immediately because their hands are tied more than mine by central office." John also reiterates that he can go to administrators with a compliant about his curriculum and they respond by saying: "We understand – you know what is best, just tweak it the best you know how and we trust your decision." John feels he has the permission of administrators to "bend it a little bit if you have to without straying too far away from the standards – you are covering the standards, but not covering them in the same way they suggest." Many North High School teachers appear to agree that they have enormous 'free space' in which to be themselves.

In their relationships, teachers at north High School have plenty of opportunities to influence the way administrators think. Teacher and public policy discourses intertwine to transform one another. For example, school administrators employ code switching that demonstrates how they are subject to the rationales of teacher discourses, which alters 'truth' so that teachers are not dominated by school administrators. David, an administrator, confirms one of the 'truths' of teacher discourses:

Every school, every community, they are different and the challenges we would have are different from another community. There is a disparity. I think there has to be way, at some point, to understand each community and looking at where they are – to understand there can be great success and gain that does not even meet a benchmark. You can interpret success in that. I guess, it comes from whomever is looking at that data and to what they want to make of it. I can see in success, we have had kids who struggled and they show a tremendous amount of growth but they may not be on grade level, but they have overcome many obstacles and what people often do not see are those stories behind that student. These are all obstacles that someone at a state level, looking at a score of a

177

child or a school measure, might not see but we can and we can appreciate the measures and learning that goes on that someone from the outside cannot or will not see.

David acknowledges teachers' concerns that data generalizes their specific situations and masks real differences, which has the affect of holding them accountable for factors they cannot control. His comments suggest that he too is "jumping through hoops" and he is equally cautious about the how 'outsiders' view his school.

However, the cordial relationship between administrators and teachers has its limits. As reflected in Rachel's comment above, administrators are still 'outsiders' who are excluded from teacher discourses. Teachers maintain an effective distance from administrators. As Kourtney says, "We are friends, but when it comes to work, we are professionals." Kourtney likens schools to "prisons" where administrators are the "wardens." Bandeen (2009) explains that this 'distance' is needed to "expand the boundaries of what they can say and do by deflecting possible interventions by policy" (p. 131). Excitement about the dominant goals and their friendliness with administrators is another part of the "song and dance" that teachers do. It allows teachers more than just a 'space' in which to act within the boundaries of certain restriction, but rather to develop their own power (Hayward, 2000, p. 8) – a power that "comes from below" (Foucault, 1980a, p. 94).

When teachers do feel the pressure to change their pedagogical practices, they can enact counter-tactics to control primarily in the form of acts of hidden resistance that they do in 'spaces left free' by management practices. For example, in the previous section, I describe how some teachers create lesson plans that are indicative of the 'correct' ways of teaching, but do not reflect their real activity. As Kim reveals:

> You know some terminology that you drop casually or put certain things on lesson plans. You do those things because you know that is what they are looking for. There are things

you know they expect that people just include or say in meetings because they know that is what they should say.

Similarly, Jane only acknowledges that performative models have "changed how teachers present stuff" and do not "drive" her curriculum. Teachers are able to work in unauthorized ways by presenting a semblance of official knowledge in their talk in front of administrators, written reports and the data they enter into official databases.

Teachers essentially hide from supervision with 'secondary adjustments' (Goffman, 1961, p. 54) that give the superficial appearance of compliance. Kourtney gives a specific example of how teachers collude with each other to lookout for administrators who attempt to catch them in the act of teaching:

> When there is administrative walk through and if we are switching classes, teachers will talk or we all text each other "they are out walking around." We do get around stuff. It is like the warden is coming. That is how you feel sometimes.

In another example, Emily confesses that some teachers do not bother using the textbooks they are given, which are written to match the common standards: "I know the reason the book was picked was because it aligns with the standards. But, we go in with the mindset that we are not going to teach out of the book."

Earlier, I mentioned that Kourtney feels that she has to go "off road" just to maintain her sanity. Putting on a 'show' for administrators by using the 'right' language cannot be characterized as merely resistance – it is more complex than that. For teachers, putting on the semblance of compliance is something they are forced to do in order to cope with what irrational demands. They are finding ways to get their work done without being outwardly negative, which helps them to avoid situations where a 'spotlight' is shined on them. In their 'free space', they use their own tools to question and transform what is considered official knowledge.

Techniques of Power in Teacher Discourses

In mapping teacher discourses, it is not my aim to validate the goals of teacher discourses as being more 'right' than the rationales produced by public policy discourses. Teacher discourses are not merely reactive to public policy discourses – they work to condition teachers through complex relations to certain group norms that are equally regulating and normalizing, but in a different ways and for different ends. Bandeen (2009) theorizes that teacher discourses apply classification and exclusion within their social relations (p. 80). She posits that "as teachers create groups, they determine who is respected while also excluding others to create shifting patterns of informal memberships" (Bandeen, 2009, p. 80).

Gore (1995) defines classification as "differentiating groups or individuals from one another, classifying them, classifying oneself" (p. 174). Classification is the way teachers individualize and totalize others and themselves according to the social group to which they belong. In teacher discourses, group membership is indicated by loyalty, bonds and empathy that create a sense of solidarity. Groups normalize teachers into the 'better' ways of doing things from the perspective of teacher discourses. Sometimes groups can be cliquish or elitist, meaning that they exclude and divide teachers. Gore (1995) explains that exclusion is sort of the "reverse side" of normalization – it is "a technique for tracing the limits that will define difference, defining boundaries, setting zones" that label some behaviors as 'wrong' and construct some individuals as 'others' (p. 173).

Many North High School teaching understand their group memberships as an inherent aspect of their jobs. For example, Kim hypothesizes: "Initially, if you like each other as people, just like normal – it is just natural that we all get together to talk about school and our classes and things." David makes s similar observation: "People meet and get together simply because of

shared values." Kourtney reiterates that "teachers will have a group of people they will naturally gravitate to," and she expounds further: "I am going to hang out with people who are more like me because I would not want to say something to someone else because you do not want to hear what they have to say." Kourtney feels that she can speak freely around her like-minded friends when she has something negative to say. Her social group allows her take a resistant position on issues, to be pessimistic and to defend herself. In other words, her social group supports her activism.

Kim adds to her earlier comment that it is through groups that "things will get spread around." Echoing Kim's experience, other North High School teachers also note that groups facilitate sharing knowledge. For example, Kourtney comments on the sense of comradery that exists: "The collaboration that we have is amazing – you could go to anyone here and they will help you. We are all really good friends." Jane gives a specific example of how teachers support each other: "All the time, I will type an assignment out, the I will share it with my colleagues and ask them to tell me how I can tweak it." Similarly, Luke says: "At this school, there is a lot of collaboration. Not only within my department, but with other fields. We share how we get stuff done." By working collaboratively, teachers come to agree on which tools or practices are better than others, and sometimes what they settle on as the 'right' course of action does not match what public policy discourses anticipate. Teachers are influence by many factors that become intertwined with their views about public policy like their own interest in doing, as Jane says, "what is best for the students."

School administrators often arrange social groups by assigning teachers to committees during which teachers are asked to take on leadership roles. For example, John talks about how he has assumed the responsibility to "head up" a new class that many teachers in his department

will be delivering next year as part of a statewide initiative. After teaching the class himself for the first time, John plans to "compile all of my information and teachers will take it next year to use it." John is acting on behalf of public policy discourses to leverage his social relations in support of a new program. In the context of the school, teachers serve as proxies for the agendas of teacher, public policy and technology discourses.

Many North High School teachers mention that outside of their informal group of friends, other professional groups are convened for them by administrators to achieve collaborative goals. For example, teachers meet as a group at regular intervals throughout the school year to conduct instructional audits for the purpose of coordinating their instruction around a shared curriculum map. As Kim says, teachers meet to ensure everyone is "doing the same thing." Public policy discourses attempt to turn group relations to their advantage by formalizing and structuring teacher groups in order to limit "possible fields of actions" (Foucault, 1983, p. 221).

At North High School, collaboration is required. Hargreaves (1994) contends that collaboration is a controlling technique: "In contrived collegiality, collaboration among teachers is compulsory, not voluntary; bounded and fixed in time and space; implementation- rather than development-oriented; and meant to be predictable rather than unpredictable in its outcome" (p. 208). In these formal meetings, relations among teachers who would not normally associate with each other are imposed. As Jane explains, in order for teachers to "get on the same page" administrators and department heads have to get them to "play nicely with one another and put personalities aside. Teachers are people too and like in society, not all lawyers see eye to eye." Jane suggests that these relationships are not natural – they force teachers who do not like each other to work together. Likewise, Kourtney reveals: "There are some people I have to collaborate with who I like more than others, but we have to be professional." It is difficult for teachers to

avoid or refuse to participate in these group debriefing sessions without feeling isolated socially by their colleagues.

Administrators and teachers in leadership roles attempt to force collegiality and collaboration among department groups to consolidate power. Luke observes how the widespread collaboration that is often initially labeled by teachers as supportive is actually controlling:

> At my previous school, I was pretty much left up to my own devices – we were basically able to do what we wanted to do. But, here it is more of a controlled environment. Administrators are more intertwined and proactive – a lot more observation and more hands on. When I say controlling, I think it is a good thing because for the most part because the administration cares more. It is a close-knit community and everyone is a lot more involved.

Luke suggests that pervasiveness of what he positively characterizes as a 'caring', 'involved' and 'close-knit' community that operates to 'improve' teachers has another side. He believes that social control is needed "because there are always a few teachers in every group that are a problem…The controlling does not affect the teachers that are doing what they are suppose to be doing." The collaborative atmosphere at North High School subtly maintains and sometimes pushes the boundaries in which teachers freely operate, but it is also coercive in the way it can separate certain teachers.

Social relations can isolate and exclude teachers by subjecting them to group norms. For example, Ella reflects on how her department group attempts to impose their prescribed methods on her work:

> I think the school system as a whole is pushing for instruction to be more systematic and coordinated. Our department tries for it to be that way. When I joined the school in January of last year, a lot of the lesson plans for one of my classes was already created. When I got here, it was like: "Here you go – this is what you teach." I am the rogue who does not teach like everyone else because I have my own way and projects that I enjoy

doing. Sometimes, I feel like I should be doing what they are doing rather than being the odd one out.

Ella feels isolated because she is not complying with the methods that her colleagues predetermined are 'correct'. For doing things differently, she is seen by others and she identified herself as an uncooperative 'rogue' and she feels guilty about it.

When social groups begin to negatively differentiate, classify, rank and exclude others, North High School teachers often refer to them as 'cliques'. Leah, characterizes her colleagues as "acting just like high school students with their gossiping and cliques." She offers a quick review of the different cliques at the school:

> The most exclusive group is the coaches, but there are even hierarchies inside the coaching clique. Some people are excluded because they do not teach cool sports, like soccer is excluded. Then you have the football coaches; they are the elite of the coaching squad. You have the group that I would considered to be the popular girls, if we were in high school, these were the ones who were well dressed, funny and everyone loves them, etc. That is a very exclusive group. These are going to be the ones who run the high profile events like prom, student government association, etc. Next, you have your science clique. All of the science teachers get along together – they all work together and collaborate. It is like they do not need anyone else in their group. Then you have those of us that are considered to be the 'weird' teachers and I consider myself to be in this group. We are people who are kind of socially awkward, who do not have a lot of good conversation skills – the people who are typical introverts. Some of the teachers in this group see the other groups as being mean.

Luke confirms that the 'coaches' and the 'popular girl' groups are the most exclusive and he has "no desire to be a part of them". Instead, he says that he is "definitely belongs to the nerdy clique" and suggests that there is another group of "younger teachers" that he "hangs out with especially outside of work." Kourtney identifies herself as belonging to the 'popular girl' group but she also has another group of close friends with "laid back" personalities and teaching styles from outside her department. Like Luke and Leah, Kourtney is not friends with coaches and avoids the "enforcer types" who are act like the "hall monitors" from when she was in high school. She says

these teachers "take their jobs too seriously, are sticklers for rules and write kids up for everything." She is also resentful towards some teachers who she characterizes as "super serious and hyper critical" and are always saying to her: "I would not have done it that way." As evidenced above, teachers individualize and totalize others and themselves through membership with different groups, which has the effect of reifying the complex order of things, but also leads to conflict. Their told stories reveal a certain micropolitics that constructs local school culture.

As indicated by the comments above, teachers' relations a very personal and emotional – they have close friends who they love and enemies who they hate. Depending on which groups a teacher belongs to, their attitudes towards conformity and rebelliousness shift. As Leah astutely observes: "Some people gripe inside their own groups, but people in other groups are very vocal and will not hesitate to take a complaint to the top." The complexity of relations in the school causes resistance and conflict to play out in unpredictable ways. Frequently, teachers are encouraged to stay silent by their peers. For example, Kourtney explains that "typically, when you see people speak up you wish they would shut up. I feel like they complain about things that are not going to change. I feel like they need to pick their battles." She illustrates her point:

> Because of AYP, we had to go through RTI training to improve reading scores. We were all told we had to start teaching reading skills everyday in our classes and doing these reading quizzes. I remember this one guy who stood up and said: "I am not going to do that. I have enough to do already, etc." They just went round and round, and by the end he had to do it. All of us had to sit there and listen to it. That is a typical thing. Why did he bother saying anything in the first place? Where if you have somebody who stands up and says "I understand what these organizers are having us do, and if you need help come see me." So, you are going to like people like that who are leaders more than people who are just complaining.

In her comment above, Kourtney characterizes the teacher's open protests as futile and wasting everyone else's time. When a teacher is vocal in his or her opposition, this violates the 'norms' that teachers impose on themselves to remain silent and avoid calling attention to themselves.

Outward expressions of opposition are generally discouraged. As Ella says, "Sometimes directors are just not open to suggestions. So, other teachers tell me to be quiet and not to rock the boat."

Teacher and public policy discourses intertwine to socially isolate and exclude both entrenched older teachers who resist change and overly obedient younger teachers who threaten the status quo within a department. For example, Ella, Kourtney, and Kim talk about different 'bad' teachers in their departments who are allowed to operate outside the boundaries set for everyone else. Kim talks negatively about a teacher who does not want to participate in the new collaborative model that has been instituted in her department: "He is the only teacher who is still doing it the old way." Likewise, Ella is frustrated that one of her colleagues will not use a new textbook that in her view is clearly better:

> There is one teacher that does not use the textbook that goes with the exam, but last semester I had more students that passed the exam than she did. She has been teaching for twenty years and is not going to give in. She is going to teach to what she thinks they need to know rather than what is on the certification exam.

Finally, Kourtney believe her nemesis "gets away with whatever he wants because he has been here forever." She is expresses her frustration: "Students will skip my class and go to his class because he is not making it available any other time [and] if grades are due on a certain day, he is like: 'I cannot do that but I will get them to you when I can.'" Teachers come to resent members of their group who appear to operate according to a different set of rules than everyone else, and they attempt to exclude them by labeling them as the 'other'.

Sometimes, teachers will withdraw from their department groups to avoid the surveillance of teacher discourses. For example, Leah has an uncooperative nemesis as well who she characterizes as "very much a lecturer, multiple choice test kind of person who is not going

to change anything." She feels compelled to distance herself from this person and her the other veteran colleagues in her department who are pushing her to compromise her ethics by using shortcuts to instruction. As she says: "I am trying to do deeper learning rather than telling them what they need to know for the test." She is defending herself against the 'negative' influence of her tenured colleagues who she labels as "having no teaching philosophy" and are only doing the minimum of what "they need to not get fired." Basically, she labels most of her colleagues as belonging to the coaches group and explains that this is why they do not care about teaching – because they primarily focused on their sport. Her colleagues turn to lectures and multiple-choice tests because it allows them to teach faster, which gives them more time for coaching. Despite her objections, Leah is slowly conceding to the 'easy' way of teaching because she does not "want to be known as the trouble maker." After putting up a good fight in her first year, she confesses that in her second year she is "turning" to the shortcuts. Disappointed in herself, she concedes: "in all honesty, it is just easier."

Subject of Teacher Discourses

From Foucault's view, resistance is a struggle to be free from the process of subjectification. Teacher discourses disrupt and challenge public policy discourses and offer teachers options to adopt divergent subject positions. He writes: "Maybe the target nowadays is not to discover what we are but to refuse what we are" (Foucault in Dreyfus & Rabinow, 1983, p. 216). Teacher discourses are more than just a reaction to public policy discourses, they present alternative understandings of relationship between how teachers are expected to serve public policy interests and the possibility for them to create other modes of being.

In this process of interpreting public policy, teachers are able to modify the official knowledge and implant their own values and principles into that apparatus, thus changing the

goals of education. For teachers, education is based on their personal relationships with students – to adjust education to students' needs and create learning environments where they are encouraged to seek, discover and explore knowledge. Teachers find satisfaction in knowing they have made a difference in the lives of students and they see their professional role as that of a life coach, mentor or role model who truly cares about students. These passionate views stand in opposition to the absolute rationales of public policy discourse. They are a relational 'truths' that teachers circulate to reshape power relations.

Teachers reinterpret the directions of public policy through their own experiences, beliefs, and relations with other teachers, which produces teaching practices that are different from what is expected. From teacher discourses emerges a snapshot of a subject position that is characterized by an outward opposition to public policy and a loyalty to learner- and teacher-centered principles of the profession. Bandeen (2009) terms this subject position as 'vocal-resistance, but I call it the 'professional'. The 'profession' teacher subject is typically a veteran tenured teacher who is not afraid to outwardly question public policy and passionately defends his or her power to determine instructional practices in the classroom. Bandeen (2009) describes teachers who assume this subject position as those who possess a "sense of obligation for doing the job well" through their "unique instructional methods" that reflect their personal style of teaching (p. 164).

However, the vocally resistant 'professional' is a subject position that most teachers are not comfortable occupying for long. The continuous barrage of public policy dictates usually overwhelms teachers and has the effect of marginalizing their professional views and silencing their oppositional speech. To avoid being targeted by public policy, teachers take practical steps analogous to what Goffman (1961) calls 'secondary adjustments', which allows teachers to give

the superficial appearance of compliance with public policy directives as they work in unauthorized ways (p. 54). Teachers put on a 'show' for administrators when they are being watched, but behind the closed door of their classroom, they continue to apply their own style of instruction.

As indicated above, from the intersection of teacher and public policy discourses, another subject position emerges. Bandeen (2009) terms a pattern of behavior composed of covert acts of disobedience as the 'silent-resistant' subject position. She clarifies: "Teachers, within this subject position, used silence consistently as a means of gaining space to assert professional judgment…[it] indicates an avoidance of policy discourses and a use of silence in the presence of administrators" (p. 145). I call this unanticipated teacher subject the 'rebel'. This sensible individual has decided that is too risky to be outspoken. The 'rebel' teacher subject accepts that opposition to public policy are futile, so they keep quiet, hide from surveillance and are externally conformist. It is not that teachers are resistant because they want to disobey; rather they feel compelled to demonstrate their compliance even when they believe the requirements are irrational or impractical. Projecting a positive image of a willingly compliant subject is a way for 'rebel' teachers to resist that maintains their power in the classroom, however, it has the same effect as actual compliance – the behavior reifies the very apparatus of control that constrain their conduct, thus it is not exactly empowering.

Alternatively, teachers can leverage their collegial relationships with each other and with administrators, to effectively 'bend' the rules in their favor – making public policy directives agreeable and creating a different atmosphere in the school where teacher and public policy discourses cooperate with each other. In this way, the values, principles and practices of administrators and teachers intertwine to creatively construct different means that are contrary to

what is officially sanctioned but still produce the desired results. Administrators agree to allow teachers the autonomy and not act like the 'curriculum police' in exchange for teachers agreeing as group to shoulder the responsibility of achieving mainstream educational goals. Teachers are permitted to fine-tune and adjust public policy in the local context to counter the rigidity of prescribed methods.

Based on the above arrangement to collaborate, teacher and public policy discourses intersect to make available another subject position that is the opposite of the 'rebel' that Bandeen (2009) terms the 'vocal-leader' and I call the 'mediator'. Bandeen (2009) defines the snapshot of the 'vocal-leader' as someone who "manages to maintain an active engagement with the discourses of policy and of teachers…that indicates an intricate understanding of the politics" of the school (p. 161). Living in both worlds, these teachers who occupy the 'mediator' subject position feel they have a positive relationship with administrators and can openly express their concerns. They negotiate with administrators to minimize the negative effects of public policy with the understanding that will return the favor by leading the enactment of reforms from the bottom-up to overcome teacher resistance.

When teachers assume leadership positions, they attempt to moderate teachers' resistance and limit the possibilities of different courses of action. They transform teacher discourses to pacify the 'professionals' and defeat the 'rebels'. Through the tactics of contrived collegiality and forced collaboration, teachers are subtly pressured to comply with prearranged modes of teaching.

Depending on the situation, teacher discourses can encourage resistance, but they can be reshaped to negatively coerce 'rebel' teachers to fall into place with public policy directives, 'professional' teachers to be quiet, and 'compliant' teachers to withdraw from social

connections. Teacher discourses operate to negatively classify and exclude teachers who are labeled as rebellious, but the definition of what constitutes a resistant act is subjective. In the context of North High School, sometimes opposing the norms of teacher discourses is considered defiance even when the norms are distance from the ideals that are upheld and honored. In Leah's narrative, for example, she is both trying to meet the demands of public policy while also fulfilling her own personal commitment to deeper-learning. She has reconciled these competing interests, but agonizes over the contradictory norms of teacher discourses that romanticize learner-centered practices while simultaneously compelling her to take shortcuts to instruction in order to fit in with the group.

Teacher discourses compose a "highly intricate mosaic" constructed by a complex and shifting network of relations encompassing the social lives of teachers at work (Foucault, 1980b, p. 62). Most of the time teachers are silently opposing the intrusions of public policy. But at different points, teachers may occupy leadership roles and appear to be agents of public policy. Or, they may become outspoken in their resistance when they feel they can no longer endure certain aspects of reforms. Out of this messiness emerges certain subject positions or patterns of behavior that proliferate and become routine or normal to some, but labeled as pathological or deviant by others. I believe that the collection of stories that I have presented in Part 3 of this chapter demonstrates how teacher discourse positively supports them in caring for themselves and inspiring others even though they can also negatively discipline teachers into the 'right' modes of conduct, however they may be defined at the time by competing teacher interests.

Conclusion

Through the retold stories of North High School teachers, I map the 'truths', goals, language, tools that define technology, public policy and teacher discourse. My approach

emulates, confirms and extends Bandeen's (2009) model. Like Bandeen (2009), I found that within the context of North High School public policy discourses are similarly characterized by: economic imperatives that are distant from history; a focus on quantitative measures of educational outcomes; absolute language that frames public policy as unquestionable; and performative technology and strategies that conduct the work of teachers.

Likewise, teacher discourses are characterized by: a focus on relationships and teachers' professional knowledge; qualitative measure of success based on meaningful stories of how teachers' impact the lives of students; tentative language that allows teachers to pleasantly disagree with school administrators; and an awareness of the rhetoric of public policy that allows teacher to maintain and effective distance from administrators and space in which to exercise their freedom.

I add to Bandeen's (2009) models that technology discourses introduce their own unique interests to education that are defined by: a different set of imperatives based on the notion that students must be prepared for success in the 'digital age'; the aim to 'reimagine' education through technology which will connect students to the world and allow them to self-direct their own learning; language that is characteristically humanist, futuristic and visionary; and strategies for technology-meditated instruction that actively supports more engaging and deeper learning.

In the illustration on the next page, I compare and contrast the 'truths', goals, language and tools of technology, public policy and teacher discourses. Both technology and public policy discourses have the effect of diverting attention away from and dislocating traditional teaching practices. The overlapping rationales and goals of technology and public policy discourses are presented as neutral, separate or distant from pedagogy, yet their tactics clearly aim to transform teachers' conduct.

	Technology Discourses	Public Policy Discourses	Teacher Discourses
'Truths'	Technology is the driving force behind progress, imperative of the digital age, digital natives learn differently, distant from education	Ideology of accountability, rational schemes, goals oriented, imperative of economic growth, distant from history	Personal experience, localized context, ethics of care, relationships, contradictory views, distant from administrators
Goals	Technology adoption, linking students to the world, allowing students to self-direct their learning, making a profit off education	Quantitative measure, delivering results, efficient system, meeting mandates, projecting a positive image	Qualitative measures, building relationships with students, deep and differentiated learning, maintaining autonomy
Language	Applied, humanist, futuristic, capitalist	Absolute, mechanistic, unquestionable, rigid, legitimated by law	Tentative, conditional, pragmatic, subjective
Tools	Technology as a means to deliver learning, connected digital devices, communication software, learning management systems, teacher viewed as technology facilitator	Common standards, curricula and assessment, business-like performative models, data collection, supervision, teacher viewed as their subject	Ethics, professional practice, comradery, personal style, secondary-adjustments, counter-strategies to control, teacher viewed as caring mentor

Figure 1: Contrasting Technology, Public Policy and Teacher Discourses

Also in this chapter, I reveal how technology, public policy and teacher discourses overlap and collide to make available different teacher subject positions. First, I look at how the circulation of 'truths' and techniques of power in technology and public policy discourses construct two separate ideals or archetypal teacher subject positions: the 'techie' and the 'partisan' and respectively. These subject positions represent the 'right' modes of teacher conduct that are projected for teachers fulfill.

In the local context of North High School, there is an agonism between how teachers compare themselves to the projected subject positions that I mention above. At North High School, the actual subject positions that most teachers occupy are constituted in relation to both the universalities of regimes of power and in relation to the "spaces left free" for altering representations of 'truth'. My analysis identifies one translated subject position in reaction to the ideal 'techie' subject, the 'technician', and two others that are characterized by teachers' response to public policy: the 'conformist' and the 'rebel'. These three subject positons emerge from practical secondary-adjustments that teachers make to mediate the negative effects of 'regimes of power' on their lives. They rearrange the ideal subject positions to fit their work instead of rearranging their work around the ideals projected by technology and public policy discourses.

In addition to more common critical subject positions based on resistance, some North High Schools teachers take the middle path of leadership. The 'mediator' simultaneously acts as an agent of change while also defending the power of teachers to retain control over their classroom practices – he or she lives in both worlds. Like 'rebels', teachers who occupy the 'mediator' subject position are also trying to make things work by 'tweaking' the system, but they do so openly instead of secretively. They are able to switch alliances depending on the audience to productively play the game of micropolitics that goes on in the school instead of withdrawing or hiding from it.

Teachers themselves, through the ways they use circumstances in their localized context alter discourses to produce other possibilities for the teacher subject positions they occupy. The overall teacher subject positions of compliance, resistance and leadership emerge from the overlap and collision of technology, public policy and teacher discourses. In the next chapter, I

will use my findings to validate, extend and rearrange Bandeen's (2009) model to further explore the interactions between these discourses to theorize other subject positions that emerge at their intersections.

Chapter V: Conclusion

Introduction

In this study, I use teachers' told stories to map out the features of technology, public policy and teacher discourses from their perspective and I identify how they relate to different players in what Foucault (1984) calls 'strategic power games' that go on at North High School. In this chapter, I first use this metaphor of 'games of power' to discuss my results and explore how the shifting boundaries among multiple discourses transform, extend, displace, reinforce and intersect each other. Next, I modify Bandeen's (2009) model to illustrate how teachers' interactions with these discourses is implicated in the construction of their subject positions and subjectivity – part of the process of subjectification. Finally, I will discuss the implications of this study – how they contribute to and advance the field of Educational Psychology – and the future directions of my research.

Strategic Power Games

In the previous chapter, the retold stories of North High School administrators and teachers are used to describe and map out technology, public policy and teacher discourses. The knowledge that emerges from my analysis resembles a 'strategic power games' in which "…individuals try to conduct, to determine the behavior of others [through] techniques of management, and also ethics, the ethos, the practice of self" and of freedom (Foucault, 1984, p. 18). Foucault (1988c) believes that "there can be [no] society without relations of power, if you understand them as means by which" – in terms of this research – technology experts, school

administrators and teachers engage in a tug-of-war over boundaries of space in which teachers are 'free' to work (p. 18). The socially-constructed building blocks of these boundaries are the dominant and contested 'norms' that are continuously pulled and pushed in different directions in an agonistic struggle as technology, public policy and teacher discourses collide, intersect and rearrange each other.

The interplay between technology, public policy and teacher discourses is characterized by the usual players in the game by their relative positions and interests: 1) technology experts who promote technology adoption and aim to empower student-directed learning through the latest digital inventions; 2) school administrators who are concerned about efficiently running their systems and meeting public policy dictates; and 3) teachers who look to the situated contexts of their current teaching practice and focus on ways to retain their autonomy and build personal relationships with their students. It is around these differing trajectories that different subject positions are constituted.

In the 'game', players attempt to reshape knowledge and redirect power to their own use. The 'truths' that underpin technology discourses portray the discoveries of technology as immediately empowering student-centered learning experiences and preparing students for success in the digital age. Public policy discourses reinforce 'truths' that reduce education to a set of common standards that are intended to produce skilled workers that will drive the economy. Teacher discourses spread the 'truths' that only teachers can understand education and that through their personal connections with students they can develop individuals who are critical thinkers and problem solvers who will contribute to society and be successful in life. The players continuously spin romantic narratives about the rightfulness of their subjective realities.

For the most part, players in the 'strategic power games' do not have an adversarial relationship with the one another. The relationships between the players are more ordinarily characterized as a mutual give-and-take, rather than a push-and-shove in which power is a productive force rather than repressive (Foucault, 1977, p. 194). It is through complex social relations that "the exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power" (Foucault, 1980a, p. 52). The struggle over 'truth' is linked to techniques of power I have identified at North High School as distribution, surveillance, classification, exclusion, individualization and totalization, which produce the effects of disciplinary power. These power techniques impose the 'norms' that are subsequently one of the primary resources for 'conducting the conduct' of teachers through group control and self-regulation.

The power games over the teacher subject are strategic, but mainly ad hoc. Technology discourses orient teachers to the 'right' mode of work through technology-mediated learning. Public policy discourses leverage technology to align teacher's work and the perception of themselves with accountability standards and performative measures that produce data which is used to judge, rate and sort teachers against established benchmarks and each other. School administrators incentivize, train, coach and praise teachers to produce 'good' results. When teachers do not heed the advice of their expert 'coaches', more coercive tactics are employed to 'correct' what is deemed problematic. In this way, lack of success in the application of governmentalizing force becomes a cue for administrators and other teachers to resort to disciplinary force to press the 'deviant' teacher to change, and bolster the public policy discourse, and if still unsuccessful, to possibly rate the 'deviant' teacher even more harshly.

School administrators also agree to stay 'hands off' and allow teachers their freedom within certain boundaries in exchange for teachers sharing responsibility for achieving education goals – teachers agree to 'live up' to official expectations encoded in the official discourses. This 'responsibilization' of teachers compels them to self-regulate their behavior and self-correct their 'problems' when they are pointed out by school administrators, parents, their colleagues and even students. Teachers become their own worst critics. However, through 'secondary adjustments' teachers find other ways to appear productive to outsiders. Teachers hide from observation of school administrators by putting on a 'show' of compliance both in the official documents they produce and in their 'performances' during classroom observations.

By producing an outward semblance of compliance, teachers are able to retain their autonomy to teach as they want to teach in their classrooms, but by doing this, teachers also reify the very 'regime of power' that constrains their work. However, the minor adjustment that they make to technology and public policy also widens the boundaries in which they work and transforms official knowledge, thus reconfiguring power relations and expanding teachers' influence over education at the level of classroom practice. In other words, North High School teachers demonstrate that the only way to change power is to push it in a different direction and deflect responsibility for meeting certain expectations imposed on them by discourses.

Constructing Teacher Identity

Foucault emphasizes that regimes of truth operate to normalize, regulate and produce subjects who are both the targets of and the vehicles though which power is exercised (Foucault, 1980a, p. 98). It is through the "prime effects of power that certain bodies, certain gestures, certain discourses, certain desires, come to be identified and constituted as individuals" (Foucault, 1980a, p. 98). In the previous chapter, I characterized how public policy discourses

construct an ideal or archetypal subject position for teachers to emulate called the 'partisan'. The 'partisan' is someone who defends performative practices and willingly participates in their own objectification and subjectification in terms of that object under the accountability regime.

Winiecki (2006) explains that in Foucault's view, power games work both ways: "…the forces from which power to produce subjects arise, can also be used by those subjects to affect their own subjectivity" (p. 145). Referencing Nespor (1997), Bandeen (2009) theorizes that teachers are constituted as bundles of codes – 'knots in social space' that become reflections of certain discourses" (p. 72). Bandeen (2009) sketches four possible subject positions that surface when teachers interact with what public policy discourses: 'silent-compliance', 'vocal-leadership', 'silent-resistance' and 'vocal resistance' (p. 74). In my findings, the same representations are visible, except I give them the titles: 'conformist', 'mediator', 'rebel' and 'professional' respectively. My findings reinforce Bandeen's (2009) model. The same subject positions that were evident in her interviews with elementary school teachers are also visible in the told stories of North High School teachers in their instructional world as it comes face to face with discourses of technology, public policy and their own credibility.

To that end, in this study I extend Bandeen's (2009) model to include technology discourses. Emulating her methods for mapping discursive fields, my analysis of the told stories of North High School teachers supports the conclusion that technology discourses are implicated in the construction of a different ideal subject position that I term the 'techie'. To summarize, the 'techie' archetype is someone who believes that technology is the key to preparing students for success in the digital age, willingly engages in transforming their teaching practices through technology to affect new learning experiences, and sees himself or herself and others in terms of standards of individual technology competence.

I claim that from the shifting layers of technology, public policy and teacher discourses what emerges are four other subject positions that further Bandeen's (2009) model: the 'technocrat', 'technician', 'facilitator' and 'resistor'. In the illustration below, I reconfigure Bandeen's (2009) model that illustrates how different teacher subject positions materialize from the intersections and collisions of discourses.
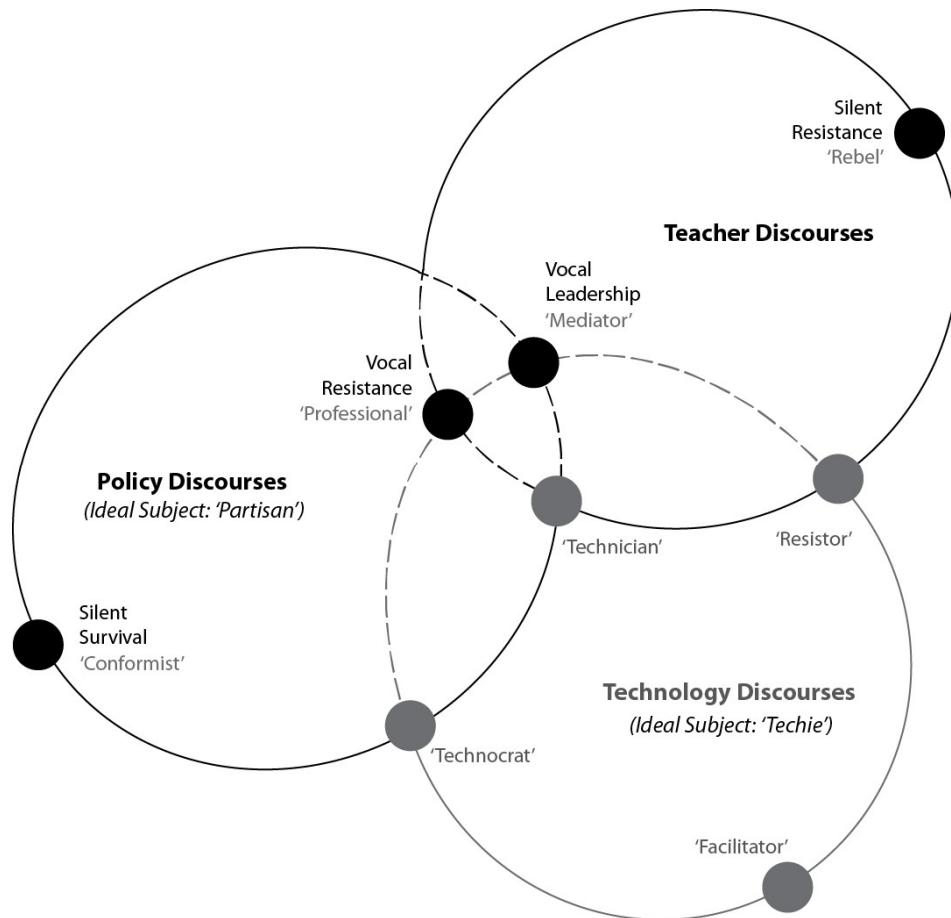
Extending Bandeen's (2009) model theorizing "the intersections of the discursive formations that emerge from empirical incidences of confrontation, disruption, and legitimatization of colliding discourses" (p. 151).

Figure 2: Power as Producing Discourses and Constructing Subject Positions

For Foucault, power is linked to the production of 'truth'. He asserts that power operates through technology and strategies that affect what people do. Nobody is ever outside of power. According to Foucault (1980a), power is:

> …something which circulates…it is never localized here or there, never in anybody's hands…Power is employed and exercised through a net-like organization… [People] are not only its inert or consenting target; they are always also the elements of its articulation…Individuals are the vehicles of power, not its points of application (p. 98).

The illustration depicts how power is 'circulated' to form the boundaries of technology, public policy and teacher discourses that in turn create the space for subject positions (Bandeen, 2009, p. 150). It shows how discourses intersect and collide to construct subjects that are the embodiment of 'regimes of truth'. The features of the illustration colored in grey are my additions to her model. The dashed lines represent the overlapping space and intersections between the discourses that forms the space in which critical subject positons are constructed (Bandeen, 2009, p. 150). As both the effect and the vehicle of power, teachers produce and sustain the discourses that "come to be identified and constitute [them] as individuals" (Foucault, 1980a, p. 97).

From the overlap of public policy and technology discourses emerges the technology 'technocrat' subject position in which technology integration is considered an essential aspect of education. The 'technocrat' believes effective technology integration is a mark of 'quality' schools and teachers, and is vital for bringing education into the 'digital age'. Teachers who occupy the 'technocrat' subject position talk about 'reengineering' or 'reimagining' education through technology-based education standards that reflect the 'wisdom' to technology expects. The 'technocrat' teacher subject asserts that technology-meditated learning offers new ways to

'diagnose' and generate data on education that is helpful for tracking results and measuring performance.

Teachers who occupy the 'technician' subject position generally buy into the values of technology discourses, but their acceptance comes with conditions. The 'technician' teacher subject is a realist that practically 'applies' technology for the purpose of enhancing their instruction and improving their results in the eyes of school administrators and others. The 'technician' attempts to apply technology to both make themselves 'better' performing teachers and also to meet the technology literacy needs of students. He or she will engage with technology as far as it helps to make their lives easier and their instruction more engaging, but they will not relinquish their freedom to it completely. Instead, they attempt to minimize the influence of technology by altering how it works.

The 'facilitator' teacher subject is someone who takes a 'back seat' to technology. His or her class is completely automated and students primarily learn through interaction with connected digital devices, often at a distance from direct contact with the teacher or other students. Like the earlier mentioned 'mediator' who negotiates power relations between public policy and teacher discourses, the 'facilitator' teacher subject frequently assumes a leadership role and is a technology change agent. He or she assists in reifying mainstream technology discourse by implanting into school culture the decontextualized reality of distant technology interests. As a go-between between technology and schools, having one foot in each world, teachers who assume the 'facilitator' position can bridge the gap between technology interests and divergent teacher views to minimize the rigidity technology-mediated modes of teaching.

Teachers who occupy the 'resistor' subject position are cautious and critical of the automated aspects of teaching through technology. They are concerned that technology may

impede their relationship with students, disempower their own teaching style and compromise their ethics. The 'resistor' teacher subject sees technology as just another complication that leads to disruptions in their classroom. Resistant behaviors are often negatively diagnosed by others as being unmotivated to change, lacking confidence or being incompetent, which are hypothesized as some of the reasons why 'resistors' are slow to adopt technology and remain silent. However, Bandeen (2009) suggest that 'resistant' teachers understand the hidden effects of technology: "…technology can be see as mechanizing aspects of work that teachers view as highly relational and personal…[and as an] entity that holds power over them…[because it is] representative of surveillance characterized by many unknown variables" (p. 157).

The subject positions that I identity in the retellings of North High School teachers are not fixed. Teachers frequently shift between, combine and transform subject positions to care for themselves and influence others in pursuit of their own personal objectives. Yet, it is through the appropriation of discourses that teachers interpret what it means to be a teacher. If there is one thing that I have learned from my study, it is that North High School teachers and administrators are continuously conflicted. They are of two minds about most issues because they try to simultaneously reflect the 'official' position, assert their own position, and empathize with position of others in their talk.

Implications for Educational Psychology

This study reveals how teacher identity is shaped by technology, public policy and social context of their day-to-day work. The retold stories of North High School teachers reflect the promises of more interactive learning from technology, more rigorous learning from public policy, and deeper learning from teachers' caring relationships with students. Their talk represents the competing technical, professional and personal repertoires that

204

compose the teacher-self. What is particularly insightful about this study is how teachers respond to how others define their work and attempt to define them as individuals. An agonism exists between the expectations of the institution and 'outsiders', and teacher's own personal identity. Technology and public policy have enduring effects that operate to 'erase' or 'absorb' teacher practices, but what is remarkable is how teachers display a semblance of compliance while steadfastly refusing to change based on their ethical principles.

My findings have implications for educational psychology because, in this study, the real consequences of our field of knowledge are made visible in the reality of teachers. The theories of educational psychology, which are a key part of the preparation and the continued professional development of educators, becomes real, productive and powerful because they are intertwined with the instruments of technology, the programs of public policy, and the practices of teachers. North High School administrators and teachers talk about learning in terms of progressive principles and models that are rooted in the developmental, cognitive and sociocultural theories that constitute the body of knowledge that is educational psychology. Different interests invoke the knowledge of educational psychology to privilege and marginalize singular views about the nature of learning.

We see in the talk of North High School teachers how many of them construct a moral base for their professional identity from learning theories like scaffolding, collaborative learning, and discovery learning that emphasize the social nature of learning. Similarly, school administrators draw on cognitive and child development theory to justify looking at education as incremental steps of knowledge and skills that students attain at certain ages, which suggest benchmarks for measuring learning and prescriptive ways of

organizing instruction. Teachers personal commitments to constructivist principles that were instilled in them during their college studies often conflict with the competency-based and performance goal models underlying public policy directives. The situation is complicated further when technology interests attempt to introduce principles of self-paced, self-directed and programmed learning to redefine what it means to be a 'productive' teacher.

Foucault's anti-essentialist method looks at the effects of socially and historically constructed 'truths' on the social constitution of subjects. Foucault criticizes the political discourses that are implicated in the production of officially-sanctioned theory, not the materiality of the application of the theories themselves. The talk of North High School teachers reflects notions of 'regimes of truth' that our field validates. Considering that power in a relationship, I believe that the same discourses that construct teacher identity also shape our own subjective positions and influence the research that we produce. The historically constructed, formalized and 'proven' body of knowledge that constitutes the field of educational psychology is the foundation on which different rationales are constructed to support opposing interests in education. In educational psychology, we tend to focus on the practical effects of our research and we traditionally view individuals as autonomous, rational subjects. Foucault challenges us to think differently and ask ourselves how our subjective positions may be influenced by politics; whether what we deem as practically rational and universally true may not actually represent reality; and how the supposedly 'objective' knowledge we produce from our research and the language we use contributes to the 'politics of truth'. Our research explicitly produces new forms of knowledge that re-conceptualize reality in ways that purposely supports different political

and economic interests, and we need to understand how this helps or hinders different possibilities for courses of action in education.

Education psychology as a profession is situated in the realm of politics. We may want to believe in the discretion of our research as devoid of political implications, but in fact is it not possible to separate theory from practice. Our work is linked to teachers' pedagogy and who they become as individuals. As Foucault (1983) says: "People know what they do; frequently they know why they do what they do; but what they don't know is what they do does" (Foucault, 1983, p. 187). We may not want to actively engage in the 'midfield' of politics, but Foucault's critical methods suggesting that in order to understand effects of what we are doing, we must grasp how the world of politics and the way we think about education are entwined and mutually reinforcing. We need to be aware of the part we play in constructing the teacher self.

As I stated in the introduction to this study, the 'problem' is understanding *how* knowledge that serves as the basis for privileging certain pedagogy expands or limits the possible subject positions that are made available to teachers. My findings confirm that educational psychology supports a variety of actors representing different interests in contradictory ways. Technology, public policy and teacher discourses take up evidence that is produced by educational psychology to support their competing claims about the most effective way to teach. We see in the talk of teachers that the complex and often contested theories of educational psychology are reduced to talking points that justify the use of certain technologies, management strategies and pedagogical practices. Teachers rely on the theories that are legitimized by our field to construct counterclaims that aid in solidifying their power and opposing the 'proper' way to be a teacher that is constructed by

dominant discourses. Theories from educational psychology largely support teachers'
autonomy and interests in the 'games of power' that play out in North High School, but
sometimes they also work to reinforce our own subjective interests and other political
agendas that limit what teachers can do and become.

This study illustrates the dilemma of educational psychology. Our apparent
pragmatic aim to apply knowledge for the purpose of influencing conditions under which
children are 'free' to learn also aids in the regulation and normalization of teachers. In
taking up the positions that we construct as 'ideal', teachers come to embody our
knowledge and this contributes to their willingness to comply with or oppose public
policy. Teachers' claims of how they 'make a difference' in the lives of students are based
on same underlying premise – there is a one 'best' way to teach – that supports the
essentialist claims of technology and public policy discourses they question, which are in
turn all based the same neoliberal reasoning and absolute values that characterize the
empirical methods of our field.

When the theories of educational psychology are set into practice to define what
counts as the 'right' mode of teaching, we are framing what is a 'good' teacher. I believe
this study challenges us to critique ourselves and reflect on the root of the reality that we
take for granted and consider how our ideas impact the micropolitics that go on in schools.
Our systematic approaches to constructing knowledge influences various discourses in
education through which we indirectly govern what teachers do. The significance of our
work rests not in its practical application, but in examining how 'it acts upon the actions'
of others (Foucault, 1983, p. 789). This study offers a degree of separation that allows us
to stand back and consider our own condition in relation to "a certain way of thinking,

speaking and acting, a certain relationship of what exists, to what we know, to what we do, a relationship to society, to culture and also a relationship to others that we could call, let's say, the critical attitude" (Foucault, 1997, p. 42).

From a practical perspective, this study demonstrates the disconnect between public policy and teachers that leads to the breakdown or 'failure' of strategies. It is not that teachers are 'undermining' change through resistance or that the strategies are flawed, rather teachers view what it means to be 'effective' differently compared to technology and public policy discrouses. Programmatic 'failures' are due to the disconnect between different subjective realities and contradictory 'truths' that create turbulence during implementation. Teachers see success as observing growth and development in individual students, but public policy focuses on achieving the 'big picture' of preparing students for college or a successful career. Teachers want to build responsible citizens where public policy aims to produce skilled workers. Teachers want students to pursue their own interests, but public policy implements strategies to push students into pursing certain fields that fill job gaps in the economy are deemed vital. The orderly and calculated 'scripts' teachers are provided in the form of common standards and assessments often contradict their personal values and the messy reality of teaching. The problem is not that either perspective is more or less 'right'; rather the question for educational psychologists is: "Which aspects of the struggle over 'truth' are we supporting?" In the case, how are we 'tweaking' the rules that govern 'strategic power games' in education to favor the winners.

Future Research

In this study, I have focused on analyzing interview data for how it reflects certain knowledge that constitutes technology, public policy and teacher discourses. Following Foucault's methods, I link discourses to effects of power that limit in productive ways what

209

teachers can say, do and think. I have attempted to "approach discourses not so much as a language, or as textuality, but as an active 'occurring', as something that implements power and action, and that also is power and action" (Hook, 2001, p. 20). Yet, this study is just a prelude to mapping out various educational discourses in rigorous detail.

Admittedly, my reliance on the retold stories and statements of teachers leaves out much of the material arrangements and effects of the discourses I am examining (Hook, 2001, p. 16). Foucault (1981) sees discourses as self-evident events, encounters, strategies and plays of force (as cited in Hook, 2001, p. 6). Hook (2001) clarifies Foucault's (1981) discourse analysis method:

> Using the principle of eventualization means, he suggests, effecting a multiplication or pluralization of causes such that the object of analysis (the event) is analyzed according to those multiple processes which constitute it. Analysis hence proceeds by progressive and necessarily incomplete saturation, from the consultation of ever more sources of origin and realization, ever more analytical 'salients', to an increasingly polymorphism of data sources (p. 18).

To Hook's point above, even though I visited teachers in their classrooms at North High School about twenty times, my research methods cannot be characterized as ethnographic. Returning to where I started my research, I was inspired by Winiecki's (2007) study to explore how technology mediates the work of teachers. There are some resemblances between the Winiecki's (2007) findings in my own. I found that teachers are distributed and isolated in their classroom just like call center agents are separated in their cubicles. Like the call center agents in Winiecki's (2007) research, teachers are subject to random inspections by their supervisors who may drop in at any time to observe their work. When supervisors are watching, both teacher and agents go by the 'script' they are given, but when they are alone they find more productive ways to work. After supervisory observations, the way teachers are coached during debriefing sessions

210

closely resembled the tactics employed by managers in the call centers as observed by Winiecki (2007). And finally, both teachers and call center agents are digitally observed by information management systems that produce data about them, which is likewise used to compare and rank them in relation to their coworkers and the expectations of their respective organizations. However, unlike Winiecki (2007) who was immersed in his research settings, I did not directly observe teachers engaging in these activities, and this is admittedly a limitation of my study.

In an ideal world, my future research would include returning to North High School to observe how technology actually mediates the interactions between administrators, teachers and students. By going to work with teachers over an extended period of time, I will have the opportunity to see firsthand the interplay between the strategies and counterstrategies of control. Ethnographic research methods will produce rich and useful data that will give further insights into how teachers interact with technology and each other. If my assumption is correct that technology will increasingly mediate the work of teachers in the future, I would like to see just how far education moves towards the highly structured and programmed systems like we see in Winiecki's (2007) example from the private sector and what impact this will have on teacher identity.

I believe there are still more discourses to explore that may be revealed by a return to the research site or to another high school. To respond to Hook's (2001) earlier point about the 'polymorphism' of data, more sources are needed to highlight how possibly students, parents and the wider community may be influencing what teachers do and how they see their role. In this study, North High School teachers indicated that students and their parents are highly demanding and define what it means to be a teacher from their own perspective. Teachers frequently comment on how their biggest challenge is to change themselves to be more entertaining and

more caring in order to motivate students to learn. And, they talk about how they use different language to avoid offending parents and students. These findings suggest there are additional discourses that are involved in the construction of the teacher subject. Furthermore, I am curious about how teacher's personal and family lives outside of school may play a role in influencing their social interactions during work. A number of teachers indicate that they socialize with each other more so after work, and some know each other through college classes they are attending together.

Finally, I am intrigued by Foucault's notion that discourses can be characterized by the breakdown of the strategic use of technology and programs in education. Foucault (1980a) asserts that despite the intention of discourses to pragmatically apply solutions to address certain goals, the programs have "entirely unforeseen" effects "which had nothing to do with any kind of strategic use on the part of some meta- or trans-historic subject conceiving and willing it" (Foucault as cited in Lemke, 2000, p. 9). My future research interest is thus oriented toward critiquing how the underlying meaning of public policy reforms are themselves meaningless, because they treat schools and teachers as homogenous and expect that their outcomes will be universal when, as this study demonstrates, they are not. I am interested in exploring the difference between the intended effects of strategies and the real effects, which is not due to the strategies being ill conceived or that the knowledge on which they are based is faulty. The unexpected outcomes rest in the dynamics of competing discourses that oppose, resist and disrupt rationalities.

Appendix A: Possible Scripted Interview Questions

Warm-up Questions

1. After hearing about topic and goals of this study, do you have any questions?

2. After hearing about how your confidentiality will be maintained, do you have any questions about your rights as a research participant?

3. What is your name and position?

4. What subject and grade level do you teach?

5. How long have you been teaching?

6. What is your teaching background?

7. Where did you attend college?

Inductive Questions

1. What do you think it means to be a teacher? What is your philosophy? Is your understanding of a teacher's role different from what school administrators or parents expect? What is the purpose of education in your view?

2. Looking back at when you were a new teacher, what was the most surprising thing you learned about what it means to be a teacher compared to what you expected? Did you make any changes to your approach to teaching as a result?

3. Other than teaching your subject, what other responsibilities do you have?

4. What do you find unexpected or surprising about being a teacher?

5. What are some of the changes and developments in technology over the past decade that have impacted your work? How have these technologies changed what you do at work every day?

6. Do you think these new technologies/policies are beneficial for you, the education system, and/or your students? Is there any downside or any unintended outcomes? DO you have any criticisms?

7. Why do you think these technologies/policies are being implemented now…for what purpose and based on what logic, ideology or politics?

8. Have you noticed instances of "no choice" repeatedly given in relation to technology/ policy changes as indicative of the framing of such policy as a natural, neutral, and necessary presence?

9. Generally, what are you and your colleagues' reactions to these new technologies/policies?

10. Do you feel teachers are engaged by decision-makers to provide input into these reforms or do they feel left out?

11. How do administrators attempt to legitimate reforms and align what you do with technology/policies?

12. How are you and your students assessed or evaluated? How does administration know you are doing a 'good' job?

13. What do administrators do to try to improve your performance or address 'low-performing' teachers/students?

14. What are administrators emphasizing lately as best practices?

15. What type of data is collected about your/students and how? Do you/the school use knowledge management systems?

16. How is data used in your evaluation…too assess your performance?

17. Do you feel like you are free to teach the way you want?

18. Compared to elementary and middle schools, do you observe that High School teachers are treated differently; have more freedom and are more vocal about their concerns without fear of retribution?

19. How do teachers help each other out – support teach other?

20. How do teachers evaluate themselves – what make you feel like you are making a difference?

21. How would you describe the culture of the school compared to other place where you have taught?

22. Do school administrators treat teachers fairly and with respect?

23. Are they any 'cliques' among teachers? What are they?

24. How do you customize your instruction for different students?

25. How do you motivate and engage students?

26. How do you feel about the disciplinary aspects of your job?

27. Do you speak or relate differently to students, parents, and administrators? How?

28. Bandeen theorizes four perspectives that emerge out of the tension between policy and teachers (silent-resistance, vocal-resistance, silent-survival, and vocal-leadership)…can you relate to any of these positions? Do you see your colleagues filling any of them?

29. What do you do to make the reforms more palatable? How do you 'tweak' polices to protect students and yourself from some of the negative aspects?

30. How do you and your colleagues counter the accountability rhetoric and find ways to exert your autonomy in "spaces left free" out of the view of administrators?

31. Have you witnessed any obvious or vocal confrontations or attempted teacher disruptions of accountability policies that emerge from translations or negotiations of discourse boundaries?

32. Do you have a 'leader' in your department that you go to when you have an issue?

33. Is there anyone in your department who is withdrawn and does not participate in meetings?

Closing Questions

1. Is there anything that I did not ask about that you would like to share?

2. Do you have any questions for me?

3. Could you recommend any of your colleagues that you think would be interested in participating in this study as well?

Appendix B: Codebook

Emergent Themes

Teaching
Curriculum
Lesson Plans
Essential Questions
Pacing Guide
Education Policy
No Child Left Behind
Discursive Arguments
College vs Trade Skill
Changes from Grad Test to ACT
Common Core - Standards – AYP
School Culture
Disciplinary tactics
Autonomy
Trends
External Factors - Diversity – Differences
Collegiality
Differences Between HS and MS
Class Observations – Walkthroughs
Differences between STEM and other subjects

Identity
Teacher Language
Generation Gap
Self-care
Students - Motivation
First-year experiences
Entertainer
Role as Disciplinarian - Classroom management
Criticisms of School System
Counter Strategies
Role of Education - Teacher's Job
Caring
Testing - Assessment - Evaluation
International Tests
Improving the Scores
STI or iNow

Technology
Downside of Technology
Instructional Technology
Electronics - Smart Board – Elmo
Mobile Devices
Internet
Youtube
Social media
Technology Gap
Need to Teach Tech
Benefits of Technology
Connecting Teachers and Sharing
Technology Helps Engage Students
Flipped Classroom
Distance Learning
Apps – Software
Presentation Software
LMS

Deductive Codes

Subject Positions (Bandeen & Winiecki)
Vocal Leadership - Responsibilization
Silent Survival - Compliance
Silent Resistance - Secondary Adjustments
Vocal Resistance - Open Opposition
Policy Discourse – Governing (Bandeen)
Quantitative Data
Production Measures
Absolute Language
Distance of Policy From History
Power Tools (Gore & Winiecki)
Individualization - Self
Normalization - Norms
Surveillance - Data
Distribution - Space
Classification - Differences
Regulation - Rules
Totalization - Collective Character
Exclusion - Boundaries
Teacher Discourse - Group Discipline (Bandeen)
Distance of Teachers From Administrators
Qualitative Measures
Tentative Language
Awareness of Rationality of Performance

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