

ABSTRACT

The Impact of the Factory Model of Education in Central Texas

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The purpose of this study is to explore the elements of Taylorism, or the factory model of education as proposed by Fredrick W. Taylor, and to show its implementation in schools today. The style of writing is narrative inquiry and offers both quantitative and qualitative data to support the claims of the thesis. This thesis outlines a brief and broad history of Taylorism in the first chapter and shows how it has adapted over time. The second chapter then narrows the focus and shows how Taylorism has remained in Texas and how it has affected schools and faculty alike. The third chapter then focuses on two sample schools in central Texas and shows the proponents of Taylorism and how they have been implemented. This chapter serves as specific evidence and examples of Taylorism in the educational system today. Finally, the fourth and final chapter is a synthesis of Taylorism and its impact as well as offers suggestions for future changes in the educational system.

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The Impact of the Factory Model of Education in Central Texas

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By

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DEDICATION

To my parents who taught me the value of education

To Dr. Talbert who was not just a professor, but also a mentor and inspiration

To Mrs. Spire, Mr. Gregory, and Mrs. McWilliams: You're the reason I teach

Prologue

Methods and Materials

If the American public education system could be summed up in just one word, the word that immediately comes to mind would be “Standardized.” We have standardized curriculum; standardized tests; standardized class periods and sizes; and standardized learning rates. In a country as diverse as America, it seems strange that the public school system would be so rigid. Of course there are some alternatives such as magnet and private schools, but these opportunities may not be available to every student due to their location or to a lack of funding. Do not misunderstand my criticism of the public school system for one of disregard—the American public school system takes on a unique task that almost no other country is faced with. We accept *all* students, and with that we accept that there will be great difficulty in accommodating all of their different needs. The need for efficiency in the public school system is apparent; however, the standardization of schooling seems to be contradictory to the task at hand which is an educational opportunity that is available and equal for all students.

The challenge of studying the educational system of the public schools of America is a daunting and almost impossible one, so I have merely selected the two secondary schools in Central Texas as a sample of this system. I selected these particular schools for two primary reasons: The first is practical. Studying the schools nearest to me provided easy access to data, administrators, and the information that I needed to complete this survey. Second, the two high schools in Central Texas—Urban High School and Suburban High School—both seem to exemplify this principle of standardization that I have mentioned, or Taylorism, as it will be called from now on.

The style of this thesis presentation will be a narrative inquiry as inspired by Virginia Woolf's *A Room of One's Own*. Woolf explored the idea of being caught in two worlds—the world of womanhood and the world of academia—through her own personal experiences utilizing the first person pronoun “I.” Such a technique gave the work relevance and allowed the reader to slip into this personage under the guise of the ambiguous “I” and take on the role of an intellectual woman struggling to find her place. As I am in a unique position of having both experiences being a student and being a teacher simultaneously, I am inclined to give my perspective on both situations throughout the research. I borrow Woolf's narrative inquiry to draw the audience in—to allow them to do as I have done and slip in between the worlds of pupil and instructor and to struggle with me to find sense in this middle ground. Though I must make the distinction between my research and *A Room of One's Own*, for Woolf uses the frame of a narrative, but she purposefully blurs the lines between actual experiences and fiction in places for the sake of making her point. For this reason, it must be noted that this research will not consist of the fictional elements that Woolf employed, but merely the narrative style. I cannot deny that I am present in this study—not merely a passive observer, but an active participant in building an identity for American education. That being said, this research includes both raw and numerical findings as data as well as interviews with administrators and educators in Central Texas, my personal experiences, and the opinions and findings of authors and essayists in regards to the public school system.

The purpose of this study is to explore the factory model of education as it has been implemented in the two secondary schools, and to then evaluate the effectiveness of such a system in regards of students' academic achievement. This presentation will feature four chapters: The first is a chapter defining and outlining the features of the factory model of

education. The second chapter will then demonstrate specifically how the Central Texas secondary schools fit into this particular model and raise the question of whether or not this model is beneficial to student achievement. Third, I will explore other schools which have also implemented this model and compare and contrast their results with that of the schools in Central Texas. Lastly, I will offer a critique to this system—what are its strengths and weaknesses as its implementation here has shown? How can we improve upon the weak points and better serve the students and the community of Central Texas? Again, I do not claim to disregard or discredit these schools or even the American ideal of public education; however, in order to better the system it must be examined with discretion, challenged when necessary, and commended when praiseworthy.

Chapter One

The Factory Model of Education

Troubling Questions in Education

If I am being perfectly honest, then I must say that teachers are not always the best students. As I am merely in the process of becoming a teacher, I am caught between the two worlds of student and instructor, and often I find myself forgetting in which world I am to be when in my teacher education classes. In my Secondary Education Practicum, my friends and I sit back and snicker like the very high school students we are always shushing. One day in particular, we learned about the schools where we would begin our teaching associate work. Perhaps we were all just excited about starting to teach, but for whatever reason, we were all particularly chatty that day. One of the site based coordinators made a comment about going to the bathroom during class. “Of course, we do not allow students to wander the halls during class time, so they must go to the bathroom during their passing periods or lunch. Absolutely no exceptions,” she said.

“Oh yes, sure, just everyone make sure to time your bladder to our schedule, please,” a girl behind me marked sarcastically. We all chuckled, but I thought there was actually a bit of weight to her statement. I was torn between agreeing with her and agreeing with Urban High School’s policy. There are obvious reasons for wanting to keep students out of the hallways during class time. For one thing, it is not safe to have children walking around without supervision. From a purely administrative standpoint, it would not be a good idea to have students leaving the classrooms unchecked because they could leave the school entirely. On the other hand, though, I did have to agree that it seemed just a bit ridiculous to tell a sixteen year

old boy or girl that they could not go to the bathroom at a certain time, as if they were some sort of young child or puppy incapable of being trusted with even a small amount of independence or responsibility.

I felt a bit uneasy at my mistrust of the policy, but I laughed and settled back into my seat. It was only a moment later that the results from our diagnostic PPR examinations were passed around the room. My results were less than exemplary, though I managed to achieve the exact score needed to pass the diagnostic for genuine testing: an 80%. I began to reread some of the questions I missed, and a thought crept into my mind while doing so. The test is meant to measure a teacher's skill in effectively and creatively delivering material and handling situations and problems that arise in a classroom among students, colleagues, and even parents. I had to chuckle at the irony: The way they measured my resourceful and imaginative pedagogical skills was through a Scantron test that I passed miraculously by filling in random bubbles and trying to spell words with my letter choices. (Yes, you see, teachers really are terrible students. We know all of the tricks students use, and we keep them for ourselves for later.) I thought back to my days when I took the SAT multiple times not really improving my score at all each time, but praying and hoping for one that was worth sending into colleges.

It may seem quite comical to speak of policies, students, and tests in this manner—I thought the entire thing hilarious. The truth of the matter is—that these scenarios are real. They may be funny or silly to talk about, but they are not a joke as these are the very things that students, student teachers, and teachers face on a daily basis. I wondered why and when these structures, these standards, had come about and why we are becoming increasingly more and more focused on them each year. It is safe and efficient to designate times in which students can go to the bathroom. It is easier to make a student sit down and bubble in a Scantron to evaluate

how much they know. It makes perfect sense for a prospective teacher to do the same, because there needs to be some standardized raw and measurable data that communicates to state and school administrators and employers that the candidates are in fact fit to teach.

Still, it seemed as if the educational system was characterized by some undeniable and deep flaws—mainly that of standardization and generalization among assessments. I began to wonder if it had always been this way, if in fact we had always used such homogenous measures to deal with the undeniably heterogeneous population of students. This question would require research, specifically research in educational systems of the past and events leading up to the creation and structure of the American educational system of the present. I delved into this research and came to find that this standardization derived as far back as the 1800s with the factory model of education (Taylor 10). Since then, this model has changed little, if only in name. Paulo Freire describes this as the banking model of education (Freire 31). Steven Selden titles this the Business model or the efficiency approach in his article, “What May a 75-Year Involvement with the Language and Ideology of Business Tell Us?” (Selden 452-3). Of course, there are other names, too—the systemic approach, Essentialism, and the standards movement, as it is most commonly referred today, but each name and each system comes from the basic ideas and principles of the factory model of education (Education Commission of the States 2).

It seemed almost silly to me to keep a system around for so long when times and technology had changed dramatically since its implementation. However, I had to note that at one point, this model was considered revolutionary. With the United States growing in population and diversity during the 17 and 1800s, a new method was needed to educate mass numbers of students quickly and efficiently—hence the application of the factory to the education system. This pedagogical system, based off of F. W. Taylor’s business model for

efficiency in business, exemplified a very corporate and practical solution to the educational problem. The characteristics of Taylorism in education exemplify those same characteristics applied to the world of manufacture, hence the coined term “factory” model of education, because under these principles, schools behave much like an assembly line.

Characteristics of the Taylorism Revolution

A revolution is characterized by radical and pervasive changes in society, often even forcible changes in terms of governmental powers. The United States has been heavily shaped by revolution: the Revolutionary war, economic and social revolutions, and the Industrial Revolution in the late 1700s and early 1800s. The Industrial Revolution was one that strived for efficiency in production and business; the factories rose out of this movement as the dominant means of manufacture and assembly. However, this idea of efficiency eventually permeated both the social and the educational spheres. People were seen as products that needed to be shaped and built into effectual workers; therefore, the school became the factory to produce such products.

Frederick W. Taylor proposed a systematic approach to increasing the productivity of the worker in his book, *The Principles of Scientific Management*. When applied to a business model, the list of principles proved to be effective. Eventually, Taylor’s approach was applied to pedagogy creating what is now seen as the “Factory Model of Education” or “Taylorism” after Taylor himself. The characteristics of the factory model of education are as follows: Top-Down Management and Power, Alienation from the Community, Emphasis on Management, Centralized Planning, Lack of Innovation, Products Produced to Meet Societal Needs, and Maximized Profits.

For this study, I examined both of the high schools in Central Texas to see if these elements of Taylorism were applied in their educational models. In order to deduce whether or not Taylorism was present in these schools, I needed to be able to identify specific characteristics of this particular model of education. The following is a description of each of the aforementioned characteristics and how they were originally applied under Taylor's business model. I will also offer a description of how each of these characteristics might be found in a school setting. These elements served as the framework or the lens for the focus of the research as I looked to see how they had manifested themselves in the school system in Central Texas today.

Top-Down Management and Power

In the business world, management resides in the few who are at the head of the company or corporation. The workers have little to no input in the work force. Though the managers are not directly involved with their workers, they dictate the amount of work, the products, the time of day, and the amount of money to be spent.

This can be seen clearly in the educational world as teachers have little control over what is to be taught with rigorous standards and national tests. Students similarly have almost no input over what they can learn, aside from the choice of a few extracurricular classes or activities. In the past few decades, the United States government has gained more and more control over the educational system, creating a small board of management in the United States Department of Education which largely dictates the curriculum for the massive body of schools. Though the Department of Education does not have a direct say in what the states can and cannot do with regards to education, the Department can offer mandates. Race to the Top, for example, offers

funded mandates—an extremely tempting offer for states which struggle financially to support their educational system.

However, this does not really concern or affect this study as Texas often does not accept the government mandates to begin with. The second chapter will focus specifically on Texas and how Taylorism has shown itself in the state. Because this study centers on Central Texas, the state mandates and requirements will be the focal point of this study. Apart from large-scale state mandates, individual districts and schools still have a top-down management system. On a smaller scale, most schools are run by a panel of people who often have little to no classroom time or influence. The main issue with applying such management to the school system is that the students and teachers are often misrepresented.

Alienation from the Community

The corporation has little to do with the community that surrounds it, and similarly in the factory model of education, the school remains as a separate entity from society. Because of the factory's alienation from society, it stays intrinsically the same throughout time. The school acts in the same way, and rather than influencing the community or becoming a part of societal change, it is a subject to the community and change. An example of this would be the implementation of Taylorism in the school system. Society first adopted Taylor's model of efficiency in the corporate world, and then these systemic principles were employed in the educational sphere. Rather than the schools creating policies and ideas which then impact the community, the schools became subject to society's needs for efficiency with the adoption of Taylor's model (Sahin 947).

When the schools are isolated from the communities, they do not encourage students to connect with their local area or get involved. I thought back to my high school experience in

Dallas, and I remembered that I never once heard a teacher mention ways that I could serve my community. It was not until I reached my university that I realized I had missed many opportunities for volunteer work and participation in my hometown simply because I was unaware of my ability to get involved. The problem with keeping students uninformed about their opportunities to participate in their society is that this ignorance often has a backlash effect of gang violence, vandalism, and drop-outs among the student population. Whereas Linda Darling-Hammond points out the opposite in “communitarian” schools in which students are encouraged to take ownership in their society. These schools and these students develop “a more collective perspective about the purposes and strategies for their work” (Darling-Hammond 181).

Emphasis on Management

In the work force, employees are given a job or task and expected to complete it as they are told. Failure to do so would result in consequences such as a demotion, dock in pay, or loss of a job. This system of rewards and consequences can be seen in Behaviorism in education. Students are seen as people who can be trained to produce certain behaviors and results. If all students are quiet and behave in the same ways, the classroom will be quick, efficient, conducive to learning, and the students will move as one unit through all of the subjects and grades.

This immediately reminded me of Urban High School’s bathroom policy which came up previously. In order to maintain control and efficiency, Urban High School does not allow students to go to the restroom during class time at all. Any sort of leaving and going in and out of classrooms would only disrupt the flow of the management of the classroom according to Taylorism’s model of efficiency. Ironically, this often decreases student productivity in schools. Schools often “lose focus on teaching and learning due to both managerial and political distractions,” meaning that teachers and administrators are so focused on following all of the

rules and policies that they are actually distracted from their goal of teaching creatively and authentically (Darling-Hammond 182).

Centralized Planning

Centralized planning in education refers to standards and subject matter. This can be seen in Texas Essential Knowledge and Skills, the Scholastic Aptitude Test, and the newly created State of Texas Assessment of Academic Readiness tests. All of these things are highly systemized and efficient. They represent certain goals and checkpoints that each student must make at a certain rate. Also, each of the students is expected to meet these goals quickly and on time—they function more as products on an assembly line rather than organisms with questions, problems, and ideas to contribute to their learning (Serafini 69). Teachers are seen as directors of instruction. They operate the machine as they simply pass down the knowledge to their students without any time for creative or differentiated instruction. There are certain goals that must be met in a certain time period, which leaves room for little else (Education Commission of the States 4). In Freire’s banking model, the teacher would act as someone “depositing” information into the students’ minds to be withdrawn later for exams. There is little room for students to take ownership in their learning as they must follow the instructions and directions of the teacher (Freire 41).

Currently, many of the schools in Central Texas follow the CSCOPE plan of instruction, which is a curriculum based program that outlines the topics and lesson plans teachers should cover during a semester. The topics are organized by dates as well, and depending on how closely a particular school decides to follow CSCOPE’s recommendations, teachers will be required to meet the deadlines for teaching the recommended content—much like a factory would be required to meet certain deadlines in production. The curriculum of the CSCOPE is

designed to prepare students for what will be on the STAAR—State of Texas Assessment of Academic Readiness—exam (TESCCC 1). My clinical instructor at Urban High School was told that she could not teach Shakespeare’s *Romeo and Juliet* because the STAAR test used excerpts of plays with stage directions, so the CSCOPE recommended *Twelve Angry Men* instead. This kind of centralized planning resembles a corporation’s model of fast and efficient production.

Lack of Innovation

Hand in hand with the idea of centralized planning is that of efficiency and traditional methodology. There is little room for originality, questions, concerns, creativity, or inventive thoughts. In a factory, the machine is fashioned in such a way that all products are produced perfectly and quickly. Theoretically, a school following the factory model would have the same function. However, if all students must follow the same line of pedagogy, they become objects of instruction rather than subjects or agents in learning (Leland 7).

It seems obvious to say that students who learn at a slower pace would not fit into the factory model of education—they simply do not meet the needs of the centralized planning at a quick enough pace. However, the lack of innovation in Taylorism harms the gifted students as well. With no room to practice their creativity and intellect, these students become bored having to slow down and move at the same pace as every other student on the assembly line. During my student teaching, I noticed one of my students was exceptionally bright, but he made very poor grades. Everything he turned in was half finished because he usually stopped working in the middle of class to chat with his friends. I pulled him aside after class to ask him why his grades did not exemplify the intellect he had proven to me in conversation and discussion. He looked at me and shrugged his shoulders saying, “Miss, I’m just so bored here. It’s too easy.” Leland points out in her article “Literacy Education for the 21st Century” that “an empowered learner in

this model is both unwanted and dangerous” (Leland 8). This is because an exceptional student like the one I mentioned would force the school to accommodate for their exceptional needs, which would be a handicap for the overall factory’s efficiency.

Products Produced to Meet Societal Needs

Supply and demand drives the business world. When consumers are in need of something, production for that particular product increases. Schools under the factory model are no exception to this rule. As objects of societal needs, schools serve to train their students and produce perfect workers. An example of this can be seen during the Cold War—Americans lived in fear of Communism and the power of the Soviet Union. In response to this fear, schools increased studies of math and science in order to churn out students who would go into careers as engineers, scientists, astrophysicists, etc. Essentially, the schools produced children as weapons through the educational system in order to compete with the Soviet Union’s military power (Serafini 68).

Maximized Profits

In order to maximize profits, the factory must throw out all products that do not meet requirements, and they must produce their products at a specific rate. Under Taylorism, students as products are treated in the same manner. If they cannot meet requirements and cannot do so in the time frame allotted, they are simply left behind. There is no room for imperfect merchandise when the objective is quick results. Imperfect merchandise in the public school system would be any student who does not meet the normative learning rates and academic achievement. It is a strange hypocrisy in the American educational system. We promise education for all, but we make it very difficult for those who are of lower class incomes to succeed. The groups in schools tend to be very homogeneous as well; that is to say that those who succeed best under this system

tend to be white, middle class students. If a student is extraordinary, they are often singled out for special instruction or Individualized Educational Plans (IEPs), which highlight their exceptionalities. In this way, “schools are viewed as leveling instruments rather than instruments of growth” (Sahin 948).

Taylorism and Central Texas

When I was presented with these traits, I could see Taylorism was still clearly at work in the public education system at large. Again, I had to remind myself that this system was once revolutionary and possibly even necessary, but I had to question whether or not it was healthy for education to remain so static. It seemed as though society changed rapidly, but educational reforms were very slow in comparison with the rapid societal changes. Taking these elements of Taylorism and my questions and criticisms of the model, I then turned to the secondary schools around me: Urban High School and Suburban High School. I asked the questions, Did these schools specifically fit into this model, and if so, what is the result of such a system in today’s society? Both of these high schools were not achieving the academic standards set by the state of Texas. It was my theory that the implementation of Taylorism might be a large component in the educational status of the students. That was the next question for me to explore. I sought to study Taylorism and its application in the Central Texas secondary schools. I wanted to discover if this system was the cause or the agent of the low academic achievement as I hypothesized, and if that was indeed the case, I would then investigate possible solutions or ideas to rectify this predicament.

I turned my attention to Urban High School and Suburban High School, and I began to apply my research of Taylorism specifically to these schools. I wanted to see exactly how

Taylorism had been applied in these schools and what elements of the traditional factory model remained in Central Texas's public schools today. In order to prove Taylorism's influence in these schools, I accessed data such as standardized test scores from the state. I also interviewed administrators and educators in the schools and asked them questions about their own school systems such as how they are run, what the purpose of education is, and what the level of involvement for students is regarding the creation of curriculum. These questions along with others will be addressed in chapter two as I demonstrate exactly how these schools fit in the model of Taylorism and how the factory model affects the students' academic achievement.

Chapter Two

Taylorism and Texas

Standardization in a Diverse Environment

Understanding the schools in Central Texas would require a better understanding of the public school system in Texas as a whole. About 832,000 students in Texas in 2011 were English Language Learners (That is roughly 1 in 9 students), presenting an exceptional situation for educators who are presented with the task of accommodating to the needs of these students as well as those who are native speakers (Flores 5). The only state with a larger portion of students learning English is California with over 1.1 million students studying English as a second language (Flores 5-6). Apart from the large portion of ELLs, Texas schools—like all public schools in the United States—also takes in students with disabilities or special needs and students of all learning levels (*Texas Fast Facts* 1). According to the Intercultural Development Research Association, about “55% of students are classified as economically disadvantaged” and “62% are considered racial or ethnic minorities” (IDRA 1). With these incredible facets in the educational system, the state of Texas is a perfect example of the unique diversity and challenges to education that the United States specifically faces, so it was definitely worth my careful examination. I wanted to see how Texas handled these complexities in their educational system before I could understand Central Texas’s specific pedagogical approach.

However, in the midst of this incredible diversity, a few words kept coming up over and over again to describe Texas’s educational system: tests, mandates, regulations, objectives, and the familiar term of standardization. I could see Taylorism in full force, its presence overwhelming in the academic curriculum, goals, and criteria. Morgan Smith wrote an article

after an interview with Phyllis Causey, a third-grade teacher in San Antonio, about her schedule as a teacher. Causey explicitly stated that she “[lived] on a timer,” went to lunch promptly at “11:55” every day, and stressed that with 23 students to manage, “every single minute counts” (Smith 1). I would agree wholeheartedly that every minute in the classroom counts; every minute spent learning is indeed precious, and the struggle to communicate information in the time allotted is a serious challenge for teachers. Yet Causey’s exasperated comments revealed that it was not the amount of content in allotted time that was an issue, but rather the large class size that made it nearly impossible to efficiently manage the students and deliver the content effectively.

Smith went on to point out that Faubion Elementary where Causey worked simply was not equipped for such class sizes; however, just up the interstate, other schools were creating classrooms in L-shapes in order to “create strategic pockets of space for small group work and to reduce potential distractions” in larger classroom settings (Smith 1). I could not help but wonder how exactly this method helped instructors like Ms. Causey living on her timer, because it seemed to only treat the symptoms of her problem rather than the problem itself: the large class sizes of children who were not receiving the attention they needed in the very short time available to them. If I were to keep the business model in mind when viewing this educational model, it seemed to me that Leander ISD was attempting to increase production output while “pinching pennies” in other areas, such as staff and storage. This would put a greater strain on the workers causing them to stretch themselves to finish double the amount of work in the same amount of time previously. If this would be ineffective even in the business world, why would we assume that the efficiency would change when dealing with human beings who do not fit on

factory lines? In Texas, especially, where the population is so immensely diverse, I did not see how over-stuffing classrooms best accommodated the needs of the students.

Perhaps Taylorism's strongest influence can be seen in the state-wide testing programs. In the past, the Texas Assessment of Knowledge and Skills, or the TAKS test, has been the measurement of student educational progress (Stanford 1). Each grade level is equipped with a set of skills and benchmarks that must be met in order for a student to be considered "on track." These benchmarks are known as the Texas Essential Knowledge and Skills, or TEKS, and they are meant to be kept in mind during the creation of lesson plans and assignments (Bernier 1).

I was immediately reminded of my freshman year studying education at Baylor when I tutored two young girls at Caesar Chavez Middle School. For each lesson, I had to create curriculum plans with objectives, assignments, and the specific TEKS that my coursework addressed. There is nothing inherently wrong with creating an objective for learning; in fact, a lesson without a purpose is virtually useless. What good is it to teach a man to fish if he does not realize that the catch will satisfy his hunger? So it is not the presence of objectives or tests that is under scrutiny, but rather the amount, the high-stakes, and the exact purposes that the objectives and tests propose. It would seem that Texas, too, has put an even greater emphasis on these tests and benchmarks in the past few years than previously.

While the TAKS test may be disappearing, the STAAR—the State of Texas Assessment of Academic Readiness—test is emerging in its place. The reactions to the new exam have been mixed with some praising its potential and others shaking their heads in cynical skepticism. Bill Hammond, CEO of Texas Association of Business, stated in a Guest Column for the Texas Tribune that:

The school bureaucrats blame everyone but themselves. They complain that 12 years was not enough time to get students over even the low bar of TAKS. They complain that the expectations of the new

accountability system, to get students ready for college or career, are somehow unfair, even though they supported this legislation just three years ago. And they complain constantly that they need more money... This is bureaucracy at its worst: demanding more money, less accountability and less responsiveness to taxpayers and parents while producing results that do not meet the needs of our young people or our economy. You have heard them complain about the STAAR exams. Well, now we know that STAAR is just one of the many messengers with the same message. Let me repeat the ACT results: fewer than a quarter of our students who make it to graduation are ready for any sort of college... We need to wake up, and wake up now, to the deeper truth that it is time to stop blaming the messengers. It is time to fix the problem.

Hammond then calls for a support of the STAAR test asking that everyone “give it a chance” to succeed, and he reminds readers that change takes time (Hammond 1). He criticizes Walter Stroup, a professor and writer for *The Tribune* who speaks out against high-stakes testing, as a man who “opposes accountability” for students because of the position he takes on standardized tests. Hammond claims that Stroup’s claims and opinions are groundless and not based on any sort of prior academic research.

I suppose an academic career teaching and active involvement with students is not valid support for Stroup’s arguments in the eyes of Hammond. I also found it interesting that the CEO of the Texas Association of Business passionately supports the tests that find their roots in Taylorism’s principles of efficiency and production. Still, not everyone supported the TAKS and the STAAR as fervently; yet, most agreed that there was something fundamentally flawed in Texas’s educational system based on the results of these exams (Smith 1). Some said that it was the tests themselves, and others still—like Mr. Hammond—believed it was the bureaucracy, teachers, or administrators, or that the tests and standards were not high enough (Stanford 1). Either way, these tests seemed to be the subject of interest. The question was what the real

effects of the tests were and how did those results shape the state of Texas's educational system today?

Intangible Results of Tangible Tests

The irony of Hammond's argument, to me, was that he suggested that the old tests did not work because of a bureaucracy, but the new STAAR exam would be effective despite sharing the stipulations of its precursors (Hammond 1). Though Hammond ardently supports the standardized tests, a large portion of teachers, parents, and administrators share Stroup's opinions that the tests do not accurately measure knowledge and are ineffective in encouraging student academic achievement (Stanford 1). Before picking a side myself, I sought to examine the effects of the high-stakes tests and Taylorism in Texas's educational structure.

Failing Tests and Failing Schools

In the broad scope of things, Texas seems to struggle. Carole Keeton Strayhorn, the Texas Comptroller, conducted a research project in 2006 that she titled, "Texas: Where We Stand" (Strayhorn 1). This project compiled raw data drawn from graduation rates, censuses, student demographics and ethnographies, and—of course—test scores in a concise file for inspection. The study revealed both positives and negatives regarding the educational system of the Lone Star State. First, she listed a few statistics from the SAT scores. Texas was ranked 49 out of 50 states in verbal SAT scores, and 46th in math. Graduation rates in Texas were only at 68%, 36th in the nation (Strayhorn 1). Strayhorn also pointed out that more administrators were being hired and that student growth was rapidly increasing annually; however, the amount of teachers being hired was relatively low in comparison (Strayhorn 1-2). The survey was not devoid of positives, though. A large portion of elementary and middle school level students

achieved at or above proficient on their math and reading tests in 2005 (Strayhorn 2). Overall, though, the message was that Texas was far behind in comparison with the other states and that serious change needed to be made to correct these errors (Flores 1).

Strayhorn's survey only measured the progress of the Texas educational system as of 2006. After six years have passed, though, the state of academic achievement has not changed much. In August 2012, the Texas Education Agency announced that "fewer than half of Texas schools met yearly requirements set by the federal government" and that only "44 percent of Texas campuses achieved the goal of an 87 percent passing rate for reading and an 83 percent passing rate for math" (O'Connor 1). Although, many educators do not feel that these tests accurately reflect the achievement of their students. Hollie O'Connor wrote an article for the Texas Tribune in which she interviewed several different people on both sides of the argument for the tests. Several teachers fervently disregarded the tests' accuracy:

"Members of Congress and the Department of Education readily admit that the current NCLB requirements ... ask too much of students too quickly," Johnny Veselka, the executive director of the Texas Association of School Administrators, said in a statement. "Unfortunately, folks in Washington have neglected to make any changes and are moving forward with a flawed system that is setting up students, schools and states to fail." Linda Bridges, the president of the Texas branch of the American Federation of Teachers, defended the performance of the state's schools, saying that in "more trustworthy measures" like the National Assessment of Educational Progress, students "have been doing far better" than the NCLB results imply — "even though more than 800,000 additional high-need, economically disadvantaged students have enrolled in Texas public schools since NCLB took effect."

It is true that the problem with this survey is precisely that of Texas's diversity.

Taylorism and the idea of the factory would suggest that failing tests means failing students and failing schools, but this debate shows that the concept is really not all that simple. These tests and statistics may not accurately reflect the amount of learning and successes of the educational

system because of the large population of English Language Learners, special needs students, impoverished students, ethnic minorities, and so on. That of course begs the question of why, with such diversity, do we hold students accountable all for the same exact test scores? Why do these scores alone reflect academic success and learnedness? Granted, Hammond makes a fair point that there should be some sort of accountability among students for their studies, but high-stakes tests and one-size-fits-all standards cannot possibly be the only solution for such a heterogeneous population.

Taylorism and the Production of High School Graduates

Another way in which Taylorism shows its influence in Texas public schools is in the graduation rates. In the business realm, factories produce products. In this case, the products would be high school graduates, preferably graduates who are prepared for the work force or for a college education. If this is the desired product, then the outcome can be measured in the amount of high school graduates. Though this seems simple under the standards of Taylorism, the truth is that even this is debated among members of the educational sphere. Morgan Smith pointed out that graduation rates among Texas high school students had improved since 2005. She said that Dallas ISD, specifically, had seen a 14% improvement since then in their graduation rate. However, there is skepticism about the accuracy of such studies. It is difficult to keep an accurate count on students who transfer or move to other states, so it is hard to determine the precision of the numbers in dropout studies (Smith 1).

Why it All Matters

Obviously the questions that I tackled are some that are controversial, sensitive, and not immediately solvable. Taylorism has such a presence in Texas that can be seen in the class sizes, the tests, the standardization, the products, the goals and checkpoints, and the production of

graduates to meet societal needs. Although, with such an emphasis on efficiency and production, it seemed that Taylorism has failed Texas. Students are not meeting the standards set forth by the system and they are being punished for their “failures.” For the purpose of this study, I will refrain from delving further into these issues. I wanted to study Texas, though, so that I could see the exact environment that Central Texas faced. These are the questions and challenges that Urban High School and Suburban High School are forced to examine while also examining their individual needs. With this, I now turned my attention fully to the schools in this study.

Chapter Three

Taylorism in Central Texas

A Closer Look

In order to see if Taylorism was truly present and relevant in Texas public education, I needed to conduct a study of some of the local high schools. I concentrated on two of the Baylor PDS campuses; for the purpose of this study, they shall be called Suburban High School and Urban High, both located in Central Texas. I studied the demographics, test scores, administrative systems and procedures for my quantitative data, and for a more qualitative approach, I talked with some of the schools' esteemed educators and administrators. The purpose of the qualitative approach was to see what teachers and administrators said about and thought of their schools and their school's educational system. Pseudonyms were used in order to protect the identity and interests of persons involved in this study.

I wanted to know how these men and women would define their own inner workings, what their critiques were, how they approached educational techniques, student learning, and their own roles in the high schools. I then compared their viewpoints and statements with my quantitative data to receive a holistic, conclusive decision about the educational systems and the effectiveness of the high schools. Though the interviews were semi-structured, I developed an interview protocol with a list of questions for the candidates. The questions were as follows:

- 1.) How would you describe your school's educational system?
- 2.) What is the role of the teacher in your educational system?
- 3.) What is the role of the student in your educational system?
- 4.) How much say do the students have in the curriculum?
- 5.) Who makes decisions regarding the curriculum?
- 6.) How is the administration involved in the classroom?
- 7.) Describe the impact of high stakes testing in the classroom?
- 8.) How do these tests affect student achievement?
- 9.) What are the strengths of your school's educational system?

10.) What are the weaknesses?

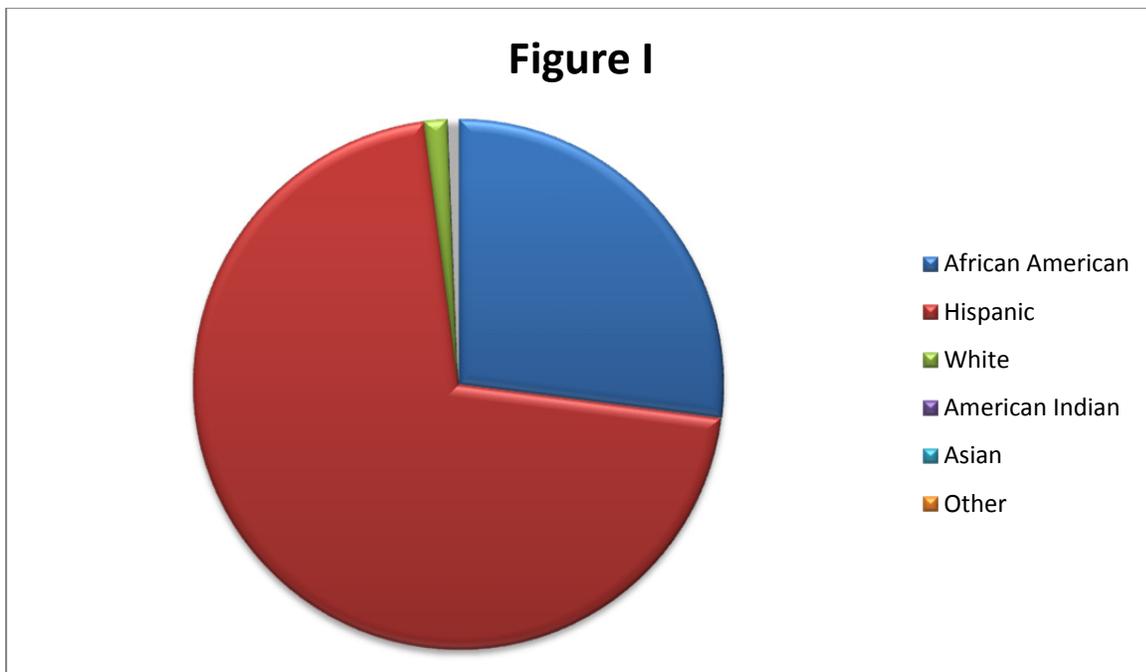
These questions served as a starting point in the interview and data collection process. Beyond the purpose of academic inquiry and research, it is also important to remember that teaching is personal. Any time knowledge and wisdom are being transferred from one person to another, there is an intimacy there, whether it is conscious or not, between the giver and the recipient. For this reason, it was necessary to speak with and listen to the very administrators and teachers who make up the educational system. To study education without studying the persons involved is to take away the very thing that makes education so wonderful—the human interaction between pupil and mentor. Such an approach to education is taciturn, lifeless, and—dare I say—useless. Through these personal interactions alongside the quantitative data, I was able to assess whether or not Taylorism was indeed implemented in these schools in some form.

All of the narrative data collected will be carefully analyzed through standard qualitative research analysis procedures. For example, the narrative data will be coded and categorized using a model of pattern matching that will allow me to identify primary and secondary themes that emerge from the data analysis. I will be looking for certain words or phrases in the narrative process which are consistent with the pattern of Taylorism in education. This data will then be compared and contrasted using the Glaser and Strauss model of Constant Comparative analysis which will provide further data reduction for grounded theory development (Glaser and Strauss 1967). Finally, applying Yin's method of cross case analysis a process of triangulation of data will yield the final categories of data which will be reported (Yin 2003).

Urban High School

In the year 2011, Urban High School accommodated roughly 1,325 students between the ages of 14 and 18. This particular high school exhibits many of the challenges and demographics

commonly found in Texas public schools including ethnic and linguistic diversity as well as exigent socio-economic backgrounds among the student body. The ethnic distribution of the students can be seen in Figure I. At 59.2% in 2011, over half of the student body qualified as economically disadvantaged, and 12.9% of the students were classified as Limited English Proficient. The most alarming number, however, is the number of At-Risk students. At 68.8%, nearly two-thirds of the student body qualified as an “At-Risk” student. If one were to measure the success of a campus merely by test scores, Urban High School would be on the lower end of the bar. For the past few years, Urban High School received an Academic Excellence rating of Unacceptable. The overall passing rate of all parts of the state TAKS test in 2011 was 50% (AEIS Report). With the recent move to the STAAR exam, that number has dropped as well.



Walking into the school, I could immediately see a sense of school spirit and pride. Many of the students participated fully in pep-rallies and extracurricular activities. Banners hung around the hallways celebrating competition between rival schools, and students happily welcomed me on campus. However, amongst the faculty there seemed to be a defeatist undertone

in their attitude towards the campus, the standards, and the educational system. I got to know a few of the members of the faculty and administration to see exactly what their ideas about the school were and to find any negatives and positives about the current educational system in place.

The principal of Urban High School, Principal Smith, could be described best as calculated, practical, and matter-of-fact. He listened intently to everything I said then answered quickly, precisely, and unapologetically. When asked how he would describe his school's educational system, he said without a pause, "We are definitely a factory model school." I was rather taken aback by the abrupt response and quick admittance to falling under the category of Taylorism, but I listened to his points. He continued, "We don't really leave a lot of room for student choice. The teachers and curriculum instructors are the ones who choose that. We just don't have a lot of student option here."

Although Smith was quick to embrace the name of Taylorism, he saw the system as more of a necessity than anything. "The truth be told," he said to me, "the stuff you learn in your colleges are not applicable in the classroom. When you get 150 students who need to pass their exams to move on, all you're worried about is efficiency, and the score on the test at the end of the semester." Principal Smith argued that the system Urban High School has in place is efficient, and efficiency is not necessarily a negative quality. I asked him to define exactly what he meant by efficient, and he vaguely described one where teachers assess what it is students need to know and learn and then bring them up to the state standard to pass their exams. "Without the standards," he said, "how could we know whether or not we were doing a good job educating kids?" This was a good point; however, Urban High School had an academically

unacceptable rating. It appeared to me as though this idea of efficiency and standards did not connect with the actual performance of the school.

Principal Smith did say though that the students would have a new chance in the coming years to choose an educational track rather than be locked into one system. Urban High School recently merged with another smaller academy in the area which had a system of academies for their students. In the academies, students were allowed to choose career choices and take classes concentrated on their particular choice. At the time that I spoke with Principal Smith, Urban High School was undergoing this process of adopting the academy system on their campus.

If Principal Smith is the embodiment of practicality and the philosophy of Taylorism, then Ms. Allen is the example of Progressivism and flexibility. Ms. Allen was a young teacher—it was only her fifth year teaching when we met—and she was constantly looking for ways to work around the school’s rigid system. She taught freshman English, both Academic and Pre-AP, and it was her first year at Urban High School. In previous years, she said her classes scored among some of the highest in the district on the state exams.

Ms. Allen wholeheartedly agreed that Urban High School tended to fall under the category of Taylorism. “We just emphasize the standardized tests so much here,” she told me. “Our students who failed the reading portion now need to have the Successful Reader program in their classes, but they hate the books and assignments. Really we’re just giving the kids more reasons to hate reading and learning.” The Successful Reading program was created to give struggling readers easier texts in order to encourage and foster a love for reading. However, most of the texts were unpopular with both teachers and students. They had a low readability so most students could, in theory, follow along in the reading. However, the students claimed the texts were “boring” or even “strange,” and they paid less attention to these than they had to the other

stories and texts before them. “And with the low readability,” Ms. Allen said, “I just feel like we’re lowering our expectations of them to meet them where they are instead of having high expectations and teaching them and bringing them where they need to be. These kids may not be great readers, but they’re smart enough to realize we’re patronizing them.”

I asked how Ms. Allen’s experience at Urban High compared with previous years in other schools. She replied:

It’s challenging. I am regimented here, and I have so little freedom to teach how I like between the Successful Reader projects and the amount of curriculum and project meetings I have. They want me to make sure that I teach to the tests so the kids can pass, but the kids miss so much class time taking exams or doing diagnostic tests. I calculated it, and I lose 22 school days to state testing. How am I supposed to prepare them to pass a month’s worth of tests when I am missing that month of teaching?

It seemed as though Ms. Allen was one of many who felt this way. Each morning, the teachers had meetings to discuss data and what was being done to improve test scores. “They’re taking away my time to prepare for the day in order to tell me how these classes are not preparing students,” she sighed. “It’s just frustrating and discouraging.”

Ms. Allen had all of the talents and capabilities for teaching students. As she told me in the year before she came to Urban High, her classes scored highest in the district on the state testing. “Ironically,” she said, “I rarely emphasized state testing back then. I just...taught. Then, the students learned and performed to the standards to which I had known they could all along.” My last question to her was what she thought about administration and the way the school functioned. She said:

They are just too controlling, and many of them never even see what a day in my classroom is like. Principal Smith is great—I know he loves and cares about students. But he is a business

man. He handles everything with pragmatics and logic and products. The problem with that is we're not dealing with numbers. We're dealing with children.

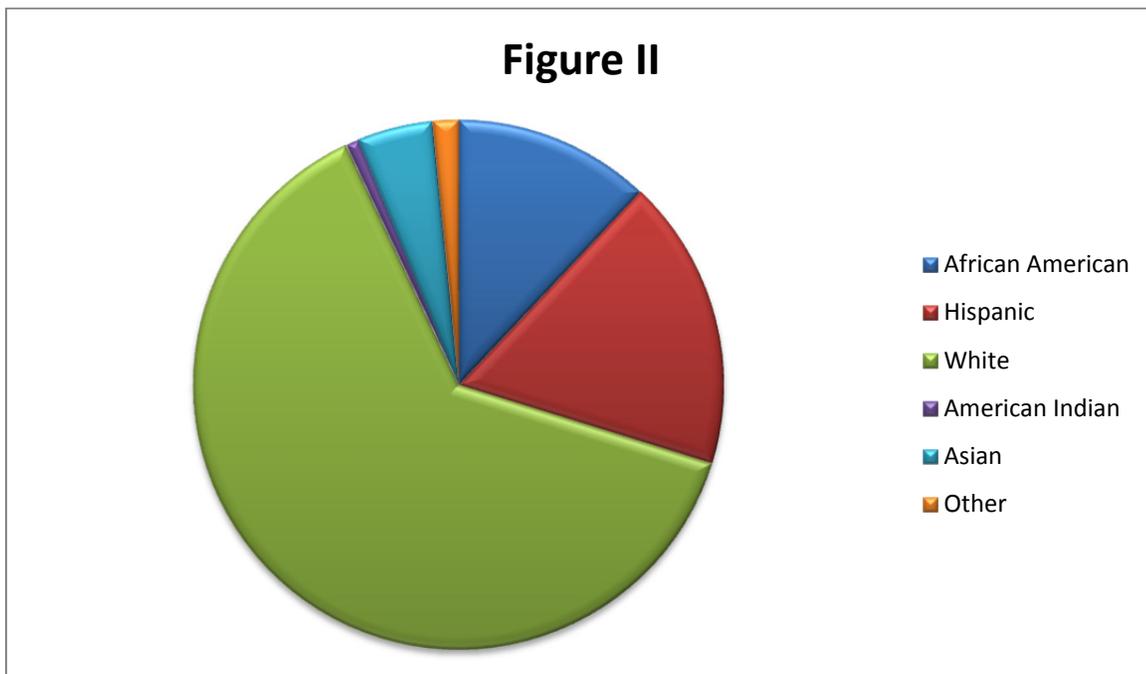
Mrs. Fischer was not quite as outspoken or fiery as Ms. Allen, but instead, she bore a serene disposition. She was the math Instructional Coach, so she was responsible for meeting with teachers and going over the content to be covered for the six weeks. Mrs. Fischer was a veteran teacher, and she had been in the educational field a good twenty years or so. I asked her to describe her school's educational system for me, and she said: Normal. "We're very traditional, I think," she said. "We have the normal amount of periods in a day; we have all of the standard extracurricular activities and subjects."

I asked Mrs. Fischer what was expected of her as an Instructional Coach. She said she was chosen because she had the experience. She had been teaching for a long time and with much success. However, in recent years, she was feeling tired and worn out from the pressure. She said, "We use CSCOPE lessons. Actually, the administration is kind of serious about it. They don't like us straying away from CSCOPE very much." The CSCOPE lessons are materials provided by the state which are meant to be used "alongside district approved materials" and they are "customizable to meet the needs of individual students," but according to Mrs. Fischer, Urban High stressed the CSCOPE so much that most departments just ended up following them verbatim. "Teachers hate them," she said. "They're boring and our kids cannot relate to that material. But we just feel so pressured to use these lessons." Mrs. Fischer ended up retiring after that year. She felt frustrated and exhausted keeping up with the pressure to perform to the standards placed on her as well as her students.

Suburban High School

With 2,117 students, Suburban High School stands as one of the largest high schools in the area. Demographically, Suburban High could not be more different from that of Urban High

School. Figure 2 displays the ethnic distribution of students of Suburban High School as of 2011. In comparison with the 59% of students who qualified as economically disadvantaged in Urban High, Suburban High School houses 24.3% of economically disadvantaged students. This is still no insignificant figure, but it goes to show the differences and unique situations for each of these campuses. Only 0.8% of students in Suburban High School are classified as Limited English Proficient, and only 22.7% are classified as “At Risk” students. The best word to describe the campus, overall, would probably be fairly homogenous (AEIS Reports). Most of the students come from similar economic, social, and demographic backgrounds.



Of course these numbers are changing every year, and the diversity of the student population is growing, but the general feel and life of the campus is completely different from that of Urban High School. Again, if we are comparing achievement merely on test scores, Suburban High would seem to be monumentally successful. For the past few years, Suburban High School received an Academic Excellence Rating of Excellent or Commended; however, since the implementation of the STAAR exam, those ratings have dropped to Recognized or to

Academically Acceptable. Still, if one were to simply see the results of standardized testing, then Suburban High would appear to meet all of the requirements for a thriving institution.

Similar to Urban High, the students of Suburban High School had a strong sense of school spirit and community, and in this community, sports were heavily emphasized and celebrated. Students at Suburban High indulged in Homecoming celebrations, club fundraisers, and extracurricular functions. The main difference I could see in this school's culture versus that of Urban High's was in the teacher's attitudes. The faculty—teachers and administrators alike—seemed to be more involved and excited about the school than those of Urban High. The faculty was also incredibly willing to assist me with my research as well. Their enthusiasm and the overall positive attitude of the school as a whole fueled my interest in studying the campus.

The enthusiasm for the campus carried over to Principal Garner's office. He was the number one fan of Suburban High School, and his love for the students and the campus was evident. "Suburban High has a great group of kids," he told me. "I would put our kids against any of those in the state of Texas!" He enthusiastically described some of the differences in Suburban High's campus culture versus that of other schools he worked in previously. For one, the Suburban High students were active in their community. They participated in food and school supplies drives so that the underprivileged students could have everything they needed. The principal's love for his students was evident—he selected a committee of students called the Principal Communication Council to speak with him and act as ambassadors for the student body. He described this to me:

This is a group I started at another campus. I try to have diverse student leaders who are interested in brainstorming ideas to make the school a better place. I am looking for diverse backgrounds and grade levels. I try to make connections with that group and hope they will be a group of young people that will come to me should an issue arise that needs my immediate

attention. My twitter group expanded when the explosion happened in West, they all tweeted me and tried to come up with solutions to help as a school. If students don't know who I am, I am not doing a very good job being the principal of a high school. In order to be selected, the students put in a blind application -- none of their personal information included. They fill out a questionnaire and I hand select them.

I was encouraged by the principal's obvious love and involvement in his school. Even with the controversial End of Course exams, Principal Garner was optimistic. "It has a positive effect in the classroom because it forces teachers to see student expectations and meet those expectations," he told me. Although, he did admit hesitantly that there was a "level of stress on students never seen before" in the high schools. As for the teachers, he said, "The only downside of the exams is that there are some limitations in that teachers may not be able to teach their favorite subject. If it is not covered by the TEKs, they cannot teach it." I asked what his main concern as a principal was as far as the testing and curriculum goes. His answer was that he evaluated the "scope and sequence" and evaluated lesson plans based on those results. Still, his positive attitude towards these numbers and examinations gave me some hope. I looked forward to speaking with other teachers on this subject and seeing their opinions in the matter.

Ms. Brown was very sweet and reserved. She seemed almost hesitant to answer my questions as if she might say something that would put the school in a bad light. She was young, but she had been teaching for about eight or nine years. Originally, she was from Houston, so she was still adjusting to the change in demographics and socio-economic status of the region. When I asked how Ms. Brown would describe her school she simply said, "Traditional." I asked for her to expound on the idea of traditionalism in schools and she said, "Well I have a lot of lectures and responsibility on students to listen, take notes, do their work, and turn assignments in.

However, it's easier for me to do that, because I have Pre-AP and AP students who are used to this style of learning. In other classes, this approach does not go over so well."

"So how is it in other classes, then?" I asked. "Still fairly traditional," she replied. "The size is my biggest issue. I have some classes with only 17 students, but then my very next period has 26. With that many students you cannot get to know all of them and teach them." She then began to describe to me the process of creating lesson plans and curriculum for her department. She said, "We do not use CSCOPE. We have way more freedom than that. Instead, we use SE's, which are the student expectations for each subject." The SE's were basically the TEKs, so Ms. Brown described the process in which several teachers in one subject area would come together, look at the SE's, and create lesson plans together. "We're very collaborative here. I like that more than the other schools I have been in. We are definitely not afraid to steal each other's lesson plans, so I am very happy with the curriculum experience."

I was glad to hear Ms. Brown was pleased with her experience there, but to me I could see a disconnect between what she felt about the freedom of the curriculum and planning and what was actually true. The departments met together, looked at the TEKs, made plans together, and lectured and delivered those plans to their large, homogenous classes. I wanted to know if this method was successful, so I asked for her thoughts on the effectiveness of this approach. "Well," she stated, "it prepares them for the EOCs." The End of Course exams have been a controversial subject in schools, so I probed her further for her thoughts in this subject. "I have many problems with the EOC," she told me. She seemed to echo the words of Ms. Allen at Urban High when she said:

At first, the EOCs sound like a great concept. The students will be tested only on what they're learning that year, and each year they need to show they've met the requirements for that subject. But, in reality, we're not even testing them on new material. Sixty percent of the 9th grade math

exam was 8th grade material. Also, we lose 10-11 days for testing. So, students have to pass the exams, but they're taking our teaching time away to give them the material they need to pass.

Others at Suburban High seemed to have different feelings regarding the EOC. "I think they're a great idea," stated Ms. Mary, a sophomore and junior math teacher. Ms. Mary was fairly young as well and had a similar teaching background to Ms. Brown. She was the department chair for curriculum planning in her content and grade level, so she decided the material that needed to be covered for each six weeks. She continued with her thoughts on the EOC tests by saying, "I will admit that fifteen needed to graduate is a bit much. The problem with that is the struggling students often have a snowball effect. They'll get behind and just keep getting behind. Student motivation is always an issue though, so we just try to grab their attention in our lessons."

I asked Ms. Mary what was the best way to get student attention or at least what her department was doing in an attempt to really motivate their students. She then began to describe a similar process of instructional planning to what Ms. Brown had described. She said:

Instructional specialists and department chairs meet together, and the department chair comes up with a lot of creative stuff for the class room. The instructional specialists then relay the information to other teachers. It's really a collaborative effort. We'll send out worksheets and materials for teachers to use and they can change it or use it as they see fit. The tests are the same across the board, except for the Pre-AP and AP students. This has had a really positive effect with students, because if they switch classrooms or instructors, they are not too far behind.

I did like to see a sense of collaboration among the instructors, but I was still confused as to how this process specifically worked to motivate students. I asked if they ever had choice in the curriculum planning or in what went on inside of their own classrooms. "Students don't have a say in curriculum," Ms. Mary stated. "They have a few choices in the classes they take, though.

We have recommendations for Pre-AP and AP, seniors can choose regular classes or dual credit, and they have electives every year.”

Ms. Mary gave a few concluding thoughts on her educational experience at Suburban High saying, “Overall, I have been really pleased with the structure here. We are not ‘isolationists’ in our teaching. We share, and there is always someone you can ask about your questions.” Even though both Ms. Mary and Ms. Brown emphasized collaboration and student achievement, the pattern emerging was one of departmentalized lessons, focus on EOC scores, and meeting the Student Expectations. There was one woman though who seemed to challenge these ideas openly.

Mrs. Knight was a seasoned veteran teacher. She had been teaching History for over 17 years when we met, and she had taught at a variety of schools and worked with all grade levels. In direct contrast with Ms. Mary, Mrs. Knight hated the EOCs and spoke often about her distaste of them. “I understand why we have standardized tests,” she said, “but they are too difficult and too complicated for students.” Mrs. Knight was always looking for suggestions and ways to get around the tests. She had a few suggestions for End of Course assessment which she offered to me:

Instead of standardized testing, why couldn’t they give us the TEKS, and then we have to prove that the students learned them, either with a portfolio for us or some sort of project for the students. Although, I know some teachers would complain that’s just extra work for them. Still, there must be a better option. If you’ve ever looked at the exams, anyone can see it’s like they are “trying” to “get you.” The material is so specific and the wording of the questions is complicated. What if we wrote our own End of Course exams? That way, students would definitely be tested over exactly what they were expected to learn in the year.

Mrs. Knight described for me the story of one of her colleagues at the school and her frustration with the standardized tests. “She is retiring next year. After her students had 98% passing rates on the TAKS tests, she just decided she could not do this job anymore the way we emphasize exams. It’s a shame to see the good ones go like that.”

Mrs. Knight was similar to Ms. Allen in that she would try to implement her own teaching and progressive style in the classroom despite regulations from administration. She described a few of her classroom ideas and procedures for me:

I learn from my students constantly. Students tell you how they like to learn, you just need to listen. Some days I will give them objectives and ask, “How do you want to approach this today?” Then, they’ll give me suggestions, we’ll come up with a few assignments for the same objectives, and they can choose which way they want to meet those objectives. I have issues with both the CSCOPE and SEs, and when I have issues with something, I change it. I like collaborating with other teachers, sure, but really I like coming up with my own stuff. If you let teachers and students both have more power in this learning process, the results might surprise you.

Mrs. Knight stressed creativity and individuality among her students. She said, “We teach to the tests so much that when you ask students to come up with something on their own, you’ve almost blown their minds. I think the same is true for teachers too. When you start telling us what to do, we fall into the habit of doing it until we’ve forgotten why we loved teaching in the first place.”

Mrs. Knight retired the year after I interviewed her. She received the job she had always wanted back in her home town, but because of complications with the current administration, she was unable to accept the position and lost the opportunity. Afterwards, she decided she did not want to teach anymore because she was disheartened and disappointed with the way she had

been treated. I couldn't help but hear her words echoing in my mind when I heard she left: It's a shame to see the good ones go like that.

What does it all mean?

These two schools served as a sample in the public education system of Texas. In order to see whether or not Taylorism was present in these schools, I studied the data and the accounts of the people working there. The purpose of interviewing the teachers and administrators was to hear from the source their ideas about their school and their school's model of education. During this time, I listened and paid attention to any signs or clues of Taylorism in the modern public education system. Taylorism, at its core, is a rigid process which calls for efficiency and measurable results. Though Taylorism in its original form, Fredrick Taylor's factory model of education, is no longer as popular in schools today, traces of it can be seen throughout history under different names and shapes. Today is no different, and Taylorism's presence could still be seen and felt in both Urban and Suburban High.

In the next chapter, I will connect the ideas discussed in this chapter as well as the others and synthesize the results in one final conclusive case for Taylorism in modern public education. Lastly, I will discuss some of the pros and cons of this system as it stands today. Of course no educational model will be perfect, and it is impossible to find anything that should satisfy the needs of every child on a large scale. For that reason, it is important to always analyze and question ways for improving educational standards for the sake of our students.

Chapter Four

Synthesis of Data Collection

How is Taylorism Present Today?

I never liked high school when I was in it. Maybe my distaste for high school came from the fact that I had few friends (No one at the age of 16 really likes to hang out with the girl who reads books like *The Brothers Karamazov* for fun), or maybe it was that I took on too many projects and pressured myself to magically succeed in all of them simultaneously. Maybe, though, I hated high school because I was often bored. I went through classes rather effortlessly and I felt few things challenging or stretching me. But it was my junior year AP Chemistry teacher who told me one day, “Kelsey, you must teach. And you must teach high school.” Most days, I am still not sure what she saw in me that made her think I could teach, and every day I am certain there are those who would do a much better job of this profession than I do, but I am also certain that I never wanted a child to hate class or hate high school like I did.

Learning has the potential to be so rich and interesting and exciting, and for those who are not as self-motivated and strange as the shy girl reading Dostoevsky, it is difficult to seek and see that beauty in learning without guidance. For this reason, I always want to strive to improve myself as well as the educational system in order to better reach and serve the students. The focus of this study was to search and see whether or not Taylorism still existed in the public educational system and whether or not those approaches in this model of education are really the best and most beneficial for students.

In the first chapter, I gave an outline of what Taylorism is and what it looks like. Now, with both the quantitative and qualitative data, I will piece together which schools had which aspects of Taylorism. Those aspects include: Top-down management and power, alienation from

the community, emphasis on management, centralized planning, lack of innovation, products produced to meet society’s needs, and lastly, maximized profits. In the first chapter, I outlined these aspects and gave examples of how these things might look in a school setting. In the second chapter, I examined the Texas public educational system specifically and how Taylorism had been implemented in the state. From there, chapter three moved into specific examples of how Taylorism had affected a few high schools in central Texas. Now, I will concentrate specifically on the two schools of this study and show which aspects of Taylorism are present and which are not, or at least could not be conclusively decided with the data collected. Figure III and Figure IV show tables breaking down the facets of Taylorism and whether or not their presence could be seen in the schools.

Figure III	Top-Down Management and Power	Alienation from the Community	Emphasis on Management	Centralized Planning
Urban High School	Yes	Yes	Yes	Yes
Suburban High School	Yes	No	Yes	Yes

Figure IV	Lack of Innovation	Products Produced to Meet Society’s Needs	Maximized Profits
Urban High School	No	Yes	Yes
Suburban High School	No	Yes	Yes

Top-Down Management and Power

It is necessary for any sort of institution to have leadership and authoritative figures to help with making decisions and delegating responsibilities. A school is no different from any other institution in this way—there must be some sort of power or authority over the administrators and then over the teachers who are over the students. However, when the authorities at the top begin micro-managing or becoming too involved in the responsibilities of those under them that is when the factory model begins to emerge. In both schools, the teachers mentioned feeling pressured by those in authority to meet difficult standards. Ms. Allen of Urban High mentioned that the administration was “too controlling,” and that many of them “never see what a day in [the] classroom is like.” Similarly, Ms. Brown spoke of the amount of days lost to testing. She mentioned that they lost “10-11 days to testing,” and that she was still expected to give the same amount of material to students within her shortened time frame. At the same time that these teachers received this sort of pressure, they also received sets of curriculum and tools they had to use in order to accomplish their goals. In both cases, passing the End of Course exams, or the STAAR tests, seemed to be the main task at hand.

If teachers are meant to be the experts on their subjects, it seems counter-productive to tell them how they must approach their particular subject. Many of the teachers interviewed expressed a feeling of defeat or discouragement from administration and curriculum instructors alike who pressured them to use either CSCOPE or SEs to plan their curriculum. Ms. Allen and Mrs. Knight both spoke out against the regimented model for planning curriculum. Suburban High School did emphasize collaboration among teachers, but during the weekly planning periods, the teachers sat with principals and discussed data from their classes and how to

improve test scores. This is exactly what Taylorism looks like—a manager or boss examining a measurable product and telling the workers how production can improve.

Mrs. Knight spoke of this when she expressed her distaste for “teaching to the test.” The planning periods often became a time when she felt teachers were told what to do as much as students just so that the school could raise student test scores. As she said, “When you ask students to come up with something on their own, you’ve almost blown their minds. I think the same is true for teachers too. When you start telling us what to do, we fall into the habit of doing it.” She suggested that teachers, like students, were actually forgetting how to be creative and to come up with ways of teaching without the test as the model. The end result, as she said, was that teachers tragically fall into a routine and forget “why they loved teaching in the first place.”

The solution to this is perhaps simply that power in the schools should become, truly, a more collaborative effort. Administration should put their faith back in their teachers and their abilities and perhaps withdraw in part from the planning and instruction. Likewise, teachers should trust in the power of the students to contribute to the learning process. Now, I must say that I am not suggesting for a complete Rousseauian approach to learning where the pupil chooses each topic to explore and study (Rousseau 37). If that were the case, students would often miss the opportunities to glean the wisdom from their teachers with both more knowledge and experience. However, I do think it would be beneficial to allow for students to have more choice in curriculum planning or in the actual learning process. What if students were allowed to join in curriculum meetings every once in awhile? What if, as in Mrs. Knight’s class, we stopped to take the time to ask students how they wished to approach certain criteria? If they had more input, not only would they find the material more interesting, but they would also feel as though their teachers genuinely cared about what they actually thought in the first place.

Alienation from the Community

In Taylorism, the school is similar to any other type of business or factory in that it exists as a separate entity from the community. Most schools now participate in some sorts of community service or fundraisers for the needy in their areas; however, the administrators and teachers at Urban High School did not stress this as something that was characteristic of their school. The data that I gathered was not conclusive enough to determine whether or not communal service was an integral part of Urban High's school culture. None of the teachers mentioned participating in community service or emphasizing this idea to their students. The administrator did not touch on this subject either.

Suburban High on the other hand prided itself on its participation in community outreach programs. Principal Garner mentioned all of the ways his students were involved in projects for both the students of their school and the other members of their community. The school hosted school supply and food drives for the students in need on campus and in the district. The students sent Principal Garner messages on Twitter when the tragedy occurred in West asking if there was any way Suburban High could possibly help out the situation. Ms. Brown also mentioned how she noticed that there was "always something going on at Suburban High" in the area of fundraisers, drives, and projects. In this way, Suburban High School differed from the traditional factory model of Taylorism because they emphasized community outreach and involvement. The school became like a resource or advocate for the common good of society rather than being a bystander in their community.

Of all of the facets of Taylorism, this seems to be the easiest to address because there are many ways schools can work to become more of an active part of society. Following Suburban High's example, schools can work to provide for those within the campus who might be in need

or food or supplies for their classes. The campuses can be more involved in the community as well by participating in volunteer work in the area. I once visited a campus that had one day of each year set aside to community service. As a school, they divided up different community service jobs among the classes such as trash pick up, food distribution, and painting or repairing weathered parts of town. The students then went out for the day with their respective teachers and chaperones to perform their acts of service. I am well aware this would be difficult to do as a large campus. It would be impractical and nearly impossible to get 2,000 students out the door for a large “field trip,” so to speak. However, if the classes were divided up during the year, perhaps Freshmen and Sophomores during two different days in the Fall semester and then Juniors and Seniors for two days in the Spring, then the project would be much more practical and manageable.

One thing I did notice almost uniformly throughout the schools was that there was no cooperation between the schools. Perhaps this can, in a way, be attributed to sports rivalries, but for the most part districts did not work with each other or help each other. It would be interesting and encouraging to see students of different schools lay down their rivalry to support one another. Students in wealthier districts could participate in some sort of community service for schools with a larger population of lower socio-economic backgrounds. High achieving students could become more involved in tutoring or after school programs not only in their own campuses, but also in those of schools with lower test scores. This is something that many college campuses do—they provide students as tutors and mentors to the schools in the outlying districts—but why should it be less effective if the schools did this for each other?

Emphasis on Management

Another key component of Taylorism is effective management of the factory or school. This includes keeping students quiet, on task, and constantly moving through the day without any hindrances to the educational process. Part of this management system can be found in the bell schedules which signal for students when to move from class to class. Following the bells keeps the teachers and students on a regular and predictable schedule which also allows for the students to get all of the necessary subjects in during one day. Once inside the classrooms, there are managerial procedures for each class. Some of the typical ones in both schools included: No technology (Unless otherwise instructed for educational purposes), no food or gum, and no standing or getting out of seats once class starts unless otherwise notified. In Urban High School particularly, there is a strict policy prohibiting students to use the bathroom once class starts.

Management for a school under Taylorism's model does not just mean classroom management, but it also covers the positions of management such as superintendents, administrators, curriculum specialists, and so forth. In Taylorism, positions of management are punished or rewarded based on productivity. In Central Texas, some of the districts threatened this year to fire all principals and administrators if test scores did not increase (O'Connor 1). Such extreme measures are similar to that of businesses in that a person's productivity and success is often measurable and therefore commendable or punishable. The question then is whether or not this same factor is true for teaching. Each class, each period, and each student is unique, and strategies for approaching these matters adapt over time. Unlike a business or a factory, there is not one product or one way to approach production. While there should be some sort of accountability for schools, is it completely fair to put such high stakes on the administration and teachers?

This is a difficult problem to rectify because management is necessary for the productivity of any organization dealing with large quantities of people. I am not suggesting we throw out all classroom management procedures, such as restricted technology usage and remaining seated unless otherwise instructed. I do think that both movement and technology should be implemented in more lessons accordingly, perhaps limiting disruptive behavior or the unwanted or undesirable use of cell phones, but obviously there should be guidelines and responsibilities for students as they participate in the learning process. In the case of large-scale management, teachers should be required to show student improvement, and they should be held to high standards for achievement, but I do not think that these high stakes are the best measures to take. Replacing administrators and teachers because of “bad” test scores does not ensure that there will suddenly be “good” test scores next time. Instead, the tests themselves should be examined as the heart of the issue rather than those who are forced to live up to these expectations.

Centralized Planning

This was perhaps one of the areas where Taylorism appeared most in both of the schools. Both institutions emphasized planning together to make a common curriculum. Mrs. Fischer, one of the Curriculum Coaches of Urban High School, said that the standards for curriculum were the CSCOPE lessons. Teachers met together with their Instructional Coach to look at the CSCOPE lessons and come up with material for the week. Apart from CSCOPE, Urban High School implemented the Successful Reader program as a way to bring students falling behind up to speed. Often times, this resulted in rigid curriculum expectations. The teachers had to teach Successful Reader at least every other day, which often took class time away from the other

material students needed to know. As Ms. Allen said, it became difficult and frustrating for teachers to “fit” all of the material required into the six weeks.

Suburban High School often masked centralized planning with the term “collaboration”. Ms. Brown and Ms. Mary both praised the collaborative efforts of teachers at Suburban High. Collaboration, the sharing of ideas between individuals, is definitely something to be encouraged, and it is often something which teachers fail to do. Teachers can become stingy with lessons and refuse to share their ideas out of pride. However, the term collaboration was sometimes dangerously overused in Suburban High School. The “collaboration” between teachers often was more like listening to the Curriculum Instructor about what was required for the six weeks and then figuring out ideas together how to teach these assignments so that each class looked roughly the same. In reality, the collaboration was closer to what Urban High School was experiencing, just under a different term.

The centralized planning in both schools was in order to meet the common goal of passing the STAAR examinations. Nearly every teacher in every case mentioned standardized tests and their thoughts, support, or frustrations with them. Some like Ms. Mary were strongly in favor of the End of Course exams, while most of the others, like Mrs. Knight, felt they were overdone. Whether or not the teachers supported or disagreed with the standardized tests, they all made it clear that the exams were a central focus or idea in the high schools. The standardized tests are an example of a measurable product for progress or success. Sometimes it seemed as though the numbers and scores on the exam were more important than anything else. As Ms. Allen said, that may be okay for a business when analyzing products and sale, but these are not products—they’re children.

Again, this is another aspect of Taylorism which is not entirely negative. Teachers should have some sort of goal or standard to meet from year to year, and students should show some progress and learning over time. However, it seems as though the EOCs are not the best way to assess this progress. Mrs. Knight recommended some sort of portfolio where students and teachers had to make a collaborative project to show how the TEKs were met each year. This may sound impractical, but the idea behind it is valid. We ask for teachers to show assessment in a variety of ways during the year, but for some reason, the end all measure of progress seems to be, ultimately, a multiple choice test. While measuring learning in a portfolio might not be the best way, a multiple choice test certainly cannot be the only way.

Lack of Innovation

I could not say with honesty that I saw a lack of innovation in either school. In fact, I saw nearly the opposite. In the cases of Mrs. Knight and Ms. Allen especially, I saw teachers who refused to let the system “win” so to speak. They constantly tried new strategies and engaging activities in their classroom. Mrs. Knight, specifically, proposed that student choice was a huge factor to the success of her class. There were many teachers like these, or teachers like Ms. Brown and Mrs. Fischer and Ms. Mary who made the best they could out of the situation they had in order to meet their students’ needs. The principals of both schools felt passionately about working toward the success of their students as well, and both worked their hardest to see that success was possible.

Both schools felt the pressure of state mandated tests and looked for new techniques and strategies to approach this quandary. It is true that in both cases the schools often reverted back to traditional elements of Taylorism to approach this problem, but both schools were open to change and ideas for improvement. Principal Smith of Urban High looked into adopting an

academy-like system for his school in which students could have multiple tracks during their high school years. With the Academy style learning, students could choose regular academics for a general education, pre-AP and AP courses for a track heading towards college, or a career or focused track dealing with a specific subject matter or trade the student wished to explore. Suburban High School's structure remained traditional, but they too searched for other opportunities for student success. Suburban High School plans on eventually giving iPads to each of the students for instructional use. The teachers currently attend classes on how to utilize this technology in the classroom effectively to the benefit of the children.

The integration of technology for instructional purposes as well as the Academy-style learning with multiple tracks for students are both excellent examples of innovation. These approaches foster student choice in learning. I must commend both of these schools for seeking out ways to better reach their student body. Not only were the principals seeking ways for improvement, but each teacher I interviewed looked for ways to improve their classrooms and reach their students. I believe fully that no system or program will ever be perfect, so in order to effectively reach students, teachers and administrators must always continue to be learners. They must learn which approaches work and which do not, and they must always reflect on strategies for improvement.

Products Produced to Meet Society's Needs

Most schools heavily emphasize producing students who are "college and career ready." This type of "preparedness" in a student is the product to be maintained by the end of the high school career. Principal Smith of Urban High mentioned that his goal for the school is just to have everyone pass their exams and "move on" to whatever their respective career or colleges may be. The teachers expressed similar sentiments, especially Ms. Allen who was concerned

with the Successful Reader project. The purpose of the project is to bring students up to speed with reading so that they can perform better on exams and catch up with other students. Mrs. Knight mentioned that in her history class she wanted students who would be educated voters. This is another example of meeting societal needs because society needs educated voters who can make intelligent choices when selecting leaders.

Now, no one would argue the necessity of a goal or outcome for education or a classroom. Without some sort of goal or purpose to achieve, education like anything else would be meaningless. Even in Academy Style learning, which Urban High School may adopt in the future, there is some sort of product or outcome for societal needs. The Academies have career-based tracks which would teach students certain trades and skills in order to serve society. Again, this is not necessarily a negative quality for a school to possess, but it is one of the aspects consistent with Taylorism.

Still, I would propose that we shift the relationship of the school as an entity producing for the society to more of a symbiotic relationship. There should be more of a give and take relationship between the school and society. As mentioned, students should not be isolated from the community. They should be active participants in their society and world, serving and working for the community. However, they are not merely products for the use of society either. Communities should be willing to help schools and work with them for the overall success of both the society and the student. Graduation, college preparedness, and career preparedness are actually only small goals in light of something much greater: Critical, active, self-sufficient thinkers. Schools should work toward fostering these sort of learners and thinkers who are “doers” in the world rather than mere bystanders subject to the whims of society.

Maximized Profits

Maximizing profits in the school setting may not just be financial, though that is certainly an important aspect to many decisions, but maximizing profits could be the amount of graduates in the school year or the amount of students passing the EOCs. Every administrator and teacher interviewed mentioned the importance of the EOC and STAAR exams. Their concerns, as Principal Smith said, were to have the students “pass and move on.” Ms. Allen and Ms. Brown talked about their frustrations with the lack of time needed to teach all of the necessary material for the tests. Mrs. Knight, though she did not agree with standardized testing at all, was perhaps one of the only teachers not concerned with actual test scores because she taught seniors who no longer needed to take them. However, they did need to graduate, and so it was her responsibility to ensure that they learned the material and passed their classes so they could walk the stage in June.

Again, seeing that everyone passes the required tests and graduates is a decent goal, but it is a short-sighted one. Again, the goal should be something much more powerful and effective—the active thinkers and doers in society. In order to achieve this, classes should be more focused on student discovery and ownership in learning. Projects and activities in class should be centered around the student as the one pulling the knowledge out of the concepts rather than the teacher simply filling their minds with ideas or information. Paolo Freire describes this as educating for critical consciousness. When the teacher merely fills the mind themselves, this is the “banking” model. When the student access prior knowledge and uses this knowledge to build upon and discover more, this is an entirely new kind of learning.

The Solution

It seems that American education functions often like a pendulum. As our nation searches to find the best approach to education, we switch from aspects of Taylorism to aspects of

Progressivism and go back and forth between the approaches over and over again. Not all of the facets of Taylorism are negative in themselves, but they have perhaps been overemphasized or implemented incorrectly. Sometimes, it is necessary to have some sort of centralized planning in which members from all parts of the school come together and make plans to better improve overall. There needs to be some sort of management plan in the classroom and in the administration; there needs to be some sort of standard for teachers and students to strive towards. But focusing so much on the tests and graduation rates and efficiency seems to have a backlash on students and teachers. They feel oppressed and discouraged and more stressed than anything. Learning, to them, seems to be as a burden rather than a joyous process.

If we look at the data alone, this approach does not help students succeed. Urban High School, which Principal Smith claimed to be completely “factory model,” had horrible test scores and received a rating of Academically Unacceptable. Suburban High suffered in a slip in test scores, so they pushed harder for meeting standards and raising those scores, which did not help the situation, but only worsened it. The issue seems to me not that we have too high of standards for American education, but rather it’s the opposite—they are much too low.

We focus only on passing tests and getting students to graduate when really the goal could be so much higher. What if we stressed creativity and innovation and produced some of the most intelligent minds in the world? What if we pushed students to become active readers and self-motivated discoverers? What if we re-thought our approach to the goals of education in general? Students may have such apathy towards school because we have made learning something that is boring and oppressive. Teachers may have become discouraged and almost lazy because they have been told so often how they must teach and how they must reach these standards until they “forget why they loved teaching in the first place,” as Mrs. Knight claimed.

The purpose of this study was to see whether or not Taylorism was in place in these schools, and indeed I saw great evidence for it. The effects of such a system seemed to be counterproductive, in that the test scores and standards this system strives towards are actually more difficult to meet. Students and teachers are, in a way, encouraged to put aside their creativity in order to simply “pass and move on.” In this chapter, I attempted to outline some of the problems and positives of Taylorism and make a few suggestions to adjust the system to better serve the student body.

As I wrote this, I could not help but think of the 16 year old girl reading Dostoevsky. But even more so, I found myself thinking about her classmates. There were so many who had such great potential who either did not live up to it during their school years or who did not succeed in college as they could have. As much as my high school stressed “college preparedness,” we had so many students who passed and made good grades, then went on to find that they did not have appropriate skills for college after all. I wondered how we could have changed these circumstances or how these students could have been reached. Changing some of the aspects of our educational approach may or may not have helped, but certainly it was worth a try. Students are always worth the risk. If we give them more authorship and responsibility in writing their own educational stories, perhaps we would be surprised to find them surpassing our expectations.

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