Schooling and Education in St. Anthony- New Brighton:
Using context to help understand this moment and provide a path for the future.

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"Education then, beyond all other devices of human origin, is the great equalizer of the conditions of men, the balance-wheel of the social machinery."
Horace Mann

"Education is our passport to the future, for tomorrow belongs to the people who prepare for it."
Malcolm X

"If we teach today's students as we taught yesterday's, we rob them of tomorrow."
John Dewey

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Introduction

St. Anthony New Brighton Schools (SANB), due to intense study and collaboration, is primed to return from distance learning amid COVID-19 ready to enact an educational system that ensures instruction is relevant, rigorous, and based in relationships. SANB is situated to do this because (1) SANB has an organically created, research-informed, definition of effective instruction; (2) SANB has a staff who not only know what effective instruction is, but who are capable of executing it through relationships.

It is imperative for SANB to plan now for how it will structurally ensure rigorous and relevant instruction based on authentic relationships during and after COVID. To plan appropriately, it is crucial to examine both how school and instruction have been executed throughout history and the motives of that execution. As outlined by education historians, Sadovnik, Cookson, & Semel (2001), "... schools look and work the way they do because of complex historical events and processes. To understand the education problems of today, you must first have a perspective from which to comprehend these historical processes" (p.13). Since COVID-19, many discussions have emerged about school. Many educators, parents, and community members are seeking for the schools to go back to "normal". If normal means the continuation of a school structure that systematically allows for predictable groups of students to fail, that is not the normal SANB aspires to recreate. There are aspects of school necessary for the well-being of students and staff alike (for example, authentic student-teacher relationships), but the system needs to reconsider the infrastructures used in schools. In Bolman and Deal's (2003) book, *Reframing Organizations*, they state, "Too often, psychic prisons prevent people from seeing old problems in a new light or finding more promising ways to work on perennial challenges. When people don't know what to do, they do more of what they know" (p.7).

This white paper will provide a brief history of public schooling in America and the history of SANB schools with an analysis for the competing purposes behind why and how public schools provide an education to children. Finally, it serves as a call for the SANB community to come together, with collective experience, knowledge, and research, to determine the future for SANB schools.

To do this analysis effectively it will be important to distinguish between school and education. These terms are often intertwined, but for the purpose of this paper, these terms will be distinct. Education historian Lawrence Cremin defined education as "the deliberate, systematic, and sustained effort to transmit, evoke, or acquire knowledge, attitudes, skills or sensibilities, as well as any outcomes of that effort" (Wennersten, 1977). School, in contrast, is a "more narrow process, as it is concerned with the activities that occur in schools" (Sadovnik, Cookson, & Semel, 2001).

Part 1 - History of American Schools

Prior to the establishment of public schools, in the land we now call the United States, there were multiple approaches to providing education. This paper will start the historical analysis with the inception of the Common School movement, with acknowledgement that education of young people existed long before that in many ways that are often not accounted for in traditional "History of Education" courses. The intent here is to analyze the history of American *schools*, and that distinction is important. The creation and evolution of public schools in the United States was not linear; therefore, the succinct nature of this history is not all-encompassing nor is it true for all regions and people within the U.S. In addition, each epoch school movement happened gradually and was based on the political, social, and economic contexts of the time.

The rise of the Common School movement ran parallel to the Industrial Revolution, "historians point to the period from 1820-1890 in the United States as one in which enormous changes took place with unprecedented speed" (Sadovnik, Cookson, & Semel, 2001). Prior to the Common School movement, "sons of the white Puritan elite were tutored at home". A desire for formal schooling emerged in New England "ultimately, to serve as a sorting device through which the newly formed Puritan elite in the United States could reproduce itself" (Sadovnik, Cookson, & Semel, 2001). The Common School movement was the first universal elementary/primary school for children in the United States. Common Schools were funded by local property taxes, a precursor to current public school funding mechanisms. Further reminiscent of public schools today, "the common school organization normally involved more than one district or neighborhood, and included a town, city, or township Board of Education. Centralization also meant that some educational initiatives, if not directives, came down to the local schools from the state level" (Urban & Wagnor, 2009).

Horace Mann, father of the Common School, needed to convince business leaders and the elite to part with personal property taxes to fund schools for *other children*. Building on an economic and civic perspective, Mann claimed the elites' security and prosperity depended on having literate and law-abiding neighbors who were competent workers and who would, via the Common School, learn of the sanctity of private property (Wennersten,1977; Wagoner & Haarlow, 2020).

Just as the Industrial Revolution saw the rise of universal elementary schools within the United States, the Progressive Era brought forward the push for compulsory high school for all children. Between 1890-1920, shifting economic, political, and social issues emerged as the United States shifted from a primarily agricultural economy to a more urbanized and industrial nation. In addition, this time period brought an increasing number of immigrants from both Europe and China. In fact, "in 1909 58% of the children in schools in the 37 largest cities in the United States were foreign born" (Sadovnik, Cookson, & Semel, 2001). To provide an overall school enrollment perspective, in 1875 fewer than 25,000 students were enrolled in a public high school. That number grew to over 2 million students between 1880-1920 (Gutek, 1991). By

1940, 6.5 million students attended a public high school. This rapid growth of universal and compulsory schooling for children to the age of 16 required a new approach to organizing school.

Two conflicting approaches to provide public schooling emerged during this era. First, John Dewey urged educators to meet the challenges of urbanization and industrialization by providing an integrated curriculum. Dewey emphasized the role experience played in education and introduced the notion of *teacher as facilitator of learning* rather than the *bestower of knowledge.* He argued active student learning that began with the needs and interests of the child would lead to a rigorous education (Sadovnik, Cookson, & Semel, 2001). Second, to manage the growth of public high schools, school districts implemented "scientific management". Fredrick Taylor's book *Principles of Scientific Management (1911)* introduced the notion - believed by managers in organizations - that workers were lazy and needed to be managed. Scientific management (sometimes referred to as Taylorism) stressed reducing process time for thinking and learning, coordinating and controlling work of machines and workers, and simplifying jobs. These elements would increase productivity.

Similar to Horace Mann's desire to create literate, civic-minded neighbors, in 1893 The Committee of Ten, formed by the National Education Association (NEA) and headed by the president at Harvard, argued that the purpose of secondary education was to prepare students for "the duties of life" (Ravitch, 1983). The Committee of Ten's recommendations were reinforced by NEA's committee to develop college entrance requirements and the Carnegie Foundation for the Advancement of Teaching's adoption of the same courses into what is referred to as *Carnegie Units* (Sadovnik, Cookson, & Semel, 2001). If the purpose of school was to prepare students for the "duties of life", and if students were expected to take Carnegie Units to enter college, a different dilemma emerged: the question of whether all students had the *ability* to attend college. To ensure a socially efficient model, "the comprehensive high school was marked by the processes of differentiated curriculum, scientific management of the schools and the curriculum, and standardized testing of students for placement into ability groups and/or curriculum tracks (Oakes, 1985; Powell, Farrah, & Cohen, 1985).

How to educate students in a school system can be highlighted by the differences between Dewey and Taylor's methods in schools. Dewey advocated against the use of tests based on the principles of scientific management (i.e. standardized tests), and therefore, recommended tools to further understand children and their thinking. These tools would be considered formative assessments in today's context. He felt tests should be used for diagnostic purposes not as a means of sorting and standardizing students (Callahan, 1964; Rose 2011). Furthermore, Dewey's educational philosophy of Pragmatism valued students as active, interactive players within their learning environment. He maintained schools were to do more than just provide students with a limited set of skills and information that might prepare them for the workforce. He argued treating students as passive subjects of segmented, fragmented courses would not properly inform them in the ways of reflective, autonomous thinking that is required to be ethical citizens.

Pragmatism was in contrast not only to the scientific management or Taylorism, but it was also incongruous to the scientifically-efficient learning theory of Behaviorism. Behaviorism can be understood by thinking about a B.F. Skinner's theory that students can perform certain actions (learn) in response to specific stimuli (grades). American Psychologist Edward Thorndike (1903) believed that learning is the accumulation of stimulus-response associations (Garrison 1990). Thorndike's theories on learning played a prominent role in accelerating the use and reliance on Taylor's scientific management ideas of how to provide an education and to manage schools. Furthermore, the prominence of scientific management in education impacted the relationships of teachers and students by compromising both the teachers and the students' creativity and intellectual curiosity (Kliebard 2004). Sadovnik, Cookson, & Semel (2001), state how scientific management or the desire for social efficiency "can often suppress the creativity required for learning. Is it reasonable to suppose that learning best takes place in 40- or 50-minute segments that are marked by the ringing of bells or the mechanical rasp of buzzers? Is it reasonable to suppose that learning best takes place when every student reads the same textbook? Is it reasonable to support that learning is best measured by multiple-choice tests?" In short, the demands of bureaucracy can often be destructive to the spontaneity and freedom that is required by teachers and students if they are to develop intellectually and personally" (P. 238).

Present day professor of psychology at Boston College, Peter Gray, further describes the continuation of Taylorism in education as described by employers "...as a way to create better workers...the most crucial lessons were punctuality, following directions, tolerance for long hours of tedious work...the duller the subjects taught in schools the better" (Psychology Today, August 8, 2008). Gray further explains that although students are offered education in gentler, more responsive environments than previous generations were, "basic assumptions have not changed. Learning continues to be defined as children's work, and power-assertive means are used to make children do that work" (Psychology Today, 2008).

Conclusion of Part 1 - History of American Schools

As we've seen in this quick study of the history of education, roughly 200 years ago, the concept that the government should provide all children a universal formal education within a school building started with the Common School. It is often assumed that the term *common* in Common School references the *Common Man* era - the time in which new occupational groups (farmers, artisans and merchants) gained additional political power. *Common* actually refers to the idea that all students would receive the same curriculum or a common education. Also, the turn from the nineteenth to the twentieth century, with the introduction of the public high school, saw a major increase in both the number of students attending school and the number of years they attended. With this increase in enrollment, there was a need for additional school buildings, so schools became miniature factories utilizing the most efficient methods of management. Both teachers and students were subjected to the belief that production would increase if work was made easier. The emergence of Taylorism, or scientific management, to effectively manage schools was in conflict with John Dewey's ideas of students and teachers as active contributors to learning and leading.

Public education in 2020 cannot be examined without understanding the historical contexts in which it was created. It is naive to examine our present situations without a careful analysis of our past, “The schools look and work the way they do because of historical events and processes. To understand the educational problems of today, you must first have perspective from which to comprehend these historical processes” (Sadovnik, Cookson, & Semel, 2001).

Summary of Important Topics
● The Common School movement led to the creation of universal primary schooling for all children in the United States with the ultimate goal of developing literate, law-abiding citizens and competent workers through a common curriculum. ● The Industrial Revolution brought two conflicting approaches to schooling - Pragmatism and Taylorism (scientific management). Pragmatism aimed to provide students with more than just a limited set of skills and information that might prepare them for the workforce and viewed students as active, interactive players in their education. Scientific management, on the other hand, sought to increase productivity by controlling time, space, and work; it also viewed workers as inherently lazy. ● Behaviorism and stimulus-response associations supported the scientific management approach to education as it provided emphasis on creating efficiency by controlling the environment and behaviors of students.
Pause and Reflect
1. Reflect on how schools were designed to educate students from 1840 to 1940. Which aspects of the student experience are the same today as they were then - specifically in St. Anthony-New Brighton? 2. To what extent do current national and state standards provide a common school experience for all students? To what extent do students in the United States experience school differently? 3. List 3-5 examples of the influence of Pragmatism,Taylorism, and/or Behaviorism in our school today. (ie. time structures, instructional methods, student groups) 4. What does the tension between Dewey’s Pragmatism and Taylor’s scientific management reveal about how the structures of school shape the student experience?

DEWEY	TAYLOR
reflective, autonomous thinkers shape the learning	standardized, segmented, fragmented coursework
tests for diagnostic purposes	tests to sort and standardize students
active, interactive learners	passive learners

teach to be ethical citizens	teach limited skill sets/knowledge for the workforce

Part 2 - Structure of School

To what extent has the structure of school changed? The structure of school exists with stubborn consistency. This can be seen in one startling example: 18 states currently allow corporal punishment of students by teachers or principals. The Washington Post reported in August of 2014 “a student is struck in a U.S. public school on average of once every thirty seconds”. If corporal punishment, an extreme example of outdated practices, still exists in schools today, one can imagine how difficult it is to redesign the “standardized organizational practices in dividing time and space, classifying students and allocating them to classrooms, and splintering knowledge into ‘subjects’” (Tyack & Tobin, 1994).

Educational researchers David Tyack and William Tobin, in their seminal work *The Grammar of Schooling: Why Has it Been so Hard to Change?*, identified that schools have become a common language, understood by almost all people within a community. Tyack and Tobin describe the grammar of school in the following way: “neither the grammar of schooling nor the grammar of speech needs to be consciously understood to operate smoothly. Indeed, much of *the grammar of school* has become so well established that it is typically taken for granted as just the way schools are. It is the departure from customary practice in schooling or speaking that attracts attention” (1994). Just as many do not often consider why we use past, present, or future tense, it is rarely questioned why schools are divided into age-alike, self-contained classrooms or why a class is offered in once-a-day, 50-minute blocks of time throughout a school year. With an infrastructure that prioritizes batch processing and sorting students, managing time, recording attendance, maintaining dependent subjects, and designating grades, the current grammar of schooling has its roots deeply planted in the scientific management of schools.

The structure of school, the ebb and flow of the day, “the division of labor and hierarchical supervision common in factories, permitted a more precise sequencing of the curriculum and classification of pupils by proficiency” and allowed for efficiency of curriculum and sorting of children (Tyack & Tobin, 1994).

Age-grouping or Batch-processing of Students

Students, in age-alike classrooms, where up to ten months can separate them by age, are expected to grow and learn at the same rate. The American Pregnancy Association states to new mothers during recommended well-child visits, “Maybe you are worried that your baby’s development is not where it should be and wonder what this means for his or her future. Comparing your baby’s development to other infants or to norms on developmental charts

should be avoided. Instead it is important to know that babies develop at different rates and should only be compared to their individual milestones from the previous week or month." (American Pregnancy website, May, 2020). It is encouraged to allow children prior to the age of five to progress at different rates, yet after the age of five, once they are enrolled in a school structure, students are expected to grow and progress at the same rate in nine-month increments. This acceptable notion within schools highlights the power Taylorism's efficiency has on the structure of schools. "The strict curriculum and system of promotional exams meant that the 'normal' student was one who progressed at the regular pace demanded by the imperatives of the graded school- the batch processing of pupils by the school system" (Tyack & Tobin, 1994). A batch-processing system is efficient for the majority of students, but for many students, especially students who are linguistically, ethnically, or economically diverse, the system was designed to produce failure.

If "normal" students who are grouped with their age-alike peers can progress through school at a defined regular pace, what happens to those not progressing at the defined regular nine-month intervals? One solution was the development of IQ tests. It is crucial to understand the history of IQ tests and the context of their creation. The first test of 'intelligence' was developed by French psychologist Alfred Binet. Binet was commissioned by the French government to identify students who were not progressing in school at the prescribed rate of time. By 1916, Binet had teamed up with Lewis Terman at Stanford to create the *Stanford-Binet* IQ test and schools around the United States utilized the tool to identify students failing to progress in school at the prescribed time. One major and debilitating outcome of IQ tests was the notion that only certain populations were suited for education. *Business Insider, a* present day magazine, addressed the dark history of IQ tests in a 2017 article highlighting the 'cultural specificity' embedded within an IQ test. Cultural specificity of IQ tests references the concept that intelligence is biased towards the environment in which they were developed - namely white, Western society (Martschenko, 2017). Fundamentally, an IQ test or any standardized test is a product of the environment in which the tests are developed. School systems in the United States, with the use of IQ tests, create differing tracks and expectations for students deemed below normal. Ultimately, due to the cultural specificity of standardized tests, their use allows for the marginalization of ethnic minorities in schools. Consequently, as educational researcher and practitioner Yvette Jackson states in her book *The Pedagogy of Confidence* (2011), "Instead of facilitating the design of instruction to specially address the needs identified from the test, the results were used for making public policy that resulted in sorting students. This practice launched the bell curve mentality."

Sorting Students

The implementation of standardized tests (standardized to dominant, white, European, middle class culture) created a belief that if the system is effective and efficient, any variation from the norm must rest within the child. "IQ testing fueled different curriculum tracks, for disparities in scores were interpreted as indicating genetic differences - both between individuals and ethnic groups" (Tyack & Tobin, 1994). Examining the historical reasoning behind this system of tracking uncovers the inherent inequities in it.

During the 1920s, when public schools were increasingly relying on IQ and standardized tests, the second resurgence of the Klu Klux Klan began and the instances of lynchings peaked across the country. As the study of history teaches, the development and use of standardized tests in public schools rests in the context of the moment in the country's history. An inequitable education system was forming to carry forth the ideals of those in power. Ultimately, the outcome of the school system was to allow for failure for Black, Brown, poor, and immigrant students. IQ tests, normed for the white student, were designed to guarantee certain subjects earned higher scores than other subjects. As stated by John Dewey in 1922, "Our mechanical, industrialized civilization is concerned with averages, with percents. The mental habit which reflects this social scene subordinates education and social arrangements based on averaged gross inferiorities and superiorities" (Alcocer, 2020). Dewey argued that by focusing on percentages and averages, individuals are labeled as inferior or superior not because of their true individual results, but rather the class or group to which they belong.

The remnants of ability tracking have continued into the twenty-first century; students in schools today are still subject to the "tracking and sorting carried out by the factory-style school of yore" (Thompson, 2001). An extensive amount of research exists regarding both the ineffectiveness and inequalities of tracking (Oakes, 2005; Burris, Wiley, Welner & Murphy, 2008; Joseph & Ford, 2006; Deunk, Smale-Jacobse, de Boer, Doolaard & Bosker, 2018; Boler, 2019), yet the practice still continues. Jeannie Oakes in her landmark book, *Keeping Track: How Schools Structure Inequality*" (2005), examined how the infrastructure of school is still built to sort students. This infrastructure is based on the Fredrick Taylor's system of scientific management, and it continues to be implemented as the grammar of schooling; it is a norm accepted as *how we do school*. In a May 12, 2020 *Star Tribune* Letter to the Editor, a student from a Minneapolis High School wrote in reference to the grading system implemented due to Distance Learning: "This new system allows a substandard student to earn the same stripes as an exceptional student and in turn gives the exceptional student no incentive except to do substandard work that will not affect their exceptional GPA". The grammar of school is so engrained - even in our students - that tracking and sorting humans using words like substandard and exceptional has been normalized and internalized.

Time, Subjects, Credits

Time, subjects, and credits were an outgrowth of an academic accounting system based on efficiency and standardization (Tyack & Tobin, 1994). At the start of the nineteenth-century, college and university professors determined which classes were recommended for entrance into college by influencing the Carnegie Foundation for the Advancement of Teaching, Committee of Ten, and the NEA. The Carnegie Foundation, in turn, created an academic accounting system, referred to as the Carnegie Unit. This accounting system for college entrance required "fifteen units for graduation, class periods of at least forty minutes, and a school year of at least thirty-six weeks" (Tyack & Tobin, 1994). The Carnegie unit, used as an accounting device, provided prestige to the "standard" high schools that organized student time spent in Carnegie units (Tyack & Tobin, 1994). The basic calculation of the Carnegie unit

became seat time (hours spent in class). It also became one of the criteria for accreditation - something high schools were seeking since it meant their graduates could enter college without examination (Tyack & Tobin, 1994). State education departments and high schools across the nation still utilize both Carnegie units and seat time to determine *success* in school. For example:

> *Minnesota State Statute 120A.41 (LENGTH OF SCHOOL YEAR; HOURS OF INSTRUCTION) states:*
>
> *(a) A school board's annual school calendar must include at least 425 hours of instruction for a kindergarten student without a disability, 935 hours of instruction for a student in grades 1 through 6, and 1,020 hours of instruction for a student in grades 7 through 12, not including summer school. The school calendar for all-day kindergarten must include at least 850 hours of instruction for the school year. The school calendar for a prekindergarten student under section 124D.151, if offered by the district, must include at least 350 hours of instruction for the school year. A school board's annual calendar must include at least 165 days of instruction for a student in grades 1 through 11 unless a four-day week schedule has been approved by the commissioner under section 124D.126.*

The way in which we organize schools to educate students today is evidence that very little of the accounting system regarding seat time, subjects, and credits has changed in the past decades. “In very simple terms, learning in school was (and still is) conceived of as a product, and students are to move down the assembly line of learning in readily testable stages” (Olson, 2006).

Grades

“Teachers have been expected to monitor and control students, assign tasks to them, and ensure that they accomplish them” since the late nineteenth century (Tyack & Tobin, 1994). In addition to seat time, credits, and disjointed teaching of separate subjects, this has led to a system where grades and marks play a significant role in the administrative processes of schools to define, label, sort and track students. Like other aspects of the systemic management or the grammar of schooling, “the basic structure of reporting student progress has changed little in over 100 years.” (Pekel, 2013). Although student assessment has been a part of teaching and learning for centuries, grading is a relatively recent phenomenon. The ancient Greeks used assessments as formative, not evaluative, tools (Guskey, 1994). “Grades as we know them originated in the educational system in 1780, when Yale University began using a four- point scale to provide feedback to students” (Pekel, 2013). Consistently, from the 1940s through today, research has shed light on the short-comings of grades. Grades as a motivator for students has become a common fallacy within the school system. This notion that an extrinsic motivation (a letter grade) can motivate students falls short when students are asked to challenge themselves or to take risks, both essential for deep learning. From the subjectivity of grades as well as grades as a motivator to the inappropriate use of averaging and

zeros when grading, the practice of reporting grades remains rooted in the systemic management of schools where the best interests of the individual learner and the learning environment are second to the efficiency of the school system (Guskey, 1994).

Conclusion of Part 2 - Structure of School

Even with ample evidence to show that our schools are an efficient system, but not a system built for transformational learning, the structures of dividing time, students, and subjects continue. As stated by Sadovnik, Cookson, & Semel (2001) “from the evidence, it seems clear that schools act as gatekeepers in determining who will get employed in high-status occupations, but schools do not provide significant job skills for their graduates” (p.127). The historical and current data is also clear; since the creation of universal school, the system has been built to allow failure to occur. This failure has continued to be predictable based on race and socioeconomic status. The system “aspires to provide rich and poor, Black and White, immigrant and native-born, with equal opportunities for success. That it fails in this aim is evidenced by the persistent differences in academic performance between groups of students, also known as achievement gaps” (Miksic, 2014). Tracking students is so ingrained in our system even when it is clear “achievement follows from opportunities, [...] the persistent practice of tracking denies a range of opportunities to a large number of students. That a disproportionate number of these students are minorities is one of the underlying reasons that the achievement gap has remained so persistent” (Burris & Welner, 2005). There are two possible ways to evaluate the persistent achievement gaps - it can either be a systems issue or a student/ethnic group issue. Meaning, either the system is flawed (which allows failing to occur for very specific and predictable groups of students) or those groups of students are flawed. Placing the blame on the individual or the group is not a new concept; “during the late 1800s and early 1900s, widespread economic and social unrest was being fueled throughout the country by the rising tide of immigrants who were arriving in American cities. Many city governments of the time were overwhelmed by issues of crime and poverty, and they thus embraced the principles of eugenics, which placed the blame for a city's social dilemmas on the victims themselves, rather than on inadequate approaches to solving the problems of the urban poor” (Norrgard, 2008).

Summary of Important Topics
● The structures of traditional schooling are so ingrained in American society that they can be described as “the grammar of school.” Just as most people can speak fluently without stopping to think about the rules of grammar, they can also recognize the structures of schools without stopping to think about why those structures exist. ● Many of the structures of school today were originally created in the name of efficiency. Those structures include age grouping and batch-processing of students,

sorting students, requiring seat time, dividing knowledge into discrete subjects, awarding credits, and assigning grades.

- There is ample evidence to show that the school system to produces predictable differences in academic achievement for different groups of students. The inequitable results of the system can either be attributed to the flaws in the system itself or to the flaws of the student groups. Historically, blame has fallen on students - particularly those not part of the dominant culture.

Pause and Reflect

1. How might you describe the concept of “the grammar of school” to a friend that is not a teacher or in education?

2. What are the possible impacts (for both students and their teachers) of expecting a “normal” progression for all students without allowing for any individual variations?

3. Why is it so difficult to reimagine schools outside of their current structures? What resources might help us do that reimagining together?

4. When new information (logic) challenges your personal beliefs (emotions) about education, how do you typically respond? According to the information you’ve read so far, what are some logical implications for schools?

5. When school systems are not examined critically, their flaws are often attributed to the humans who teach and learn in them. What are the impacts of labeling students and teachers as “exceptional” or “substandard” based on their ability to operate within a flawed system?

Part 3 - Purpose of Education

As described earlier, there is a distinction between education (what students should learn) and school (the systems designed to deliver learning). In this section, an emphasis on education will be used, versus the above sections, where the emphasis was on the concept of school.

Education has four broad **philosophies**: idealism, realism, postmodernism, and pragmatism. Each philosophy can be viewed through three main **perspectives**: conservative, liberal, and radical (note that these are perspectives, not political parties). In addition, people have either traditional or progressive **visions** for education, regardless of their philosophy or perspective.

More than simply understanding all of the factors - education philosophies, perspectives, and visions - is the ability to understand that people come to education with their personal views of each. Those views are honed by life experiences, cultures, identities, and thus, personal epistemologies are formed. An epistemology is one's knowledge as it relates to how one views the world. Epistemology "is concerned with anything that informs or influences us is how we learn, and how we understand what we believe is real" (Khalifa, 2018). Unpacking all that form one's epistemology allows for further consideration of other perspectives and offers opportunities to find common values and priorities.

Philosophies of Education

Idealism

Idealism is often associated with the teachings of Socrates and Plato (427-347 BC). In modern education, "educators who subscribe to idealism are interested in the search for truth through ideas, rather than through the examination of the false shadowy world of matter" (Sadovnik, Cookson, & Semel, 2001). Idealism can be seen in the classroom when teachers are discussing and analyzing ideas with students. The dialectic method (the art of discussing the truth of opinions) is the strategy most often used by teachers with an idealism philosophy of education. In an Idealist classroom, the role of the teacher is to "bring out that which is already in the student's mind[,] to be a role model in the classroom, [and] to be emulated by students" (Sadovnik, Cookson, & Semel, 2001). Teachers operating within this philosophy often ask students to work collaboratively on learning that requires analysis, synthesis, and application.

Realism

Emerging from Plato's student Aristotle (384-322BC), Realism sees the world in terms of matter, which is separate from the world of ideas (Lynch, 2016). Realists see the purpose of education "to help individuals understand then apply the profiles of science to help solve the problems plaguing the modern world" (Sadovnik, Cookson, & Semel, 2001). Of all the philosophies, Realism has had the greatest impact (in schools) because it is the foundation of scientific reasoning (Lynch 2016). Realist teachers, prefer to present ideas in a "clear and consistent manner and demonstrate that there are definite ways to judge works of art, music, poetry, and literature [...] it is the role of the teacher to enable students to learn objective methods of evaluating such works" (Ozman & Craver, 1990).

Postmodernism

Postmodernism, which emerged around the start of the twentieth century, was the result of major social changes due to the Industrial Revolution - primarily in power and class structure. Postmodern educators don't believe in a universal truth, but rather the idea that truth changes with new social events and discoveries. One of the defining features of a Postmodern classroom is that "political factors and themes such as power and social inequality must be addressed if a teacher is providing a holistic education" (Lynch, 2016). In a Postmodern classroom, students are encouraged to express individual expression and cross-cultural dialogue and debate (Lynch, 2016).

Pragmatism

Generally viewed as an American philosophy, the literal definition of pragmatism is work. However, a more detailed definition is “using our ideas with a predefined purpose, we base actions on those ideas to determine whether or not the purpose can be achieved through them” (Sadovnik, Cookson, & Semel, 2001; Lynch, 2016). In United States education, John Dewey’s Pragmatism philosophy believed “schools should balance the needs of society and community on the one hand and the needs of the individual on the other” (Sadovnik, Cookson, & Semel, 2001). In a Pragmatist classroom, the role of the teacher is one of facilitator of knowledge, not the authoritarian figure from which all knowledge flows (Sadovnik, Cookson, & Semel, 2001). A current modern Pragmatism approach to education can be seen in the personalized learning movement in which “education leverages the interest of the individual, promoting teachers to instruct their students on how their personal interests are connected to the body of organized knowledge” (Lynch, 2016).

Educational Perspectives

Most debates regarding education are usually regarding the goals or purpose of education, or the role schools play in society. Each approach to the debate is grounded in complex social values and needs and can be defined within three major perspectives, particularly in the context of the United States. Those three perspectives: conservative, liberal, and/or radical further one’s analysis of the purpose of education. These perspectives are not to be confused with political alignment.

Conservative

The conservative perspective emerged in the nineteenth century out of social Darwinist thought. Focusing the purpose of school from the view of the individual student, it posits that students are in competition with each other for success, and that success is a limited resource. Within the education system, students are expected to show individual initiative that the individual student alone is capable of solving his or her own problems (Sadovnik, Cookson, & Semel, 2001).

Liberal

Compared to the conservative perspective, the liberal perspective is more focused on groups rather than individuals within a society. The purpose of education can be ascertained by how the liberal perspectives view the role of government “...involvement in economic, political, and social arenas is necessary to ensure fair treatment of all citizens” (Sadovnik, Cookson, & Semel, 2001). The concepts of equality, especially equality of opportunity, are pillars to the liberal perspective.

Radical

Radicalism doggedly challenges the status quo. It calls into question what must be built and maintained to adequately provide all citizens with a decent standard of living (Sadovnik, Cookson, & Semel, 2001). In education, the radical perspective can be seen in classrooms

where social problems in the United States are analyzed using a systems lens, versus an individual problem lens.

Visions for Education

Each of these visions guide an individual's belief around why education should be provided to children by the State and Federal governments. This vision of education can be further divided into two camps of thought: traditional and progressive. The basic premises of each vision is as follows:

> *Traditional Vision of Education:* Schools are needed to provide the necessary transmission of traditional values of United States society, such as 'hard work, family unity, and individual initiative'.
>
> *Progressive Vision of Education*: Schools are needed to allow for the solving of social problems, a way for citizens to move up in society, along with the development of individual potential to become an integral part of a democratic society (Sadovnik, Cookson, & Semel, 2001).

All of these factors - philosophies, perspectives, and visions - influence an individual's opinions, values, and understanding of the purpose of education. Furthermore, there is a reciprocal relationship between an individual's epistemology and how they determine the purpose of education. One informs the other. And since "the world simply can't be made sense of, facts can't be organized, unless you have a mental model to begin with...a mental map, is a set of ideas or assumptions you carry in your head" (Bolman & Deal, 2003), it is necessary to reflect and clarify how these factors (philosophies, perspectives, visions, theories, and epistemologies) influence beliefs in the purpose of education.

Applying Purpose, Perspective, and Vision of Education

In 1954, when the St. Anthony New Brighton School Board convened their first meetings, Policy 1.1 "Philosophy of Education" was one of the first actions taken. Policy 1.1 is clearly influenced by a variety of educational philosophies, perspectives, and visions.

> ***Written Board Policy***
> ***Independent District #282***
> ***St. Anthony, Minnesota***
>
> ***Policy 1.1: Philosophy Of Education***
> *The School Philosophy for District Schools*
>
> *We believe that the school exists for the benefit of the students and society. Consistent with the ideals of democracy, the school should provide the opportunity for each student to discover and develop his interests and abilities for a useful and happy life in our*

society. This school shares this responsibility with the home, church, and other community institutions.

We believe that it is the school's responsibility, through guidance in diversified and flexible curricular and cocurricular activities:

1. *To take youth as it finds them with their diverse backgrounds, abilities, achievements, interests, and to provide a program of instruction that will allow for individual differences and develop those qualities necessary for self-realization.*
2. *To provide students with meaningful experiences which will result in their development into knowing, efficient, and responsible citizens.*
3. *To help the child develop a foundation for attaining vocational goals that will prepare him to meet the changes of an ever-changing society.*
4. *To provide opportunities for cultural, social, moral, and physical development that will enrich life and result in profitable use of leisure time.*

In order for this philosophy to function properly, all school personnel and the community must be responsive to the changing aspects of our school and society.

The first sentence within Policy 1.1 states, "We believe that the school exists for the benefit of the students and society." This statement is aligned with the Pragmatism philosophy of education. As stated previously regarding Pragmatism, "schools should balance the needs of society and community on the one hand and the needs of the individual on the other". In addition, pragmatic thinking can be seen in Policy 1.1 with the following statements:

- "To help the child develop a foundation for attaining vocational goals that will prepare him to meet the changes of an ever-changing society" and
- "In order for this philosophy to function properly, all school personnel and the community must be responsive to the changing aspects of our school and society".

The philosophy of Postmodernism can be also found in this policy - particularly in the following statement: "To take youth as it finds them with their diverse backgrounds, abilities, achievements, interests, and to provide a program of instruction that will allow for individual differences and develop those qualities necessary for self-realization." Within the Postmodernism philosophy, students are encouraged to express individual expression and cross-cultural dialogue.

Policy 1.1 is influenced by both a traditional and progressive vision for education. The statement, "To provide students with meaningful experiences which will result in their development into knowing, efficient, and responsible citizens," represents a traditional vision for the transmission of the values of efficiency and responsible citizenship. Additionally, a progressive vision emerges with the statement "To provide opportunities for cultural, social, moral, and physical development that will enrich life and result in profitable use of leisure time".

Both a liberal and conservative perspective can be recognized as well. The policy highlights both the needs of the individual and their attainment of vocational goals along with the support of others, described as “all school personnel and the community” along with how the responsibility to provide an education is shared with the “home, church, and other community institutions”.

Conclusion of Part 3 - Purpose of Education

It is not often that schools dedicate precious, limited time to analyzing the underlying philosophies, perspectives, visions, and theories that underpin our school system and our approach to education. As educational researcher Michael Fullan stated in his book, *The New Meaning of Educational Change* (2001), “Unless [educators] are bound together by a moral commitment to growth, empathy, and shared responsibility, [they] are as likely to replicate the prevailing school culture as to change it” (p. 47). It is essential for educators to do the deep thinking required to analyze not only their personal philosophies, but to also use those frameworks to analyze their schools’ structures, instructional program, and curriculum. School systems, like many organizations, are “filled with people who have their interpretations of what is and should be happening. Each vision contains a glimmer of truth, but each is a product of their prejudices and blind spots of its maker” (Bolman & Deal, 2003). If this is true for *prejudice* and *blind spots*, as the quote says, it is true for *philosophy* and *perspective*. Only after our philosophies and perspectives are shared and analyzed, can true collaboration and dialogue among staff occur. This is the work SANB is committed to doing together.

Summary of Important Topics
● There are four main philosophies of education - Idealism, Realism, Postmodernism, and Pragmatism. Each philosophy emphasizes different roles for teachers and students and establishes a purpose for education. ● There are three main educational perspectives - conservative, liberal, and radical. These perspectives are grounded in the goals and purpose of education - particularly the roles schools play in society. ● The two main visions for education are the *traditional* vision that schools are meant to teach and uphold the traditional values of society and the *progressive* vision that schools are important for social mobility and solving the problems of society. ● The SANB Policy 1.1, written in 1954, is influenced by aspects of multiple philosophies, including Pragmatism and Postmodernism. The policy also includes both traditional and progressive vision statements. It also reflects both liberal and conservative perspectives. ● It is important that educators take time to reflect on their own personal philosophies and to analyze the structures of their schools. By closely examining individual and

systemic beliefs, SANB staff can come together in collaboration and dialogue to ensure our systems and structures deliver on the vision laid out in Policy 1.1.
Pause and Reflect
1. Begin thinking about your own personal philosophy of education: A. What elements of the four main educational philosophies B. Which of the three educational perspectives C. traditional and/or progressive visions 2. In what ways and for whom do SANB schools successfully provide the student experience envisioned in SANB Board Policy 1.1? In what ways must SANB schools be responsive to the changing aspects of our school and society in order to provide that experience for all students? 3. What do you think should change or stay the same about our classrooms and schools? What do you believe we should be doing more or less of? How does your personal experience in school (both as a student and a teacher) influence your thoughts about SANB schools?

Defining Effective Instruction- Rigor, Relevance, Relationships

Since the summer of 2018, a group of administrators, school board members, teacher union leadership representatives, and classroom teachers have gathered for over 75 hours to think deeply about the learning occurring inside SANB schools. This past year, an emphasis was placed on defining effective instruction. The following definition was formed:

> *In SANB schools effective instruction is grounded in three principles: rigor, relevance, and relationships. Without each of these components, high levels of transferable learning is not possible.*

SANB has defined effective instruction as the interplay between rigor and relevant instruction grounded in relationships. This district-wide definition of instruction allows for critical examination of structures and practices at SANB to disrupt those structures and practices that do not benefit our students or society. Through research, discussions, and reflection in our own schools, it has become clear that the learning theory of behaviorism dominates the current educational and learning practices within classrooms - which has led to low levels of rigor and a focus on compliance. Research out of Learning Sciences Marzano Center (2014) found in “an

analysis of more than 2 million data points collected from observer ratings on specific classroom instruction strategies, indicates that even today, [...] the great majority of teachers still devote the highest frequency of classroom instruction to introducing and practicing new knowledge, activities which are at the lower levels of Bloom (1956), Webb's (2002), and Marzano's (2001) taxonomies of educational objectives" (Marzano p.11). It is easy to see how schools and classrooms steeped in behaviorism encourage an efficiency-based (Taylorism) model for instruction. To be more efficient, teachers carry the cognitive load in classrooms - not the students. To move toward higher-level thinking and transferable learning, teachers need to design instruction that allows students to do the deep thinking and process to really understand concepts. Lastly, for decades schools have seen predictability in which students succeed and which students do not. With a system built on deep understanding and system-wide implementation of rigorous relevant, and relationships-based instruction, SANB can lead the way in efforts to bring about educational equity and success for all students.

What is Rigor?

The concept of rigor in the classroom is often confused with the amount of work a teacher assigns to students. Rigor is not more work, or more homework, or even more vocabulary words. Rigor requires teachers to design instruction that engages students in deep thinking. Rigorous instruction requires students to make meaning out of content through reading, writing, and problem-solving. Too often, the acts of reading, writing, and problem-solving are viewed as the ends rather than the means by which students engage in cognition. Teachers who design rigorous instruction ask students to identify preconceptions and misconceptions in their prior learning and then test and develop new ways of thinking. The United States National Academy of Sciences' published the book *"How People Learn"* (1999) and identified three findings that have both a solid research base and strong implications for rigorous teaching. These three findings indicate:

> (1) students' preconceptions must be engaged to grasp new concepts and information
>
> (2) students' must develop competence in inquiry by having a deep foundation of knowledge that they can organize into a conceptual framework, and apply
>
> (3) students' must be asked to engage in metacognition, to take control of their own learning by defining learning goals and monitor their own progress in achieving them. (P. 10-13).

Students must be given opportunities to transform factual information into usable knowledge in order for rigorous learning to occur. This usable knowledge cannot be school dependent (i.e. score on an exam), but rather it must be authentic in nature (i.e. have value outside the classroom). As described by educational researchers Newmann, Marks, and Gamoran (1996), "authentic construction of knowledge involves application, manipulation, interpretation, or analysis of prior knowledge to solve a problem that cannot be solved simply by routine retrieval

or reproduction" (p. 286). It is important to note, the movement to a more rigorous classroom does not mean students will never engage in low-order thinking tasks. It means that there will be an increase in the amount of time students do rigorous thinking. As found in the Marzano research, students currently are only spending 6% of classroom time engaging in deep and rigorous thinking (Marzano, 2014).

SANB Definition of Rigor:
Students engage in deep thinking.

Concepts that Matter:

- Students must read, write, solve problems, and make meaning.
- Students must be required to think about their thinking regarding their progress towards the learning goals.
- Students must use sophisticated language, tools, and texts.
- Students must take ownership of their learning by combatting any prior misconceptions and developing, testing, and refining their thinking.
- Students must be able to transform factual information into usable knowledge.

What is Relevance?

Relevance means students are engaged in meaningful work with authentic resources. It demands of them to make connections from what they are learning to real-word, unknown situations. For example, in history class, students are not asked to learn about history, but rather are asked to *do* history. As an actual historian reads primary sources, creates historical hypotheses, supports hypotheses with primary evidence and contextual understanding. This is relevant learning of history.

Furthermore, to be relevant, instruction must engage students both linguistically and culturally. As stated in the Science of Learning and Development "rather than ignoring the assets that students bring with them (e.g. their cultural knowledge) or viewing it as a deficit, culturally responsive approaches leverage cultural resources additively" (Osher, Cantor, Berg, Steyer, & Rose, 2017). The biggest shift in creating relevant classroom instruction involves a move away from school-dependent products because "student accomplishment should have value beyond being an indicator of success in schools" (Newmann, Marks, & Gamoran, 1996). Relevant instruction means that the "intellectual accomplishment is worthwhile and meaningful" students are required to produce learning that has aesthetic, utilitarian, or has personal value, apart from documententing competence of the learner in a grade book (Newmann, Marks, & Gamoran, 1996).

SANB Definition of Relevance:
Students engage in thinking and work that relate to the discipline and the real world.

Concepts that Matter:

- Students engage in culturally and linguistically relevant concepts, issues, and/or materials.
- The relevant work has meaning apart from documenting the competence of the learner.
- Students access and apply prior and new learning effectively in unfamiliar situations.

What are Relationships?

To produce a classroom where students are engaged in both rigorous and relevant learning, a developmental relationship must be fostered with the teacher. Developmental relationships (Search Institute) are centered around student-assets and high-expectations which leads to transformational growth and learning. Similar to how Dewey described the teacher as a facilitator of learning Newmann, Marks, and Gamoran (1996) describe the teacher as “a coach, facilitator, guide, or mentor in a ‘cognitive apprenticeship’ who inspires and nudges the student to do the active work of learning” (P. 285). Using behaviorist theory, student motivation is driven by grades and/or points on an exam, relationship research tells us “students are motivated when they experience support and belonging” (Osher, Cantor, Berg, Steyer, & Rose, 2017). Furthermore, “students’ perceptions of teacher empathy and trust play an important role in students' engagement and capacity to persist through challenging academic tasks” (Osher, Cantor, Berg, Steyer, & Rose, 2017). The relationship adults foster with students are the basis for creating a safe and caring environment with high levels of emotional engagement that is also conducive to supporting students’ social-emotional needs. Developmental relationships are more than just providing care and support for students. In an authentic teacher-student relationship, teachers challenge students’ self-perceptions, help them create internal agency, and also open doors to previously unknown possibilities.

SANB Definition of Relationships:
To be in authentic relationships with students, staff must be students of their students.

Concepts that Matter:

- Authentic relationships centered around student-assets and high-expectations lead to transformational growth and learning.
- Staff must understand, validate, and affirm students’ multiple complex identities.
- Staff must build trust to successfully address the individual and collective needs of students.
- These relationships are the basis for creating a safe and caring environment with high levels of emotional engagement that is also conducive to supporting students’ social-emotional needs.

● Authentic relationships are more than just providing care and support for students. They challenge student's self-perceptions, create internal agency, and open doors to previously-unknown possibilities.

Summary of SANB's Definition of Effective Instruction: Rigor, Relevance, and Relationships

Stated again, *"In SANB schools effective instruction is grounded in three principles: rigor, relevance, and relationships. Without each of these components, high levels of transferable learning is not possible.*

This definition of effective instruction is not a program or an initiative. This definition is what SANB believes our students need to be successful. The integration of each of the three principles- rigor, relevance, and relationships- grounded in research and an identified philosophy of education is what will guide the future of SANB schools.

Summary of Important Topics
● Rigor ● Relevance ● Relationships
Pause and Reflect
1. Reflect on previous learning experiences as a student? 2. What are the challenges in designing curriculum and lessons that provide rigorous and relevant learning for students? 3. How can we prioritize relationships in our classroom when they are seen as separate from, rather than dependent on, learning?

The Future of SANB Schools

To begin the examination and implementation of the SANB's definition of effective instruction, one must have a better understanding of everything that brought us to this moment. The history of education, the context present when shifts were made in schools, education philosophies, purposes, and perspectives provide the foundational knowledge necessary to move forward in bringing success to all students.

On March 15, 2020 Minnesota Governor Tim Walz announced that schools would shift from brick and mortar schools to distance learning. Students never returned to the physical school

building for the remainder of the 2019-20 school year. Never in the history of universal public school in the United States has such an event happened, where across the nation, students did *not* attend school to receive their education. This change, unlike all the other changes in schools, happened abruptly and universally. This is a moment in time, unlike any other, for SANB schools to examine how the model of school can be changed to ensure transferable learning for all students.

Since 1954, SANB school district has been clear on its purpose and philosophy - *We believe that the school exists for the benefit of the students and society. Consistent with the ideals of democracy, the school should provide the opportunity for each student to discover and develop his interests and abilities for a useful and happy life in our society. This school shares this responsibility with the home, church, and other community institutions.* In today's language SANB's mission is to *educate and inspire a community of life-long learners in our small, caring environment.* We understand to make sure our vision to *ensure the success of all learners by engaging, inspiring, challenging, and supporting each learner through innovation and collaboration*, will require us to have extremely high expectations of each other and our students - with high levels of support.

As stated in the introduction, St. Anthony New Brighton Schools (SANB), due to intense study and collaboration, is primed to return from distance learning amid COVID-19 ready to enact an educational system that ensures instruction is relevant, rigorous, and based in relationships. SANB can do this because it is committed to collaboration, research, the community, and most importantly to our students.

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