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Contextual Factors Analysis- Madison Jr. High School

Madison Jr. High School is a small school located in Madison, Maine. Though Madison is a small and rural community, like many areas in central Maine, it boasts several local attractions for outdoor enthusiasts. The town's natural features make it perfect for fishing, hiking, camping, biking, and swimming. Madison offers other favorites such as apple picking and seasonal festivals. The town is also home to a golf course and the well known Lakewood Theater, one of America's oldest and most famous summer theaters. As the Madison town motto says, it is a "great place to live, work, and play," (Town of Madison).

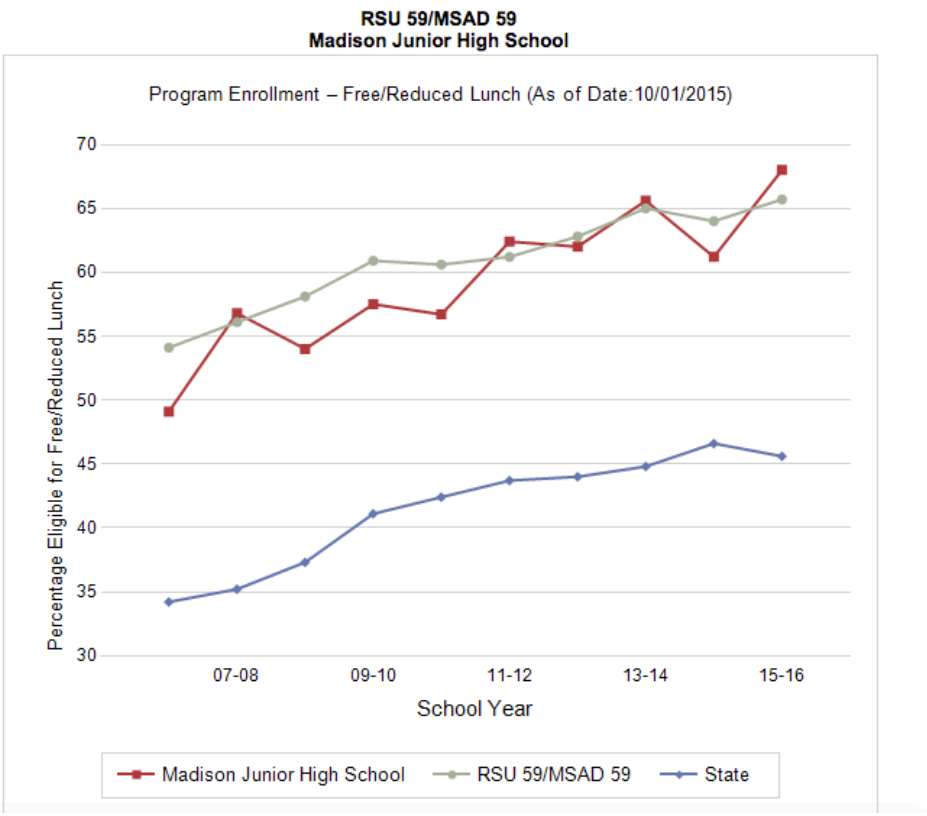
The town of Madison, while having a rich history, was primarily built upon its thriving manufacturing industry. In the 1880s, several mills appeared along the Kennebec River, and by 1903, Madison was considered one of Maine's leading towns in output and value of manufactured goods (Town of Madison). Though several mills came and went, Madison thrived with all of the jobs that were brought to the town. In recent years, with the decline of the paper mill industry, many Maine residents have lost their high paying mill jobs (Field). This past May, Madison's last mill, Madison Paper Industries, closed their doors and put 214 people out of work (Harlow). Since the town has been built upon its manufacturing, this obviously came as very devastating news to the community and the families of those who worked at the mill, but the closure has also had a large impact on the Madison school district. Since the town's taxes are based on property value, the mill was Madison's largest taxpayer. The state looks at the property values for the town and determines how much money they can put into their school district. The state then covers the remaining costs. This creates an issue for Madison because the state will not

recognize the closure of the mill and its tremendous drop in property value for another three years. This means that the taxpayers of Madison must cover a much larger portion of the school budget, in addition to making cuts to programs considered unnecessary.

In addition to the school district, Madison families have been directly impacted by the closing mill. While many of those who lost their jobs were able to get new jobs at the mill in Skowhegan, this fact does not hold true for all families, forcing some workers to take lower paying, lower skilled jobs. Fortunately, it was recently announced that the mill property has been purchased and is going to be remarketed for alternative industrial uses, offering signs of hope for the business-driven town (Harlow).

As I consider my instructional planning, it will be understood that many families are still feeling the impacts of the closing mill. It is well known that parental unemployment adds a dimension of stress to a household, which in turn, affects the development of children and may hinder their academic performance. To alleviate stress in students, it will be my primary focus to help maintain daily routines as I become more involved in the classroom. Though my involvement in the classroom will bring new changes, it is important that the shift of power be as seamless as possible. In addition, it will be important to help students develop a strong, positive sense of identity to support their learning. By getting to know my students well and communicating positive messages, it will help in creating a sense of security and trust that will aid in minimizing stress.

Financial setbacks will be the most obvious of the effects from the closing mills and it is something that already affects many Madison families. At Madison Jr. High School for the 2015-2016 academic year, 132 of 194 students (about 68%) were eligible for the Free and



Reduced Lunch Program (Data Warehouse). In comparison, that puts Madison Jr. High School about two percentage points above the district totals and over 20 percentage points above the state totals. Examining the economic climate of the town, you see many families which are part of the "working poor." This means that, though they are above the poverty line, they still have a very low income which is often just barely enough to get by. This is not an uncommon story for much of Maine. With the decline of the manufacturing industry, along with depressed wages, the "working poor" makes up a large chunk of the population (Field). These numbers are not reflected by the poverty line, but can be seen very clearly with the Free and Reduced Lunch Program, especially in Madison.

Poverty is one of the biggest challenges facing public education and is something that many educators consider in their instruction and assessment. Education is critical to escaping poverty, yet poverty is the biggest obstacle in getting an education. Students who live in poverty come to school at a disadvantage when compared with wealthier peers. They have generally had fewer learning opportunities, have had exposure to more adverse experiences, and have low executive function skills. The gap between students living in poverty and their wealthier peers

expands as they progress throughout their education, and the slight disadvantage they experienced upon entering school causes them to fall victim to a system that subjects them to feelings of inadequacy. Though these patterns do not hold true for every student, many have experiences that fall within this dichotomy in education.

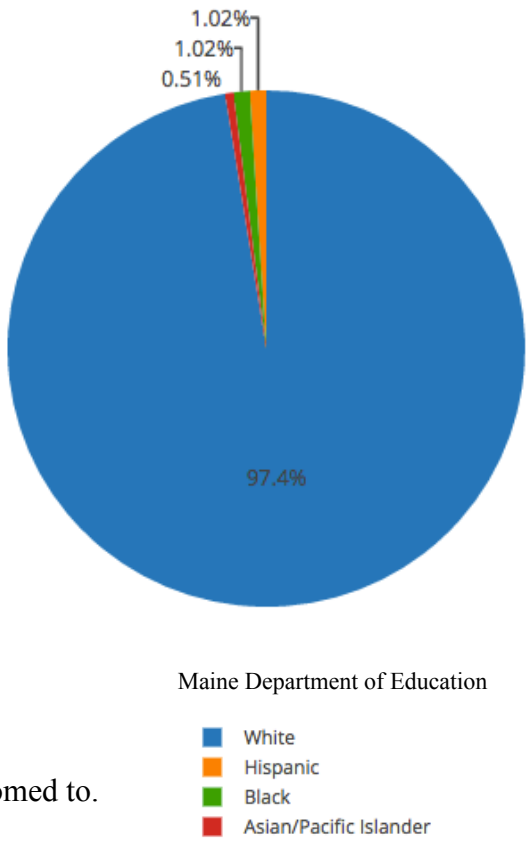
As an educator, there are several ways to breakdown the embedment of privilege in education and mitigate the effects of poverty in the classroom. The most important thing I will do to make my teaching accessible for all students is to establish open and honest lines of communication. It is important that students feel safe at school and especially in the classroom as it promotes academic risk taking. The more I know my students, the more I can communicate and draw on their experiences to offer appropriate challenges and encourage them to reach their potential. The next thing I will do is set goals with my students. Giving them something to work towards will keep them focused and will give them long-term vision and intrinsic motivation. When setting goals and looking at student achievement, the best thing I can do for my students is keep the expectations high. All students should be given access to challenging coursework while also having systems of academic support in place to help them continue to meet their goals. I will also work to strengthen the link between school and home to ensure that students are always challenged and held to their highest potential.

These ideas, though broad, will be worked into my daily routines as a teacher. On a more specific level, I will be sure to appropriately assign homework, meaning that all assignments requiring internet will be completed in school as to not exclude students who may not have internet at home. Also, as part of my philosophy of education, I will incorporate issues of economical, social, and environmental justice into the mathematical content. These are the most

important issues that students will face in their future and it is especially important for low-income students to understand these issues as they are often disproportionately affected by them.

The final best thing I can do to minimize the effects of poverty in the classroom is to challenge myself and any underlying biases by learning about the cycle of poverty and how privilege is embedded in education, while also continually working to understand the experiences of my students.

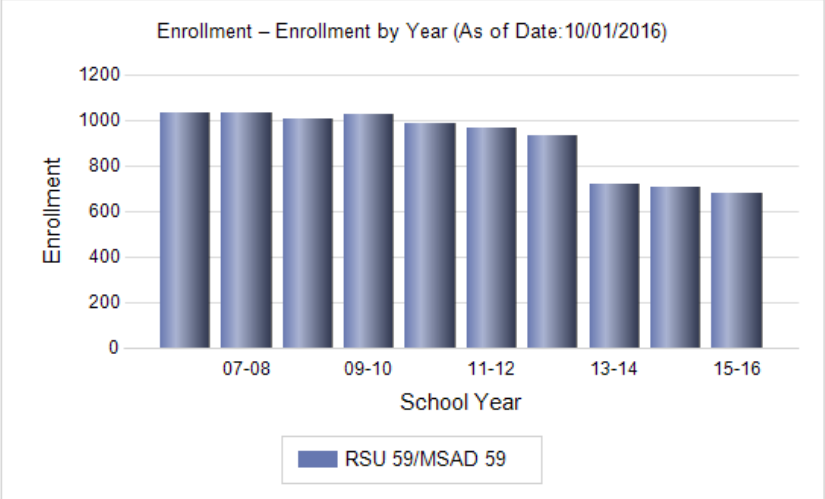
Upon further examination of demographics at Madison Jr. High School, like many schools in Maine, there is very little racial diversity amongst students. For the 2014-2015 academic year, 191 of 196 students (98%) identify as white (Maine DOE). With such little racial and cultural diversity, it is often more difficult for students to draw upon wide ranges of views and experiences. Having a diverse student body is critical in creating realistic settings and encouraging students to grow outside of the boundaries they are accustomed to. There is growing body of evidence showing that when students are exposed to ideas and views that are different from their own, the challenges that arise from that exposure lead to improved critical thinking and problem solving skills, both which are essential in a math classroom.



Maine Department of Education

One of my biggest challenges in student teaching will be bringing diversity into a classroom that is 98% white. When we think of mathematics, we think of it as an objective and universally accepted set of facts with little room for cultural consideration. Fortunately, mathematics is a subject with broad implications. One possible way to incorporate diversity into the classroom is to examine social justice on a local and global perspective. This begins with a strong mathematical framework. Once the math is understood, I will consider what social justice issues my students are interested in and which of those issues best fits with the curriculum. Possible topics include wealth inequality, housing, public health, and environmental racism. Though these may be considered "big topics," there are subtle ways to include them and to get students thinking about the world outside of their own.

In recent years, the entire Madison School District has seen a large drop in enrollment, with over a 50% drop at the junior high school alone (Data Warehouse). Because of this steady decline, as teachers have left the district, there has been pressure put on the remaining teachers to cover more classes. For example, at the junior high school there are several teachers who are covering disciplines that they do not specialize in. My mentor teacher, who is primarily a math teacher, is teaching seventh grade ELA, while the science teacher is teaching seventh grade math. While this is realistic for a



middle school setting, it is evident how difficult it has become for these teachers. As I take over the course load for my mentor, I will also be taking over the ELA class. As a math concentration, I will have to pull from my own experiences in school and my experiences in education courses to incorporate effective and meaningful lessons in a subject area that is slightly less familiar to me. I will primarily use what I have learned about incorporating writing across disciplines and make attempts at interdisciplinary based lessons. Though this will present a challenge, I look forward to gaining this alternative perspective in education.

The classroom space at Madison Jr. High School is, fortunately, fairly large. My classroom has 15 desks arranged in columns and rows near the front of the room, leaving a large space in the back. Many of my students have indicated that they prefer more hands-on activities, and the space available in the classroom makes that need much easier to meet. It is a good space to get students up and moving, encouraging intake of oxygen and the release of glucose, improving overall cognitive function (Jensen).

Madison Jr. High School has access to a broad spectrum of technology. The school is 1:1, so each student is equipped with a new MacBook Air and all of the classrooms have SmartBoards. The school has given me my own laptop to use in the classroom, and they have equipped my personal laptop with all of the SMART features as well, making projecting notes and videos very easy. All students are also very familiar with Google Drive features as well. When planning, most lessons will be built around the use of the available technology. Selecting the correct tools and resources for teaching math is critical in ensuring that the information is conveyed appropriately. In some instances, using a hands-on approach to learning can be more effective and aid in forming a concrete understanding of a subject, but in other cases, technology

allows for a better learning experience. Technology can redefine how we see concepts and it allows students to make inferences and manipulations that they could not before. For example, using technology for data collection, computation, and visual representations is often more effective than other approaches. Depending on the topic, it is sometimes best to stress the bigger ideas than having students perform tasks by exhaustion, which is why technology is so beneficial. In these instances, teaching must go beyond just giving access to technology. The lessons must be designed around the technology in order for it to be meaningful. Incorporating technology in mathematics is also another way to further develop students' skills in technology and more adequately prepare them for their future.

Madison Jr. High School groups their students by academic performance. The A group is made up of the students who perform very well academically and they have consistently remained 10-20 lessons ahead of their peers. The B group students perform well but may need a little more guidance and time on assignments. The students in the C group tend to need several accommodations in some subjects, generally needing more help with organizational and behavioral skills. These things tend to interfere with their learning and make it difficult for them to get their work done and handed in on time. Though the needs of the groups are different, the expectations are kept high across all groups. We expect all students to stay focused in class and hand in their homework on time. It is really important that these students begin taking on more responsibility before they go to high school, so as their teacher I have to remain strict with my grading and late work policies.

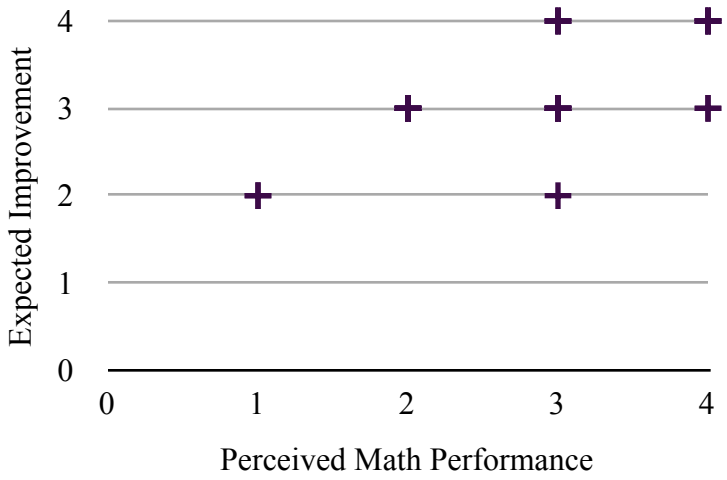
Within the first week at Madison Jr. High School, I made three attempts to break the ice with my students and get to know them better. On the first day, we played a game in which students responded anonymously to five questions by writing their answers on notecards. I then

collected the notecards and as a group we tried to guess which cards belonged to which students, making note of which student wrote each notecard. This worked well because the A, B, and C groups almost always remain the same throughout their time in the junior high, which means that the students know each other very well. The questions I asked, though not particularly personal, allowed for some creativity in the response, which became very telling when understanding their interests.

That same day I sent the students home with a survey which had questions ranging from personal interest to feelings about math and school. This survey gave me a really good look into how the students feel when they are at school, and also gave me a glimpse into what their life is like outside of school. The first question was very telling as to how the students perceive the school community. They were asked to use one word to describe school, and as one could imagine, a majority of the words had a negative connotation. Many of the students responded with words such as *prison, boring, tiring, horror, frustrating,* and *difficult.* This simple question gave so much insight as to how students feel about their educational experience. On the flip side of this, I had many students respond with positive words like *community, fun, educational,* and *welcoming.* This highlighted exactly which values students appreciate about their school and showed me what I need to do to weaken the negative connotations that students have, while strengthening the positive ones. For example, to ease feeling of boredom and strengthen the community feel, I will focus on incorporating more group activities into my lessons.

Also on the survey, students were asked how they perceive their performance in math, whether or not they like math, and whether or not they think they will improve. They were given three statements; I believe I am good at math, I like (maybe even love) math, and I will improve

in math this year. They were then asked to give each statement a number one through four, one being that they disagree with the statement and four being that they agree with the statement. I chose to look specifically at the relationship between how students perceive their math performance (I believe I am good at math) and their expected improvement in math (I will improve in math this year). I created a scatterplot, as seen to the right, comparing the data from these statements. There is a strong, positive correlation between these statements, indicating that students who perceive themselves as good at math, expect to improve at math. I was happy to see that none of my students anticipated *not* improving in math this year, but what does concern me is that the students who think they are not good at math do not *entirely* agree that they will improve in math. Growth is the most critical aspect of education, and even though students may not always recognize their own growth, having the idea that they will not improve only discourages them from taking academic risks. So while most of the students gave themselves three or fours across the board, my main concern is for the students who gave themselves ones or twos. In order to help these particular students with their confidence and encourage them to take risks, I will have to, first, demonstrate risk taking, then I will celebrate students' willingness to try, and I will maintain a positive classroom culture as to make *all* of my students feel comfortable.



In the survey I gave to my students, I also asked them how they like to learn and what I can do to help them succeed. I was very surprised by how honest some of my students were. Many indicated that they prefer working in groups and doing more hands-on activities. From what I can tell, many students are bored by the routines of the classroom. They are looking for ways to make math fun and to be more engaged which is something that has always been at the core of my philosophy. The students had many suggestions for how I can help them succeed. They told me to answer their questions and to teach them new things. They told me to be myself and to have fun. Some students mentioned that though they usually need help, they do not ask for it. A couple of students were very honest and told me how their ADHD or Tourette syndrome affects how they learn. I was also fascinated to see that several students wanted to be pushed because they do not always do that for themselves. When I first read these I was so impressed with these responses as they demonstrated quite a bit of maturity, much more than I had initially expected from eighth graders. The more I get to know these students, though, the more these responses make sense to me.

My third attempt to get to know my students came from their parents' perspective. Along with the permission slip, I sent home a survey for parents to fill out about their child. The survey consisted of questions about students' skills, their interests, any concerns the parents have, what motivates their children, and what goals they have for their children. While I only received parent surveys from about half of the students, I was very interested in the alternative perspective, and I think my students also liked to see what their parents had to say about them. It was very uplifting to see what the parents felt were their child's strengths and what motivates

them. It gave me a glimpse into the students' lives at home which is a huge indicator of how they perform in class.

The more time I spend with my students, the easier it becomes to gauge what they need from me. As I took over the C group, I noticed that they were very sluggish after lunch. I have now started that class with some stretching, deep breathing, and interactive Kahoot! quizzes to get them engaged and focused right from the start. In the short time this has been implemented, I have already seen a small change in attitude and engagement. I anticipate that this will help the other groups as well once I begin to take over.

In the few weeks that I have been with my students, I have noticed that they are hard workers with very good intentions, but they need guidance and more opportunities to practice responsibility. Many of my students have difficulty with handing their work in on time and they are quick to give up if they are having trouble figuring something out. In order to teach responsibility, I am not going to go easy on students who are turning in late work. I will not make a list of students who owe me work and then go track them down. I will offer reminders in class, but if students do not use the opportunities built into the school day to do their work, that responsibility falls onto them. The students also do their Habits of Work each week in which they rate themselves on responsibility, productivity, and behavior. They, in turn, receive "money" based on how they perform in these categories which will be used in an auction at the end of the year. When students are not being responsible or productive, they will receive less money as a consequence. Also, when students owe work, they are fined each day until that work is completed. When students are reminded of this, it is often a motivator for them to persevere and take responsibility for their actions.

My overall impression of Madison Jr. High School has been shaped by its strong belief in community and dedication to its students. Moving forward, my planning for instruction is going to be inspired primarily by the schools sense of collaboration and project based learning. To keep things simple, putting the students first will always take priority, and the rest will follow. It has been my aim since day one to build that relationship and sense of trust with my students, and every day is spent strengthening that. The more I can learn about them, the more equipped I am to tailor the lessons appropriately and inspire life-long learners.

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