

Observations of a part-time motivated student

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Student Profile

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School and Student Background

Unlike many junior high schools, Bolzano Middle School is a large and very diverse school in the midwest of the United States. Because Bolzano is the only junior high in the city of Bolzano, and because Bolzano is the home of a prestigious University, Bolzano Middle School has a student population of over one thousand. Students pile into classes, some packed to the limit allowed by state, with other specialized classes only numbering in the lower teens. Every passing period, the halls are flooded with student scrambling to make it to a class that is fairly far away in a short amount of time. To help herd the students in a more orderly fashion, administrators painted lines on the floor much like on the road to keep students going in one direction from fighting with students going in the other direction. The halls can be so bad that most teachers wait several minutes for the hysteria to calm down before moving on to their next class. It would not be too difficult for one student to be lost in a school so big.

The school itself looks very nice and clean from the outside, but parts of the inside are under renovation. In fact, a majority of the halls have no proper ceiling and several doors have warning signs about dangerous equipment and materials. The students don't seem to mind too much, except for some of the sixth graders. Bolzano Middle School currently does not have enough room for all the students and the library, so sixth graders are bussed off to another campus for part of the day, and if a student wants to check out a book, they have to trek over to the other campus. Besides the construction, the walls of the school look like any other: motivational posters and sayings cover the walls, and because of the terrorist events on September 11th, patriotic signs and slogans have found their place on the walls as well. Several halls are covered with posters made by students depicting some project they've put together. Other halls have resources for teachers to use, such as a display case titled "When will we ever use this?" in reference to math. Overall the atmosphere seems warm, although teachers in the halls are not slow to discipline students and attempt to keep them from causing too much

trouble.

The student population, from what I've seen, is very diverse. From the class I've specifically watched, Ms. Altgeld's Math Workshop, a class for students who need extra time or help to perform well in their math classes, there are a large percentage of African-American, Hispanic, and other minority groups represented in the class room. Minority groups are also very visible in passing periods, so it's unlikely that the class being a "help session" for students has anything to do with its make up. There are about as many girls as boys in Ms Altgeld's class, although the boys tend to be the more active members of the class. The student I choose to follow, Nathan, is an exception to this rule.

Nathan is a white seventh grade male who tends to sit near the back of his class. He rarely raises his hand or gives any input into what is going on in class; he's content to sit and listen. His main goal of the class is to use it as a way to get his homework done for his other math class. He will do assignments for the Math Workshop class in addition, but the deadlines are usually nearer the end of the week, and I see him only on Wednesdays.

Nathan is one of four siblings, two younger and one older. His parents divorced two years ago, when he moved to Bolzano away from his father. Nathan's mom has a new boy friend, but there seems to be no apparent animosity between Nathan and the boy friend. The divorce and move definitely had a negative impact on his schooling, though. The year during the divorce, he received thirteen F's, an astounding number. Since then his grades have improved, but he still receives F's in classes were he is capable of receiving higher grades. He does appear to be a motivated student, but he has trouble remaining motivated over periods of time and staying organized; many times he has completed his homework, but he forgets it at home or can't find it in his binder.

Hockey is one of Nathan's main love's in life. He's a water boy for the university's hockey team. He enjoys being on the ice with friends and skating around after school. He even

has invited me to come watch a game sometime in the future. Hopefully he won't be wearing only shorts, which he likes to do during the winter. He especially loves to talk about ice skating, although he did so during class while I was helping him with a math problem, so it might have been a ploy to get out of doing work, a personality characteristic he flaunts constantly.

Unfortunately for Nathan, Ms Altgeld is not able to focus attention on him and his needs. The rest of the class is made up mainly of 8th graders, and a scheduling problem is the only reason that Nathan is even in the class. The grade difference makes it difficult for her to incorporate math at Nathan's level that won't bore the rest of the class. In the end, Nathan is given assignments in areas that he is not prepared to tackle and so he struggles quietly in a class not made up of his peers.

Initial Impressions and Observations

I choose Nathan as my student to observe out of coincidence; I had originally decided to observe another student, but I was asked to tutor Nathan one day and was really intrigued by his behavior. He was attempting to correct a test on which he had only gotten half the questions right. Being very sly, Nathan knew how to get me to tell him the answer to questions he was unsure of. He would blurt out close answers until he got the right one, when I would instinctively congratulate him, thinking that he had figured out the answer, when in fact he was just guessing. And now that he knew the right answer, he didn't care about the actual method of finding the right answer and just jotted down the answer I had confirmed.

Nathan's resourcefulness was the first thing that caught my attention. He was the master at doing the least amount of work. This isn't necessarily a bad trait, as all mathematicians want to do the least amount of work as possible. Unfortunately, he was channeling his energy in a way that was less than beneficial to his understanding of mathematics.

The second thing that caught my eye was his organization. His binder was full of papers

jumbled together in no particular order. There were some folders, but they were obviously not used. It would take him at least 5 minutes to find his homework and assignments, if he was able to find them at all. His assignments would always look crumpled and in the worst of shape. It was amazing that he was able to ever find his homework, let alone remember that he had put homework in his binder to begin with.

These two characteristics led me to believe that he did receive the best grades in his classes, nor did he retain much information. I also felt that he lacked the motivation to want to excel in school. I also thought he was somewhat of a social introvert, as he was one of the only students in his class not to interact much with the people around him. With all these issues to deal with, it seemed like Nathan would be an excellent student to observe.

Nathan's View

Nathan offered me the privilege of interviewing him one week in exchange for candy. During this interview, I hoped to get a more complete view of how Nathan views himself, school, math, and teaching. The rest of this section will be written from the perspective of Nathan, drawing from the conversation I had with him during the interview.

I'm a weird kid. You know when it's cold out during the winter? That's when I wear shorts. But I don't get too cold; that's when I'm ice skating so I stay warm. I'm excited about doing stuff on ice and watching hockey and watching hockey fights. I don't do the fighting, but it's fun to watch. After school I like to hang out with friends and go skating; I really really like hockey. When I'm not skating, I like eating out with my three brothers and sisters, my mom, and her boy friend.

When I'm in school, I'd rather help other people than do my homework. I want to help people by being a paramedic, but I know I need to know math to be a paramedic. I need to be able to measure the stuff in needles and such and that means I need math. Math is dealing with

numbers and measurements, so I'll need that. I didn't use to try in math, but my teacher told me that I needed math to be a paramedic so I'm trying now. If I don't start getting good grades I'm going to be sent to boot camp. Before I moved, I got a lot of bad grades, and since then I've gotten more. But I want to help people, so I'm trying to do better.

If I were going to describe math to someone, I'd say it deals with numbers and measurements, it's sometimes easy and sometimes hard. I'd use pictures to describe math concepts, like a graph with points and stuff is like being on a real map with moving north and east instead of 'x' and 'y.'

All my experiences with math have pretty much been in math classes. But if I needed to learn math stuff in the future, I would need to come back to school. I would walk right in and sit down with teachers and have them explain to me the new thing. I don't think I could just learn it on my own. I guess if I had enough time, I might be able to figure it out, but I usually need help. Math is really important, but I don't want to tell any stories about my experiences. I don't think about things in the past, I just leave them there where they belong.

Good teachers need to explain what students need to do. They shouldn't make the whole class wait for slackers who talk. The one thing that made me mad is when a teacher would never call on me. I would ask other students for help, but then my teacher would yell at me for interrupting class and told other students not to help me. I spent most of one class with my hand in the air and she didn't call on me until right when the bell rung; that way she could avoid dealing with me. Even friends around me thought my teacher was being stupid.

Ms. Altgeld's View

In addition to interviewing Nathan, I also interviewed his teacher, Ms. Altgeld. We talked about how to relate with student, what makes a good teacher, and what insights she could provide about Nathan as a student. The rest of this section will be written from her point of

view based on the conversation we had during the interview.

The relationship between a teacher and a student is something I still struggle with. There needs to be a balance between being liked and being tough. When I first started out, I was a little too concerned with being their friends than being their teacher. Sometime I need to just lay down the law and not always be their friend. But at the same time I need to be approachable and warm, laugh at some of their antics and not be overly restrictive.

To start getting to know my students at the beginning of the year, I have what I call a “people hunt.” Each student fills at a survey and they have to find other students in the class with the same information. This helps students get to know each other, helps me get to know my students, and also helps to break the ice. I also use Parent-Teacher conferences and calls home, for both good and bad reasons, to find out what’s going on in my students’ lives that may be relevant to their performance in school. And one thing that’s really important is extracurricular activities. It’s a big deal, especially for the boys, when I go to their basketball games or cross country meets. And because I’m a coach for the volleyball team, I get to relate to my students on a much more personal level; I’m more than just their teacher.

A good teacher needs to be patient and flexible. Parents, kids, and other teachers can really push your buttons from time to time and I need to adapt constantly. Good teachers also need to be very creative and be able to catch the interests of their kids with relevant activities and lessons. As I’ve said, good teachers need to build relationships, and being a volleyball teacher has helped me in the category. Any way teachers can show interest in their students will help their students become excited and do better in school.

Nathan is a very bright student with good academic skills. He has an excellent imagination and loves to tell stories. He never misbehaves and is always very polite. But Nathan does have some academic issues to deal with. He is very unorganized and needs motivation to do his work. He essentially needs a push from someone else to get his work done. Sometimes he won’t finish

his assignments, but other time he either forgets to turn them in or just loses them altogether. Essentially he needs to mature a little more before he'll become a more independent student and learner.

Nathan will probably do okay in school, but not excel. He's very easy to work with, which make it more likely that he'll get the extra attention he needs to pass hi classes. But his poor organizational skills and lack of focus will cost him lots of points. I see him getting a C or D in math this year. In school, he'll do know worse than how he does in math. He has good relationships with his teachers and is very likable. Nathan is definitely not a dumb student, he just doesn't always do his best work.

Discussion of Themes

Considering the two interviews and my observations of Nathan, I have identified two underlying theme that defines his academic career: motivation and teacher support. Nathan only has what can be called external motivation. He is motivated to do well in math and other subjects mainly because he does not want to be sent to boot camp. Additionally, he wants to be a paramedic, and he recognizes that he needs to do well in math to be able to be a paramedic, although I'm not sure that he distinguishes between understanding math and passing a math class; one gives you the ability to apply math in the future, the other only supplies you with a piece of paper. Nathan has a short attention span, and he can quickly forget these external motivators when there are things to think about, such as hockey or what he's doing after school.

My initial impressions with Nathan, and our later interview helped confirm my view, was that he lacks an internal motivation to do well in math. Instead of wanting to do math for the sake of understanding how the world works, or because math is a pure science, or its fun, or its exciting, etc., Nathan does his homework only because external forces tell him he has to. He's already expressed his desire to help people instead of doing math related activities, as if the two

should be mutually exclusive. It seems to him that math concepts are more abstract and less real world, while people are tangible things that he interacts with every day.

One obvious way to help create internal motivation would be through a teacher, but Nathan's teacher has not indicated any way to help Nathan create such motivation. Ms. Altgeld seems to focus more on the little push that I give Nathan every Wednesday, instead of any self-sustaining push that would keep Nathan motivated to do well in math everyday. I have never seen Ms. Altgeld give special attention to Nathan, even though it is obvious that he is behind in a class of students a grade higher than himself; this includes the several days when I did not specifically work with Nathan. Instead of giving Nathan assignments that are more related to what he's learning in his seventh grade class, Ms Altgeld gives Nathan eighth grade work. It's no wonder Nathan thinks that math can sometimes be hard, he's usually doing math problems harder than other students in his own grade level are expected to be able to do. I find it difficult to believe that Nathan will ever be able to like math intrinsically if he continues to see it as a difficult chore.

Additionally, Nathan is never given any opportunity to be an author of his math learning. Ms. Altgeld's class is almost exclusively a review session that goes over Nathan's head. For what little time he learns from his teacher, he does so in silence. And as Povey et al describe, this type of learning is "immobilizing, making the mind blank so that the sense of knowing is lost" (233). The evidence of these effects on Nathan are clear, as he has no faith in his ability to learn math concepts on his own; he would rather not have other people tell him the way to solve a problem, but the answer to a problem, as the answer to math problems exist externally to him. This lack of authority may hinder his ability to be an independent thinker about math in the future, rendering himself dependent on others for explaining simple mathematical situations. Ms. Altgeld could potentially help Nathan become more independent with the use of more activities that require Nathan to create his own meaning.

On the other hand, Ms. Altgeld does a good job of integrating neutral math activities. These activities are general math topics that are not directly related to anything covered in the standard math classes. Nathan enjoys doing these assignments and remains focused on his work longer. Most of these neutral activities are more visual, requiring drawing and coloring, which Nathan really seems to enjoy. Perhaps Nathan likes these problems precisely because they are not traditional rote mathematics, and especially because it's mathematics that he is prepared to learn and understand. By providing more problems that are at Nathan's academic level, Ms. Altgeld could go a long way towards giving an intrinsic value of math to Nathan.

In addition, I believe that Nathan has had a troubled math past, something I didn't expect at all. In the interview with Nathan, he flat out tells me that he has no stories about his math experiences because he does not think about things that belong in the past, implying that his math experiences are painful or troubling. But other stories he loves to tell, and I've sat through several, and Ms Altgeld also indicated during her interview that Nathan loves to tell stories. The only insight into Nathan's past math experiences was the teacher who ignored him constantly. By ignoring Nathan in what seemed most certainly in an intentional manner, Nathan was hurt in ways that may impede his ability to learn math in the future, something he indicated would be difficult for him to do without the help of a teacher. Nathan may have reached a kind of cross roads in his life. Without the support of his teacher, Nathan could try to learn independently, or become more dependent on others. It appears that Nathan has moved towards dependency, as he often asks other students for help instead of trying to work through a problem on his own. It may also be that other teachers ignored Nathan in their classes, possibly because they thought Nathan was an underachiever and would hold up the class and so not worth their time. If Nathan was not worth his teachers' time, why is math worth his time?

Observing Nathan was most definitely worth my time, and I've come away with a couple nuggets of information that could be helpful for other teachers. One thing is that some students

who appear to be average or even poor in academics can really be very intelligent. This is a fact that all teachers must recognize because, “for most individuals, basic cognitive deficiency is not responsible for learning deficiencies in mathematic” (Ginsburg and Asmussen, 89). Nathan is very intelligent and uses his mind to even get out of work, but his grades do not reflect his intelligence. What seemed to be holding Nathan back was a mix of a bad classroom situation bundled with a shaky math past and a lack of intrinsic motivation. Unfortunately for Nathan, Ms. Altgeld did not seem to address any of these concerns, even though she recognized during the interview that Nathan was doing material that was often above his level. Any type of response, including pairing Nathan up with other students, grouping Nathan with the couple other seventh graders in the class so they could interact, encouraging group behavior, may have helped Nathan gain a better grasp of math and potentially help him develop an intrinsic value of math. As Silverman et al explained, this type of group work is exactly what teachers involved in the QUASAR project use to help students who are struggling with math (32). This type of learning, even between grade levels, can allow “students with different abilities and interests to bring their knowledge and talents to bear on the completion of a task” (Silverman et al, 34). By putting Nathan into a cooperative group, it would give math more meaning to him, especially because a cooperative group would allow him to do what he loves: help other people.

Unfortunately, I don't think most teachers will have an easy time getting at their students' past math experiences. If students have had trouble with math before, they will probably try to suppress those memories. It was subtle things that led me to believe that Nathan had some damaging experiences in the past, and with a class of thirty students, teachers will be hard pressed to get all the information that could be helpful for understanding their students. But if Ms Altgeld had stumbled upon Nathan's past, she might spend more time and attention on him, and hopefully influence his academic progress in a positive manner.

Questions and Conclusions

After observing my student, I still have some unresolved questions. First of all, I never got a clear picture of how his family relates to his educational life. How do his siblings do in school, and are they supportive of his work or a distraction, like most siblings are? Does his mom emphasize the importance of doing well in school? More importantly, does she take the time to help Nathan do better in school and be more organized? I'd also be curious to see how well Nathan did in school before his parents got divorced.

Also, I'd like to know how other seasoned teachers would work with Nathan in their class, and if my analysis of his situation is credible. It is one thing to detect a possible situation, it is quite another to properly diagnosis and deal with the situation. Additionally, I'd like to know how Nathan acts and interacts in his other classes. How does he do in respect to his peers in other subjects? I know he gets poor grades in general, but that isn't an accurate indicator of his ability to do well academically. Finally, I'd like to get a better view of what he does with school related stuff outside of school. How does his binder end up so disorganized? Where does he do his homework, if he does it at all outside of school? Does he work with friends or alone? Answers to these questions could yield more insight into why Nathan continues to receive poor grades in all of his classes despite his creative mind.