

May 2011

A SWOT Analysis of the Teaching Process of Math and Science At Worcester's North High School

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**A SWOT Analysis of the Teaching Process of Math and Science
At Worcester's North High School**

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Project Background

Inner city high schools these days have a chip on their shoulder, whether its overcrowded classrooms, a lack of funding or students who drop out, inner city schools are not as successful as other high schools. I'm strictly speaking in generalities and stereotypes intentionally because this is how these high schools are seen by the masses. Stereotypes are used when people do not want to give the effort or do not care enough to look deeper into the real issues. Prior to entering North High, people from the area warned me of the fights and the horrors that I would encounter, none of these people however, had actually set foot in North High. Perhaps the best description of it came from a former graduate and a classmate of mine who said, "It's a great school with caring teachers but it has its problems just like any other."

Those problems are the ones that need to be identified and resolved in order to break stereotypes, in order to see North High progress and deliver a better experience for its students. To uncover the truth about the Math and Science teaching processes at North high, both teachers and students need to be able to express their opinions, as a professor once told me, "Teaching only happens when someone is learning, otherwise it is just talking."

The SWOT analysis method identifies the strengths, weaknesses, opportunities, and threats to an organization or a situation. By interviewing 6 Math and Science teachers of all different levels and experiences along with 55 current North High students a few common themes began to emerge in the interviews, providing a detailed picture of the current teaching process, and where it can develop and grow.

Profile of North High

Worcester North has been described in many ways, one of which being a mini united nations due to the vast array of ethnic backgrounds of the students attending it. 43.2% are Hispanic, 27.8% are White, 19% are African American, 8.7% are Asian, 1.2% are Multi-racial, and .1% are Native American and Pacific Islander. (Massachusetts Department of Education) 53.9% of the student population is male and 46.1% is female.

Academically Worcester North's dropout rate (7.1%) is more than twice as high as the state average (2.9%) and 3.3% higher than the Worcester district average. The graduation rate is 23.5% lower than the state average (58.6% versus 82.1%) and almost 13% lower than the Worcester average (71.4%). This dramatic difference between Worcester North and the state average is seen by the students as well, not perhaps by numbers, but the students don't have the confidence in themselves or their ability to learn and succeed because those ahead of them didn't. That lack of confidence effects the students' motivation, and leads to a truancy rate that is 18.5 times higher than the state average (40.7% vs. 2.2%).

While the students are in school a quarter of them have found themselves at one point or another in in-school suspension, a statistic that is almost 7 times that of the state average of 3.7% and nearly a quarter of the students, 23.1% have received an Out-of-School suspension, where the state average is 6%.

In a school where nearly half of the students don't graduate within four years or at all, the atmosphere that is created is bleak. Many students haven't given extensive thoughts to their future and many students don't believe in their ability to succeed academically. This lack of self-confidence in academics follows the students into other areas and hurts their confidence in having a successful future life.

The goal of this project was to identify the strengths, weaknesses, opportunities, and threats to North High to specifically understand what the teachers and the students experience during their time at North High. Once the experiences are described it will be easier to understand where teachers and students feel that the school can be improved and what also has been keeping it from being successful.

Strengths

Teachers

When asked about the strengths of the teaching process at North High, the responses most often related to the teachers. The feeling among the teachers is that they are passionate about their subjects and dedicated. There is a sense of camaraderie between the faculty members that creates a powerful force for the students. The teachers often become personally invested in their students and can have relationships with them outside the classroom by coaching them, or advising clubs for the students. These teachers are the ones who want to make a difference in the lives of their students even when the students do not understand that that is what they need.

May students however do feel the same way, they know that the teachers have the knowledge of their subjects; they appreciate the fact that the teachers are willing to help the students, and that they are willing to put in extra effort in helping them succeed. Students feel that most teachers understand that they will need help learning and that at this point in their lives, and that the students are going through many new experiences, and sometimes students need that extra help to keep them on track and focused. Most importantly perhaps, students feel that the teachers care about them, they are happy to engage students, and are willing to put the time in to build good relationships with students, and be that mentor that will get them ready for college.

Other Strengths

Some of the other strengths of North High include, their business partners they create with local colleges and businesses who in donate basic technology that the students otherwise wouldn't have. Students participating in the health and science academy are given the opportunity to acquire internships to give them work experience in their fields of study, and a foot in the door of companies for the future.

North High's ability to acquire AP grants that comes with teacher training as well helps all around, they provide the teachers with the skills to help develop their students, and also gives students the opportunity to receive college credit before they leave high school.

Looking ahead to the future the new North High School will have state of the art facilities for the math and sciences including a mock hospital setting that can give their students the experience in a work setting that will prepare them for a solid future.

A large point of pride for Worcester North is that there are immensely talented and gifted students, one teacher expressed their opinion by saying to a local private high school that if they both took their top 25 students that North High's would be right on par with the private students.

Weaknesses

The Teachers' Perspective

Teachers see students who are dejected and apathetic towards the math and science fields, students who have failed math for multiple years but are passed on by teachers who either feel pity for them, or by those who do not want to deal with the students anymore. At a point where an estimated 80% of the students do not pass their 8th grade MCAS math test, students do not have the fundamentals necessary for the more advanced classes that they find themselves put in. Many students do not

understand why they're in the classes they are and they do not see the point of taking them, and from there they do not feel the need to push themselves in their academic disciplines. Students come to high school with lower reading levels each year and even lower expectations of what they can do with their lives and without the hope for a better future they do not see any reason to waste their efforts.

While the administration presents multiple initiatives in order to push students to develop skills that will be useful for the rest of their lives, whether it be the All Write, or emphasis on MCAS, the use of multiple initiatives at any given time inhibits the teachers and students from focusing on one area of improvement. This approach appears to be spreading the students and the teachers too thin. Teachers feel that the administration has a lack of faith in the teachers' ability to teach their students. The administrations push for AP classes have put students in AP classes that should not be and this sets students up for failure.

The communication breakdown from teacher to teacher causes confusion on the part of the students, often teachers will have to spend time teaching how they would approach a problem and re-teaching old material instead of having an understanding of what the student's know coming into the class, and moving from there. Common core strategies, curriculum and common exams would create parity among the classes. It's felt that this change should come from the department head and senior leadership. Many times new teachers will be unaware of the requirements or expectations that come with their new teaching post, and come in without the proper knowledge to handle students with behavioral or learning issues which leads to students not receiving the education that they need.

The Students' Perspective

Students saw the weaknesses in the students as well as the teachers. The students felt that themselves and their classmates lack motivation and at times do not put forth effort in their studies. They procrastinate and can be unwilling to do the work assigned. These actions trace back to the

students not seeing the value in the learning or in the work that is assigned to them. Some students do not have the drive that is needed to succeed in academics or life and many do not have the support that is necessary either. Many students do not believe that math and science will help them in the future, and since they do not see the need for it they will intentionally be disruptive to try to keep the teacher off topic. The students also said that there is a lack of school spirit that causes resentment and apathy on their part.

Students feel that the teachers do not individualize teaching enough and treat all students the same. Students look at the college and honors level workloads and see a minimal difference. They want the teachers to understand that students will learn at different rates and when they take a college course they expect that they will get more time to absorb the information given to them.

Students want to feel more support from the teachers; they want teachers to help them learn the fundamentals that they need to be successful, the fundamentals that their previous teachers failed to teach them. Students feel that teachers at times cannot relate to them, and that they need to try to understand their students better, and most importantly understand that each student needs to feel that they are believed in, which is not always the case. The students want to feel a sense of accomplishment from school, and when teachers criticize or compare them to other classes or other students they can feel belittled.

Students understand that they need a strong structure to be successful; they want homework to be enforced and checked, while they did also mention an adjustment in the workload saying if every class gave 1 hour of homework per day that would be at least 5 hours of homework every day. They also want teachers that are caring, they commented that they feel that some teachers are intimidating and are unapproachable, saying they can be rude and argumentative as well.

Students also wish that there was more promotion of college opportunities throughout the school. They do not think that most of the student body is aware of the programs or services that North High offers to help them achieve their collegiate goals, such as finding the correct college, or help in understanding how to afford college.

Opportunities

The Teachers' Perspective

North High's teachers identified three areas of improvement for North High that it currently doesn't address. These opportunities for growth break down in to student oriented improvements, administration oriented, and teacher oriented.

By taking students and teaching them not only the material but the study skills that would help them learn on their own, things like helping them learn how to navigate a textbook and how to take useful notes that work for them, whether it's an elective class or otherwise it would help them become more successful in all of their classes. Also a basic math skills class that could be available for each student as necessary to help bring them up to speed with the high school material would prove to be invaluable.

The Administration needs to take the opportunity that the new high school environment creates to reform the attitude from students. Create more structure for the students, and create smaller classes so the students can have more of an individualized experience. But just as teachers need to individualize their teaching for the students, the administration needs to individualize their professional development and training for the teachers by creating a program that identifies the individual weaknesses of each teacher, and helps them grow as they need it, instead of general help and development for all teachers.

Teachers also feel that they can better utilize technology in the classroom, especially now with the new facilities they can create an improved learning environment for their students. In order to better address their own personal weakness the teachers feel that educational classes about their students would help them understand what's going on from their students' eyes, from there they would be able to adjust their teaching practices. Better communication between teachers on what each teacher needs to work on would help each other meet the needs of their students, an open door policy where teachers can observe each other to see what they do well and what they need improvement on would aid in their development and growth as professionals

The Students' Perspective

The students' opportunities for improvement also broke down into three groups, opportunities for teachers, the school environment, and the students themselves. Some of the opportunities that the students came up with showed tremendous creativity and many mirrored the areas that the teachers saw as well.

Students feel that the teachers can work together on their teaching practices to provide consistency for their students so they spend more time learning material instead of learning how to understand their teachers. Teachers can take child psych classes to better understand the students (both groups identified this as an option to help teachers empathize with their students). Students want teachers to use technology better in the classroom to create a more dynamic teaching style, but at the same time want the teachers to better learn and use the book in their teaching so that it's easier for the students to follow along at home. Finally the students want more individual attention with their teachers to help each one grow as an individual.

Students want a school environment that builds them up academically, but also emotionally. They want North high to be that safe haven where they can flourish. Smaller classroom for a more

individualized feel would help students reach their potential. Students want to protect their new school environment by having both the administration and the teachers enforce school rules that would do so (like cracking down on vandalism and graffiti). Students also want more school spirit, this opinion was echoed multiple times throughout the interviews and even developed into mini-brain storming sessions that came up with things like an activities fair to help students become involved in their school.

Students looked at what could be done to help them to grow and one of the first things that they identified was that they want the administration to stop putting students into AP classes that “do not belong” in them, they talked about the frustration on their part of wanting to learn at a slower pace, but not having the opportunity to change classes. Students discussed potentially having smaller books or more access to books so that they do not have to carry them back and forth from home, they also felt that optional books online would help solve this problem as well. Students wanted tutoring help at night or even online, because often during the day they have prior commitment or sports clubs and cannot get the help that they want and need.

Students outside of classroom activities talked about optional morning activities, energizers such as tai chi, a practice seen in Asia, or ice breakers to better know their classmates. While looking at options for detention alternatives, students want to be given the opportunity to learn in a separate setting while being reprimanded so they do not fall behind in their classes further than they would be. Students also expressed the desire to get help acquiring internships like the process that they already do in the health and science academy.

Threats

The Teachers' Perspective

Teachers see the threats for success at North High coming from multiple sources. Students who lack self confidence in academics and have behavioral issues that stem from the student not caring enough about the subject matter, these students do not recognize that they're in school for the education and the social aspect is a secondary part. Then there are students who have bigger things on their plates at the moment, students who work 30 hour weeks to support themselves and other family members. The maturity of the high school students is declining while at the same time life is requiring them to already be adults, forcing many students to quickly make highly impactful decisions about their future when they may not realize that they're doing so.

Teachers see the community at large as a threat, where students do not have an academically focused home life, one that consists of parents who do not have an education background, and consequently they have low expectations for their children when it comes to academics as well. This creates a cycle of parent-child relationships that do not value education. As one teacher put it "...they do not get it, they do not understand that education can get them in a better situation."

When the administration doesn't provide the proper structure for students accompanied by an implementable discipline program the teachers are unable to keep order in their classrooms because there is little threat for punishment, and the punishment that is in place the students are willing to accept.

Teachers also see the emphasis on the data from standardized tests allows for students to fall in the cracks as opposed to what it was originally planned to do. Students come into high school without the proper background to be successful and are pushed forward in order to improve the standardized

test grades, when they may need to stay back and work on things like their multiplication tables, or fractions.

The recent acclaim to Worcester's Vocational school comes at the expense of the local schools test scores as well as the students who aren't prepared for or do not desire a standard school experience. "Voke" is taking students who have proven that they can be successful in a school environment and helping them learn trades that they want to pursue, which is great for those students. However, it denies entry to students who aren't cut out for the "traditional" learning process and who would benefit the most from a vocational learning atmosphere.

The Students' Perspective

When asked what inhibits success at North High, students were hesitant at first to answer, they were not sure what the question meant, but after understanding that the idea was to find out what is the limiting factors to their success, what stops them from being as successful as can be, they were overflowing with comments, some out of frustration, some out of pain and anger, some out of concern.

Students talked about the peer pressure that they experience, pressures from relationships that they're in to do things that perhaps they're not ready for. "Friends" who do not go to school anymore and try to take other students out of school as well, and peers that provide an influence into the world of drugs and fighting, things that look better and better to a young adult who just wants a place where they feel connected to others, where there are people who care about them, or in some cases, just a place where people will notice them.

The topic of drugs came up, and students described students who are dealing drugs in class, and using drugs during school hours or in the school itself. Students who are doing drugs like marijuana because their depressed and it's an outlet or because the students do not care about or see the consequences.

Many students talked about Worcester being divided, divided by different backgrounds, different gangs, and different districts. These divides in Worcester create fear and concern in the lives of its residents. Students talked about fights starting for no other reason than two people from different area, no other background, no other knowledge of each other, just different factions that do not get along. One brave student talked in class about their relationship with a person in a gang, and the concern and fear that comes over them about the well-being of their partner on a regular occurrence when they do not hear from them.

Students talked about their own emotions as a threat to success in school, whether it's the idea that some students have anger issues, and some do not know how to keep their emotions in check, but also saw that outside forces have a large impact on how they feel. There was a large discussion about people who bring down others. Whether it's "friends" who put each other down to try to gain dominance, guidance counselors who eliminate the dreams of students at a point when they only need encouragement or teachers who compare students to other students or siblings when an individual only wants to make their own way through life. Students want to be lifted up, believed in, even if their goal is far-fetched. They are told to reach for the stars, but that's difficult to do when everyone is trying to keep them grounded.

Students see their homes as threats to their success in school too, students whose parents do not get them to class on time, and do not provide that support to be successful in school. The students want their parents more involved in their school lives; they want more parent teacher meetings because they understand that when the parents do not care, the students do not care. Extending on that idea, they also do not feel that most people care about them in general, that their community doesn't provide the support that each student desires to push them to become better students. Students also

understand that those who do not have a strong home to return to will worry about things besides school, like keeping food on the table for their loved ones.

Personal Reflection

During my time at Worcester's North High School I had one of the most amazing experiences of my life. Teaching young students was amazing, but the relationships that a teacher builds with their students are far more rewarding than knowing that you helped them learn the quadratic equation. These young students are no different than any other adult, they're all trying to find the three something's of happiness, something to do, something to love, something to hope for. The students however do not have the life experience or the teaching to know that all three can come from education.

Students do not understand that the school can provide more activities and clubs for them to join to keep busy. If they can find a productive positive group in a secure setting they would be able to grow and develop in a direction that will put them in a good place at the end. The students were desperate for more school spirit, because that gives them an outlet for something safe to love, Worcester North will be there for as long as they need it. The security in the absolute that this school can provide to students who do not know what the next day will hold is more powerful than perhaps anyone has ever thought. If that potential can be tapped into then the possibilities for school spirit are endless. Academia itself gives the students something to hope for, a better future. A lifestyle where they have consistent jobs that provide for their families. These things are not seen as the most accessible outlets for the students to find their "three something's" and until that view is changed, the school will not reach its full potential.

Students like the teachers at North High because they provide the push for them, they're the people in their lives that care about their success, and are there day in and day out working their hardest to try to help the students, when for some students no one else is. The teachers hold the key to a better future and while some students understand that, still many do not. They do not understand that the way to a better life for themselves and the families that they want is accomplished by putting their noses in books. Perhaps if students are shown the end destination, the better lifestyle that comes from their educational journey they may be more motivated to be successful in academics.

This analysis is meant to be a communication tool, hopefully a jumping off point for the future of North High. Providing insight into perhaps things already known but not talked about. Students at North high have a tremendous potential growth and development and really have a thirst for knowledge that I had the privilege to witness on multiple occasions, what they lack however is the understanding of how to utilize that drive and passion and use it to accomplish positive outcomes.

Acknowledgements

I would like to thank my advisor Professor John Goulet, my supervising teacher Mr. Larry Turner and Ms. K for letting me take over their classes for a few weeks that in turn, will have a lasting impact on my life. The teacher's lounge teachers that helped me feel at home at North High, thank you for letting me bounce ideas off of you guys and offering your wonderful insight into the teaching world, thank you North High and WPI for allowing me this opportunity. But most importantly I would like to say a huge thank you to all the students that have helped me see the world as only they truly do.

Works Cited

Goldstein, E. (2011, May 3). SWOT Analysis of Teaching at Worcester North. (B. E. Murray, Interviewer)

Hippert, T. G. (2001, May 5). SWOT Analysis of Worcester North. (B. E. Murray, Interviewer)

Jasiewicz, M. (2011, May 5). SWOT Analysis of Teaching at Worcester North. (B. E. Murray, Interviewer)

Kolaczyk, K. (2011, May 3). SWOT Analysis of Teaching at Worcester North. (B. E. Murray, Interviewer)

Massachusetts Department of Education. (n.d.). *Student Data*. Retrieved May 29, 2011, from
Massachusetts Department of Elementary and Secondary Education (ESE):
<http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=03480515&orgtypecode=6&leftNavId=303&>

Snow, J. (2011, May 3). SWOT Analysis of Teaching at Worcester North. (B. E. Murray, Interviewer)

Turner, L. (2011, May 4). SWOT Analysis of Teaching at Worcester North. (B. E. Murray, Interviewer)

Also, the 55 students of Worcester North that gave me their unique perspectives to help me with my analysis consisting of 8 sophomores, 34 juniors, and 13 seniors.

Appendices

Appendix 1: Teachers SWOT Compilation

Strengths

- Good Textbooks
- Qualified Teachers
- Teachers who are:
 - Passionate about their subjects
 - Dedicated
 - Creative with little resources
 - Use creativity with new technology
 - Low turnover rate
 - Due to a sense of challenge and camaraderie
 - Multilingual
 - Teachers who become personally invested with their students
 - Teachers are sport coaches so they know kids on a personal level, get to know what is going on
- Teachers who want to make a difference in kids' lives (even if the kids do not want to).
- Stick-to-it-tiveness of the teachers
- Great business partners, colleges and businesses that donate basic technology
- Senior internships within the health and science academy
- AP grants, brings teacher training
 - Increased number of AP students*
- New state of the art math and science facilities
 - New mock hospital
- Smart Students (top 25 against any other 25)
- Migration students who are highly motivated to learn

*Good and bad

Weaknesses

- Students who
 - Are dejected and apathetic
 - Have known failure for multiple years but have been passed along
 - ~80% failed their 8th grade MCAS math test
 - Work ethics for many students ("They do not get it" speaking to why they're here)
 - Students' progress during the week, then regress during the weekend
 - Students have gotten worse; lower reading levels, and low self-expectations.
- Administration
 - Too many initiatives being imposed

- Lack of focus on what the student needs to achieve and how to achieve it
- Does not have faith in the ability for teachers to teach
- Lack of discipline
- Trying to do too much at once
 - MCAS focus, with All Write, etc.
- No continuity from teacher to teacher
 - Teach different strategies
 - Not all on the same page as to what students need to learn
 - This due to lack of dept. head leadership
 - Lack of common core curriculum and common exams
 - Discipline rules vary from classroom to classroom (inconsistency is where it fails)
- Failure of senior leadership
- Teachers
 - Young teachers are not ready for the requirements or expectations for them
 - Not prepared to handle the students with behavioral or learning issues
- AP students that shouldn't be in there
- New facility with old teachers will have a steep learning curve

Opportunities

- Skills to teach students
 - Study skills
 - How to use a text book
 - Teach them how to teach themselves
 - Basic math skills
- Administration
 - Creating a structure for students
 - Taking advantage of the new environment to change the attitude of apathy towards education
 - Create smaller classrooms
 - Divide classes according to ability more distinctly
 - Continue with the mentor mentee program that is in place (make sure people are actually doing it)
 - Useful professional development (possibly use smaller groups to help teachers individual weaknesses)
 - Individualized help for teachers, not just general help
- Teachers
 - Utilizing new technologies
 - Educational classes to help teachers get a better perspective of the students
 - Create an open door policy for classroom observation between teachers to help develop better practices

- Group called “The New Teacher Project” that focuses on looking for math and science teachers with a business background that helps them become good teachers. (Create better teachers and longer lasting teachers)

Threats

- Students
 - Self confidence in academics
 - Lack of reading skills hurt their confidence in being able to succeed in life
 - Behavioral issues of the students (urban population, tough home life, act in disruptive manor)
 - Students not living up to their half of the deal
 - Seeing school as social as opposed to educational
 - Students working 30 hours a week to support themselves
 - Students caring for family members
 - Maturity level lower now than it was 10-15 years ago
 -
- Community
 - Lack an academically focused home life (home life is the most important factor in inhibiting success for the learning process)
 - Cultural factors
 - Lack of parent education (low level low expectations)
 - Socio-economics are lower than other places in the city, student’s falling into a family cycle where they do not care about education (do not understand that education can get them in a better situation)
- Teachers
 - Unable to truly grade and discipline students
- Administration
 - Lack of structure from the administration
 - Lack of administration to foster a highly disciplined environment for student learning
- Budget is \$30 per student (\$130 15 years ago)
- Standardized tests (that’s all they do and that’s how teachers are graded)
 - Too much emphasis on the data
- Students who would regularly do well at North transfer to Worcester Votech
 - Votech rejects students now that would traditionally go there to learn trades
 - Students should be going through vocational learning now have to go through an academic one and are less academic

Appendix 2: Students SWOT Compilation

Strengths

- Teachers
 - Great knowledge of subject matter
 - Some know that students need help learning
 - Willing to help the students
 - Put emphasis on the responsibility of the student
 - Try to get students ready for college (with workload)
 - Some understand what the students are going through
 - Want the students to succeed, encourage them
 - Engaging students
 - Create a good relationship with the students (i.e. can joke around)
 - Care about the students education
 - Will stay after school to help the students
 - Work with the students and compromise when necessary
 - Can have a laid back attitude and allow for mistakes

Weaknesses

- Teachers
 - Need to individualize teaching
 - Need to treat the students as individuals and help each on learn
 - Create a difference in how they teach honors and college level classes
 - Understand students better
 - Help students learn the fundamentals
 - Can be intimidating (students do not think they can approach them)
 - Can make students feel dumb
 - Expect students to learn on their own without guidance
 - Do not understand how to use technology
 - Need to enforce homework by checking it
 - Need to assign homework on a quality over quantity basis
 - Over emphasizing homework
 - Have poor grammar
 - Can be rude or argumentative
 - Some teachers seem to be around just for the paycheck
 - Do not believe in their students enough
 - Do not provide enough hands on learning
 - Cannot relate to students
 - Play favorites
 - Create tests that are not in line with what is taught
 - Comparing classes

- Students
 - Lack motivation, do not try
 - Procrastinate, unwilling to do the work
 - Do not see the value in learning
 - Do not have the drive to succeed in life (or the support)
 - Do not believe that math and science will help them in the future
 - Lack School spirit
 - Disrespectful/Disruptive, try to keep the teacher off topic
- More promotion for college access (students do not know the opportunities that North High provides)

Opportunities

- Teachers
 - Get teachers together to agree on teaching processes to provide consistency
 - Have all teachers take a child psych class
 - Train teachers to teach with the book
 - Use technology more effectively in the classroom
 - More one on one student interaction
- School environment
 - Create one that lifts students up
 - Create school spirit
 - Protect the new school by enforcing rules
 - Smaller classes
 - Promote clubs and activities better
 - Activities fair
- Students
 - Stop putting students into advanced placement classes that should not be
 - Update books
 - Smaller books or more access to books (so that students do not need to bring them back and forth)
 - Optional books online
 - Online tutoring at night
 - Detention alternatives
 - Learning opportunities
 - Morning activities
 - Energizers (like they do in Asia)
 - Ice Breakers
 - More internship opportunities
 - More AP's

Threats

- Peer pressure
 - Can be from relationships
 - Students want to fit in
 - Friends that do not go to school anymore
 - An influence to do drugs and fight
- Drugs
 - Weed
 - Because they're depressed
 - Because they do not care
 - Students dealing drugs during class
 - Students doing drugs in or during school
- Worcester is divided
 - Backgrounds
 - Gangs
 - Concern for those that are in gangs
 - Not in school to learn but just to help the gang
 - Districts
- Emotions
 - Some students and teachers have anger problems
 - People that cannot keep their emotions in check
- People bringing each other down
 - Friends
 - Guidance counselors
 - Teachers comparing students to other students (or family)
- Teen Pregnancy
 - Only in school for limited amount of time
- Bullying
 - Facebook used for bullying
 - Counseling for bullies and those being bullied
- Lack of security
 - Students do not feel safe, worried about fights
- Home environment/ Parents
 - Students not getting into class on time
 - Parents not pushing students to do work
 - Make parents more involved
 - More parent teacher meetings
 - Students do not care when the parents do not care
 - Students do not feel that people care in general
 - Students that do not have a strong home to go to will worry about other things besides school
- Distractions during school

- Side conversations
- Texting
- Fights