Small changes for the urban teacher

By: Erika Meisel

I think there are a lot of minds going to waste in our urban environments, minds that could be reinventing the world, but are, for some reason, only keeping themselves down and out of a culture that needs them. Why are there so few college bound kids graduating from our urban schools, and why are the ones who do go to college so ill-prepared when its obvious how capable they are? I claim that it is possible to change how we teach in a manner that doesn’t take more time, but yields more opportunities for the multicultural classroom to learn.

Treisman’s article was not only a big resource, but a huge inspiration for my paper and personal goals. Being from a rural community, I feel very under-educated when it comes to the urban community. He gave me a lot of information, some of which I would have assumed, but was reassured to see it in writing, and some of which I would not have thought up with on my own. Another resource I used was ‘Problems and Solutions in Urban Schools’ edited by Gwendolyn Duhon. It was a very helpful tool, and written by many different authors, which was great for getting a few different voices behind my arguments. A final resource for me was ‘Becoming a Successful Urban Teacher’ by Dave Brown. This book probably helped me more personally than specifically for this paper. I loved that it went over so many of the questions I have had and left plenty of room for personal reflection.

I would like to begin by saying that every teacher has his or her own personality, and the incorporation of that could alter some of the specifics of each of my principles,
but I do believe the general make-up of the principles to be universal. I think that the best way my principles could be summed up would be in three stages: Pre-classroom, Firstweek, and Yearlong, each having equal importance. Pre-classroom would be the most time consuming of the stages, because it involves reevaluating all of your mathematical content knowledge. I think drastic changes would occur if the teacher could spend even one week, part-time, prior to the class, reading and questioning the text book. **You could familiarize yourself with every hang-up you have, working them out as you go.** You could take notes of possible hang-ups the students will have and the basics they will need to overcome these. As you are going through the book, it would be necessary to reflect from the standpoint of a poverty stricken high school senior who could be of many possible cultures and backgrounds. Here you should take notes on how math can be involved in their lives, you can use these notes in the Yearlong stage to create word problems straight from the street. Unfortunately many people, like me, have never really even seen the streets, so how could we reflect as if we’d grown up there?

*I think it would be necessary to learn something of African history, Spanish culture, hip-hop as a counterculture, and all the things that have affected the students you will have in your classroom the coming year.* There are many books out there that are quick reads and would give lots of insight and maybe some substance, but also some real history and hard facts could reap huge benefits. If you can teach them something of the world they are from, not only would they respect you more, but maybe it won’t be so unnatural for them to take the things you teach them about math into their world. I think the Pre-classroom stage will be the most rewarding, and like most things that are, it will also be the most difficult of all the stages I talk about. It would be easy to slack off some
of this research, promising yourself you will look into it during the school year, but then, what can you expect of your students and the work they give to you.

Like I said, stage one is the most time consuming, but only for the first year. After that it will take less and less time. You could sum up stage one in a single word: read. Read through the text, and read about the things that affect the lives of your students.

Stage two as I mentioned above is Firstweek. I originally titled it Firstday, but realized that I had too many things planned for a single day. In many schools the first week is often only two or three days, which would actually be perfect for my Firstweek. Firstweek is so valuable because you are setting the pace for the rest of the semester and beginning every relationship that you will have with your students.

I think there are many things that need to be expressed immediately to your students. The very first thing that I think should be verbalized is respect. This is definitely a word that people of any race, creed, culture, and personality should understand. I think it should be explained that you are there as an authority, but one who holds the deepest respect for everyone, until they lose it. It should be made very clear that you expect the classroom to be full of respect: students respecting you, you respecting students, students respecting each other, and students respecting themselves. I think respect could be the only rule in your classroom, and still cover all the behavior problems there are. I think the most forthright way to incorporate respect into your classroom would be participation points. Of course the specifics would be up to the individual teacher, but I think students should get the basic points just for being in class, extra points could be given to students who ask questions, and an unlimited amount could
be taken away for acts of disrespect. If they get negative participation points it starts to cut into their homework grade.

This leads us to the grading system, something I think the students should be involved with, especially in a math class where word problems about their theoretical grades could be easily used. One such word problem could be: “If you come to class everyday and participate this semester, get an average of 60% on your homework, and test scores of 54%, 60%, 75%, 62%, 70% and 80% respectively, what grade do you need on your midterm just to be passing the class, what grade do you need for a C, B, and A?” This shows them, right away, ways they can use the math you are going to be teaching them. Plus, there is more than one way to solve it, showing how important intuition and control are. If they aren’t advanced enough for this problem, you could still show it to them along with some simpler problems they could do, and hopefully they would learn how to do the original problem by the time of the midterm.

I also feel very strongly that it should be made clear that with enough work, everyone can get an A. I also think it is important when developing your points system that there are two untraditional ways to pass the class. Of course the traditional way I am speaking of is working hard and doing well. The two untraditional ways would be: not working hard but doing well, and working hard but not doing well. Now I don’t think anyone should be rewarded for not working hard, but if they know the subject matter, they should pass, period.

As far as passing those who work hard but don’t do so well, I have a slight moral dilemma. I don’t want to be sending kids to college un-prepared, but in all reality many of these kids won’t be going to college (in spite of being strongly encouraged by their
math teacher) and for those students, I may be teaching them that showing up is half the battle. Many kids don’t go to school on a regular basis, but you can’t keep a job if you don’t go everyday. If I am preparing most of my kids for the workforce, this may be as valuable as content knowledge.

The only way I can think to balance these two untraditional ways of passing students is making the test worth enough that with no other points, someone who received all the test points could pass. For the other type of student you would have to know beforehand how many test points students get for trying every problem. This would be the theoretical final test score of untraditional student #2. With these points added to 100% scores in participation and homework it also should be enough to pass.

Another step in my Firstweek phase which I actually got from misinterpreting the first half of a chapter in ‘Problems and Solutions in Urban Schools’ is an autobiography. Although his plan was wonderful, it could not be integrated into a math class, but it did give me an idea. I think, and I have mentioned before, that knowing your students personally is one key to success in teaching, therefore I think assigning an autobiography could begin the process right away on the right foot. I don’t mean a general autobiography, but a school autobiography. Tell the students to give you the run-down of their life in school so far, especially their impressions of previous math teachers. It doesn’t have to be in any form or any length, just typed and true and as detailed as possible. Then take the autobiography and staple it to a manila folder with their name on it. Have it due at the end of the first week (no one will spend more than an hour on it anyway) and students who hand it in on time receive 100%, starting the year off with an A+. 
The only other assignment during Firstweek would be an in-class “worksheet”, actually an entrance exam of sorts. Back when you took notes during Pre-classroom, you should have noted the basics that are required for each section. With these basics develop a test to see how many of these have actually been absorbed by the students thus far, so you know where you need to retrace throughout the year. Place this in their folders also, and make some notes as to where the majority of the classroom has hang-ups. For those students who were out of the average, either below or above, make a point to meet with them personally about their needs, even if it is just for five or ten minutes. It won’t take half as long as the possible benefits it could reap. Maybe try to get tutoring lined up for those below average, and offer to make some work that would be more challenging for those above average, if they want it.

Firstweek may seem like a lot of work, but really it is not much more than what has to be done. You have to create a curriculum and a points system either way, so why not try it like this. The only real extra time would be meeting up with students after school, before school, or maybe even during lunch. Assuming you don’t pick more than 20 kids to talk to, and giving them each five minutes of your time wouldn’t take two hours. Doing these things will not only benefit your school, but I think it would lower stress. Being on top of problems makes you feel much less overworked and overloaded. You could then approach your students with a better attitude.

Phase three has the least amount of work; this is because I want the program easily implemented into a busy teacher’s schedule. Yearlong simply includes making minor changes in curriculum, a few optional activities and the more difficult part, monitoring the student’s progression. That is why there is the manila folder. After each
test, look at the previous tests and the amount of homework turned in, to see if you need to set up another appointment with any students, or their parents. I really think that by high school, it is students who are responsible for their own behavior, especially in such an environment where they have dealt with adult tragedies and stress since very young, causing them to grow up very quickly. However, if the problem is homework, a talk with mom and/or dad could prove beneficial. The line separating a poor test with a real problem is up to every individual teacher and how much work they want to put into their students.

Another change that I think may be the most important is having BIG projects. I think this is where you can help students learn control, because I do still believe it can be taught. It is really hard for a student to get excited about math, especially when the problems are repetitive and short-lived. It is easy for a student to get excited about something beautiful they could make, or practical they could use. There are many such projects available in books and over the internet. Unfortunately this, like many aspects of my theory, needs to be put into practice and researched through classroom experiments before the detailed, specific curriculum could be designed. Until I can do this, a broad theory is all I have.

A few big projects isn’t enough, you also need to incorporate the way that every assignment can be seen in their real world. This is where you take the notes you took during phase one, and develop a few word problems from that poverty stricken high school student’s point of view. You don’t want to overload them, and they need the basic practice from regular homework, so maybe after their tests on Fridays they could take the
worksheet home for the weekend, to prepare them for next week, and help to review previous weeks in a different setting.

Another option, which actually may not be an option for some, is to consider yourself ‘coaching’ help sessions. Many teachers have to coach a sport, but if the math teacher didn’t have to, then they could ‘coach’ math after school for those in need. This could be where you find the individual needs of all those students who are willing to put in the work. If this isn’t an option I have one idea that could work, potentially. How practical would it be allow those students who are receiving an A to tutor for 3 hours a week in place of doing their own homework? I would think that if they actually tutored three hours a week, they would indeed learn all of the material as if they had done their homework, plus it be less money the school has to spend on tutors and less time for you also. I just don’t know how realistic and/or fair it is.

Most of the things we have read in class have been written after the implementation of a program such as mine. I am excited to one day do my own research, but until then I guess my theory will just be a hypothesis. However, I think my hypothesis is a good one. I know it may seem like more work than the average teacher, but who wants to be the average teacher anyway?