Best Teaching Practices in my Science Classroom

It is an understatement, but teachers do so much in the classroom in order to improve or enhance student learning. However with all the work that is done on the part of the teacher, there are guidelines that dictates whether the teacher will be successful or not in the classroom or within the profession itself. Failure to adhere to these guidelines can wreak havoc on the sanity of the teacher and the longevity of her/his stint in the classroom. As a matter of fact the experts state that there are four key elements a teacher must incorporate daily in order to educate students in this competitive world. These key elements are:

- Implement a balance curriculum
- Provide active learning opportunities
- Practice differentiated instruction
- Integrated curriculum

I think I would not be alone if I said that the experts are indeed correct. Personally, my best practices are based on following these key elements, because I have seen the rewards and also the chaos if not done. In addition to the required elements that are geared to meeting the different learning styles while promoting rigor, relevance and relationships, here is the list of the best practices that I use in my classroom every year. As expected some are used more than others and tweaked depending on the lesson and the class itself. They are:
1) **Avoid Murphy’s Law**
Planning is a standardized practice for all teachers. Our profession is synonymous with being prepared. Hence it comes naturally. However there are some moments that we just leave to chance or say we will get by… “I mean there is only another thirty minutes left to the bell, right?!!!!” For me this is a no-no especially with the personality of my classes. Despite the fact that teachers are not psychic, we cannot always “know” what’s going to happen, but we can be prepared for it by always having a backup lesson to go, just in case for some strange reason Murphy’s Law goes into full effect. For instance if you plan to do research using laptops, and you recognize everyone is complaining that they are shutting down because they need to be charged or there is a tech glitch that cannot be resolved immediately. Instead doing the “mother-ease” of trying to constantly soothe, pack them all up and move into another lesson. Yes everyone will be disappointed, but if you have an equally interesting lesson ready to go – the whining will not be for long! Just remember, your lesson plan must not be the only plan of action.

2) **Technology is Your Friend**
A lot of teachers are themselves intimidated by technology however it is still not a good excuse to not use it. In this technologically advancing world, to better get students excited about learning (especially science), it is a great step forward to use the things they quickly identify with. It will engage them in both active and hands-on learning. Personally, I try to use technology frequently. Trust me when I tell you I am not a “techie”, but I do see the difference when I implement something “computer” in to my classes. The interest level increases and the quality of work improve overall. My students are enlisted in **Blackboard**. An online educational tool that extends the classroom to a wonderful 24 hours of learning that also includes harnessing assistance from their classmates. In addition my projects are geared towards the use of technology. Projects frequently go green in my classroom and are most times submitted electronically. And they are other assignments that utilizes digital story telling (Photo Story, Podcast) along with graphic and drawing software.

3) **Get a Rubric!**
Major assignments are not the only thing that needs a rubric. It is a great habit to use a rubric for every assignment. Trust me when we I tell you, it will be a life saver. It tells the students and their parents what your expectations are and what happens when they fail to meet the mark. Remember a rubric can be very simple, as long as it embodies the elements you are focusing on for grading.
4) **No Excuses, No Exceptions, No Extensions**
   This is my mantra! Trust me it is not as harsh it sounds but it is geared towards making students better at planning and time management especially with time-driven assignments/projects. In addition it is also offers a lesson for us teachers as well; which is – be fair and consistent at all times. Never take it for granted that the students are not watching what you do with student X when her/his assignment or project is late, only because s/he is a great student or teacher’s pet. Be very careful, you can lose other students in the class by this very dangerous practice. Yes we all know that there will be extenuating circumstances but use discretion in rectifying a solution.

5) **Mix n’ Match, Cut n’ Paste**
   Just because the textbook came with all these great resources and planning guide – it does not mean you have to use them all verbatim per verbatim. Yes you have the curriculum in your hand, but analyze your students and use the elements that work. Yes it means extra work sometimes, but mixing it up a bit and sometimes foregoing certain aspects, will provide a more challenging learning environment. Cut n’ paste and create that worksheet that will work for you!

6) **Be Accessible**
   Find the time to meet with your students, and this is not only for make-up assignments or gathering missed work. This time can be used for them to come and talk to you about certain unrelated class issues while maintaining sound professional protocol. Every year it surprises me how many kids are hurting and need just one adult to care enough to listen. This practice will give great insight into the inner workings of your student and hints as to better serve these students to garner success!

7) **Teach Life Skills**
   In this competitive, ever-changing world, it is very important to make connections between the real world and your curriculum. I have found that students are more interested in learning about a new concept especially when they are able to see how it impacts their daily lives. Be mindful that it does not have to be every aspect of the lesson; just one simple connection is enough to get that hook! You are able to get students to think outside of the box if you can get them to leave the confines of the classroom.

   Lastly and as always do your best, bring your A-game and teach from day 1 to day 196!