BEST PRACTICES OF A GOOD MATH TEACHER

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Countless researchers and various educational institutions have come up with a list of “Best Practices” for a good mathematics teacher. These practices are the result of recent research-based and data gathering.

Protheroe, 2007 identified different principles used in an effective Mathematics classroom, he says a good teacher has:

Demonstrating acceptance of students’ different ideas. Some students have a different methodology in solving mathematical problems, teachers should challenge their students to think critically so that students think widely about the problem. In the Philippine education setting, problem-solving solves routine and non-routine approach.

Influencing learning by posturing challenging and interesting questions. Let your students explore and try new ideas. Your questions must be relevant to your objective. Most of the students are excited if there something new to be learned.

Projecting a positive attitude about mathematics and about students’ ability to “do” mathematics

Furthermore, Adams 2020 also identifies 15 strategies in teaching Mathematics

Raise the bar for all. Rather your students are mathematically inclined or not, most of the students need to hear from their teachers that once you strive and work hard you will succeed. Let your students feel that mathematics is for all, not just only for mathematically inclined students.
2. Exorcise your math demons. Toxicity and negativity of math teachers can easily adopt by their students, therefore, math teachers should prevent any transmitting math anxiety to your students. If your students find difficulty in solving a problem provide appropriate strategies fitted to their abilities.

3. Don’t wait—act now! Look ahead to the specific ideas, students need to master for annual end-of-year tests and step instruction accordingly.

4. Create a testing pathway. Mastery of subject matter is essential, to ensure the understanding of the students’ day to day lessons, math teacher should always provide formative assessment. Make sure that assessment to be given to your students should be indicated to your planning/lesson

5. Observe, modify, and reevaluate. Every individual is unique, each student needs individualized instructions, we have to be flexible enough to make sure that no student gets left behind. Observe the progress of your students, if needed modify your assessment tools and reevaluate if necessary.

6. Connect math to other learning areas. The integration of mathematics to all learning areas is significant but showing how mathematics is connected to the world is more important. Read books with math connections. Talk about the ways math integrates with visual arts and music.

7. Personalize and offer choices. Being creative and innovative provides more opportunities to learn and motivate your students, as much as possible, allow your students to choose what strategies and approaches they wanted to use in solving a mathematics problem. Give students a variety of options differentiated instructions are highly recommended.
8. Encourage math talk. Allow your students to tell their stories and everyday routine, as a math teacher relate their stories to your lesson. If possible, ask your students if they experienced to solve the problem in their way.

9. Play math games. Learning is not only confined in the four corners of your classroom, let your students explore the outside classroom wherein they can able to learn while playing. Provides some games that relevant to your lessons such as station game etc.

10. Emphasize hands-on learning. In math, apply concrete, semi-concrete, and abstract approach in teaching, allow your students to use their imagination in visualizing the concepts of some mathematical problems, however, make sure that they will experience hands-on learning by using manipulative toys.

11. Seek to develop understanding. Meaningful math education does not only memorizing the step by step procedures in solving mathematical problems rather than, but there is also a space for exploration. Furthermore, teaching mathematics always provides motivation and review, it could be done by presenting a broad topic and reviewing some formula before proceeding to a new one.

12. Choose meaningful tasks. Most of the students are creative, as a math teacher you should be creative too. Choose an appropriate task to your students wherein they can able to learn and explore as well as developing their potentials in mathematics.

13. Allow for productive struggle. Challenge your students by providing challenging questions and tasks. Let them find the solutions in their way.

14. Build excitement and reward progress. A good teacher always recognizes the effort of his or her students, simple giving of certificates and awards can boost the confidence of their students.
15. Encourage teacher teamwork and reflection. No man is an island, being a math teacher it doesn’t mean you know everything, as a member of the school, collaboration is necessary to gain more knowledge from your colleagues.

References:

https://www.bestvalueschools.com/lists/5-characteristics-of-a-great-math-teacher/