A Successful Mathematics Teacher

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“What is a successful math teacher?” is only a question but the answer to this relatively simple question is the main purpose of this paper. Namely, I will mention teachers’ roles and try to give the answer of question “What kind of a teacher do students like?” Cleary, it is much simpler to mention which characteristics a successful mathematics teacher must not have or use. In the end, I would like to address every “successful teacher” with some motivation words.

Keywords: successful math teacher, success, great teacher, knowledge

Introduction

In this paper, I will try to answer the question “What is a successful math teacher?” The answer to this relatively simple question is different depending on the source of the literature used or, in other words, the quoted author’s basic subject field of study.

Trying to start with our own literature, using the manual “A successful teacher” by Kiro Popovski, we will emphasize several required characteristics that every successful mathematics teacher (although this may refer to a wider context, regarding some other subject fields of study) should have.

Being a successful teacher means knowing how to incite students to learn. A successful instructing means devising an educational activity for every student that will accomplish the type of learning the teacher has predicted.

The successful teacher is evaluated (assessed), above all, according to the achieved students’ results, his/her contribution to the advancement of the educational work, as well as according to many other activities and properties of the teacher’s personality.

One of the teacher’s primary tasks is to know how to incite and activate all the students’ potentials and direct them towards optimal study and work. A more successful teacher is the teacher who knows how to do even more, i.e., create conditions and help students train for self-study and gradually become responsible for their own learning.

Structure

Teacher’s roles in teaching are divided into several groups:

1) Comprehender—diagnostician of the initial state. The teacher assumes this role at the beginning of the school year. Later, this role transforms into formative monitoring and assessing which is needed for appropriate planning and organizing of teaching and the final evaluation of the progress.
(2) Planner and preparer of teaching and other educational and professional work. This role is treated as a key role for the successful realization of activities and it covers: planning, preparing and organizing teaching, planning and preparing other activities (extra-curricular activities, cooperation with teachers and parents), and planning of self-improvement.

(3) Instructor, informant. The teacher’s role as an instructor, i.e., as an informant, is considered the most dominant responsibility of the teacher. The teacher provides information through short presentations and his/her speech implies asking and answering questions, and not giving long lectures. The process of instructing is a kind of communication in which information is conveyed through the teacher. While teaching, the teacher sends information in a planned manner, but also requests and receives feedback. The successful teacher listens to his/her students and thinks about what he/she has heard from them, conveys his/her thoughts, and tries to develop a discussion with the students. Together with the students, the teacher rejoices new knowledge and experience.

(4) An assessor of students’ achievements. The teacher performs this function throughout the entire teaching process, thus assessing the overall development and progress of each student. In order to assess students, a successful teacher must have the intended aims as a starting point. This determines the type of questions and tasks that the teacher will give to students.

(5) A stimulator of students’ interest and motivation for learning as a basis for successful learning. Motivation is one of the fundamental elements as a starting point in order to learn something, therefore without it there is no successful learning. Student’s inner motivation is of great significance, and the teacher’s role is seen through stimulating and developing the same.

(6) A manager of teaching. The manner in which the teacher organizes, plans, and implements teaching greatly determines the degree of the student’s independence. The teacher’s working style can be democratic, autocratic, or liberal. The democratic style represents a style where the teacher strives for best possible conditions for every student’s development. In the autocratic style, the teacher is the centre of all activities in the teaching process, i.e., the teacher sets all the activities, ideas, initiatives, etc. The teacher has the main role and this type of leadership can also be called authoritarian. The third style, called liberal is the style characterized by complete freedom. Students have the main role and the teacher’s only responsibility is to provide the necessary information and help.

(7) A role model. Being a teacher requires more than simply being a good expert and a professional. Namely, for every student, teachers are role models and people students look up to. Modern teaching requires teachers to be close to their students, have a friendly relationship with them, look decent, be calm, and establish pleasant working conditions. “What kind of a teacher do students like?” The answer to this question deserves our full attention. The fact that many students say that they only want to study with some teachers, but not with others only confirms that teachers are an important factor in the educational process. The following question arises: “What criteria should a teacher fulfill in order to motivate students to learn?”

These are some of the obtained answers:

(1) Teachers must respect students as persons and provide that the school is the environment where students can show what they know and can do best.

(2) Teachers should be polite and provide students with examples from their own life that will demonstrate that the teacher is a free and cultured person, a good parent, daughter or son, a friendly neighbor, and a good interlocutor.
(3) Teachers should be well read, have a wide knowledge, and make sure that the material they teach is seen as connected to a practical system that is close to the students and they come across it on a daily basis.

(4) Teachers should be patient and allow students to speak their mind and to elaborate on what they know in a different way. Students do not like knowledge that is not well explained or presented in an abstract way, which, unfortunately, is the most common case in our curriculums and syllabuses.

(5) Teachers should be persons who trust their students and allow students to solve problems and tasks on their own, in their own manner, and be praised for doing so. Students do not like stereotypical tasks that they have not understood and have no meaning for them.

Now, we should also mention some characteristics related to the teacher’s successfulness. Successful teachers in every subject (math teachers in this paper) have clear objectives and a sense of purpose. By using manipulative, interactive and physical materials while teaching, teachers present the true, real possibilities and conditions of what is being taught to students, and then help students create their own ideas that connect and explain the studied material. Teachers should enable students make clear connections between the activities with objects and mathematical notions and procedures. Successful teachers know when to listen to students and when to ignore them. Successful teachers expect their students to succeed. Students can achieve results when teachers use different approaches and techniques while teaching. In order to help students really learn mathematics, teachers should be prepared to explain their thinking and pay attention to the manner in which they explain and use mathematical arguments. Successful teachers are consistent and reflective; they take time to explore new tools and welcome change in the classroom. During the teaching process, the successful and creativity teacher could achieve the following: facilitate the adoption of new knowledge and skills, improve and integrate lectures, contribute to the cultivation of qualitative thinking, introduce students to discover regularities in an unobtrusive way, improve space orientation, and cultivate didactic principles, especially the principle of success using appropriate examples and improving the integration of mathematics instruction and introduction to nature (Gogovska & Malchevski, 2012; Ruhama & Ball, 2009).

Successful teachers never stop learning; they break out of the box, but they are masters of their subject. Students’ achievements are a criterion for the teacher’s successfulness.

Starting from the fact that the teacher is a key factor to the quality of the educational process and the quality of the assessment as well, the activities regarding the teacher’s professional development play a key role. By assessing students’ achievements, the teacher simultaneously assesses his/her own work and achievement. There are three types of assessment: formative, summative, and ipsative assessment. Formative assessment refers to the assessment that provides information for both students and teachers and is used to improve teaching and learning. Formative assessment requires interventions during the educational process, gathering information that is used to direct both instruction and learning. Summative assessment refers to summarizing and interpreting information obtained from the assessment in order to incite teaching and learning. This type of assessment refers more to summarizing student’s success during a determined time period. Ipsative assessment is directed towards oneself, motivating students to compare themselves to their own previous achievements, rather than comparing themselves to other students.

Conclusion

However, it is important to mention that fulfillment of all these conditions does not equal “a successful teacher” because it is theoretically impossible to list all characteristics. It is much simpler to mention which
characteristics a successful mathematics teacher must not have or use.

Therefore, a successful teacher:

- must not make professional, methodological, or material mistakes;
- must not go to lessons without making professional, methodological, and time preparations;
- must not be a negative example to students;
- must not regard teaching as a private commitment;
- must not disregard the aims of the lesson;
- must not exclude students from participating in the lesson;
- must not use homogeneous tasks or only use tasks from the same cognitive level;
- must not underestimate students, insult them, or hurt them in any way.

In the end, I would like to address every “successful teacher”: “Work with love, love your students, incite their achievements. Only in this way, through you, they will start to love mathematics and mathematics will become a desired activity for them, and logical thinking will become part of their everyday life”.

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