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HOW TO STOP THE DISINTEREST OF STUDENTS TOWARD SCHOOL SUBJECTS?

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First of all, I would like to thank for the possibility to write an editorial on this issue. Actual problems, which are presented in learning and teaching process are huge. However, to choose some of them, is also a demanding situation. As a researcher and also as a teacher, I often attend primary and secondary schools and try to communicate with teachers, not only of science subjects. The results of the conversations are aimed mainly at the big disinterest in learning material and the meaning of any subject.

Disinterest is obviously defined as a cause to regard something with no interest or concern. As it is mentioned in many studies, the interest in school subjects is decreasing. The factors causing this state are many, the excessive using of different information and communication devices among students of different age cohorts diverts attention from the learning topics and materials, and it can cause disinterest in students about all schools' activity. The teachers and also researchers are trying to suggest many activities and improvements to eliminate disinterest. It is possible to mention an option, how to stop decreasing interest in any school subject, and it is possible to find it in the relatively new curricular efforts. As a good example serves STEM (science, technology, engineering, and math) subjects. STEM is introduced, used and popular in some countries, where the educational process is developing and where there is an effort to focus on the student(s). As it is also possible to find in many theoretical and empirical studies, the connection of some subjects in one unit could be beneficial for many parts of the educational process. For example, teachers are not separate units, but they input in the teaching process together, they are preparing and creating the common topic simultaneously. Teachers could be in consensus within the preparation process for STEM lessons.

Students could see the interconnection, not only between subjects but also among disciplines. So, they (students) probably have got a better understanding of the topic from various points of view. They are able to observe not only the separate processes in subjects like biology, chemistry, etc, but they also have the possibility to understand processes and phenomena in a holistic way, which is typical for the whole discipline. As a good example is photosynthesis, which is in many curricular documents typical for a biology curriculum, but, as we know, they are also presented parts, which are typical for chemistry, physics, and mathematics. In the typical classes, where the STEM does not exist are the processes and aspects of photosynthesis taught separately in different grades. It could cause the misunderstanding of this abstract topic and the creation of many misconceptions among students, which will be persistent till adulthood (e.g., Atchia et al., 2022; Butler et al., 2015). In the case of STEM lessons, the presence of separate units is not presented, so the number of misconceptions and misunderstandings is rapidly decreasing. The number of wrong understandings of some concepts is decreasing, not only in the example of photosynthesis but in all scientific topics (Hasanah, 2020). STEM has a direct influence on the interest toward learning in a general view. As Chiang and Liu (2023) or Staus et al. (2020) quoted in their study the interest toward scientific subjects increased, when the learning process was performed by STEM, not a separate learning process of scientific subjects. The increasing of interest was in every examined group, namely

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boys and girls, students from different residences etc., without any statistical differences. Only brief notice, when the scientific subjects were taught separately, the interest in them was low in every observed variable and some differences between groups were found. This connection between different subjects and disciplines is possible to realize in many cases, not only in scientific subjects but it could also be realized in unofficial versions. It depends on the creativity and fantasy of teachers. The researchers could serve as creators of suggestions, on how to improve the interest of students about school and school subjects on the basis of their research. And teachers could try to realize new methods and forms of the teaching process.

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