HOW ROBOTICS ENHANCES SCHOOL EDUCATION

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Robotics in education is a relatively new area of educational technology. Secondary schools that use educational robotics have this learning technology in their curriculum because it enhances collaborative learning. According to Vega (2016) robotics education involves technology integration of math, science, and other subject areas. Students work together when using robotics in the classroom by solving problems or programming a robot to carry out specific commands. In the realm of instructional technology, educational robots is still in its beginning, but it will develop quickly in the future with greater exposure to teachers, administrators, and parents.

With the aim of facilitating students' skills and attitudes for robot analysis and operation, educational robotics enables students to acquire STE topics in a variety of methods. However, using robotics in the classroom has several additional advantages. Let's find out more about how it affects education.

Programming is enjoyable and simple. By building, designing, assembling, and operating robots, educational robotics helps students enhance their skills and knowledge. Because they feel comfortable interacting directly with both electrical and mechanical processes and procedures, children and younger students find it amusing and interesting. In fact, learning programming via the "traditional" abstract way may be both tedious and difficult. On the other hand, by having to operate a real robot and observing what goes wrong, students gain an immediate knowledge of what robots can and cannot do.

Developing skills for the future. Robotics helps pupils become competitive workers of the future. Students can find out if their interests and aptitudes match those

that will define the future employment market, such as programming, science, technology, or engineering, by programming robots. By integrating and applying their knowledge, students are encouraged to develop their engineering intuition while working on a robot, which emphasizes the need of meaningful problem-based learning. Computational thinking, higher order thinking, logical and analytical reasoning, and strategic problem-solving are some of the abilities created by educational robots that will be crucial in a wide range of professional domains.

Robotics Can Teach Critical Learning Skills. Students will probably talk about and share ideas that they might need to test out as they collaborate on robotics projects. Students may think of issues in their daily lives that robots could solve or items that robots might automate. Students' capacity to build hypotheses will be improved if they are given the opportunity to create theories that can be tested in robotics projects.

The capacity to learn via trial and error, confidently conceptualize specific solutions, put them to the test, and document and process outcomes is one of the most crucial elements of STE academics. Students who are interested in robotics can acquire these crucial STE skills, which will help them in future projects.

Robotics is a fascinating project that will excite learners and pave the way for their curiosity, possibilities, and careers.

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