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STEM Education Unites a Divided World



Aditya Mojumdar¹

¹University of Victoria, Canada
amojumdar@uvic.ca

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The political tensions and the clash of cultures separate the countries as never before. However, in one field, there is hope for peace in the world of STEM education. The world speaks the same language in mathematics, physics, and engineering. A chemical reaction in Seoul will do the same in São Paulo. This common base opens areas of cooperation that are beyond borders and ideologies.

Common problem-solving styles are taught in STEM education. When learning to solve a problem about robotics competition or climate research together, students in different countries find the things they have in common and forget about the differences in culture. This unity may be illustrated by the International Mathematical Olympiad, which has been operating since 1959, when students of more than 100 nations compete with one another using the same mathematical principles in spite of a huge diversity in their backgrounds.

This unifying effect has research to back it up. Research by the Organization for Economic Co-operation and Development in 2019 revealed that nations with robust STEM research collaborations internationally displayed a 23 percent rise in scientific advancements and innovation.

Somehow, big obstacles exist anyway. The digital divide is generated due to a lack of equality in education- advanced nations are equipped with the latest facilities, while basic equipment is not available in poor states. Such inequality only tends to deepen the already existing rifts instead of reversing them. The barriers also come in the form of cultural resistance. Other societies will not embrace principles that contradict traditional beliefs and may therefore reduce the integration of STEM.

These are aggravated by gender barriers. In the report published by UNESCO in 2020, it was revealed that women make up a mere 28 percent of the researchers working in STEM areas, and participation remains even lower in studies in countries with social limits. This marginalization is the waste of human talent and division.

Revolutionary technologies democratize STEM education globally. Virtual reality enables equal laboratory experiences from Bangladesh to Boston. European Space Agency simulators connect 50,000 students across 30 countries. Cloud platforms like GitHub host 200 million student projects worldwide. AI tutors operate in 46 languages, personalizing learning while maintaining scientific accuracy.

The STEM education establishes world harmony to global standards of scientific realities, where diplomacy cannot make a mark. This possibility lies in the COVID-19 vaccine partnership and the International Space Station. To succeed, we should eradicate inequalities, make investments, and break down the barriers. We have a choice to make: we can use STEM as a unifier, or the rifts in the world can get even wider.

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