

STEM Education

In order for the US to remain competitive, it is essential that American high schools graduate more students with strong math and science skills and that more students be attracted to STEM (Science, Technology, Engineering and Mathematics) fields. This has been established as a national priority. At the same time, it is estimated that US schools will have to hire 200,000 middle and high school mathematics and science teachers during the coming decade just to replace teachers who will retire. Yet, the demand for certified teachers is growing as states are increase high school graduation requirements in mathematics and science.

This increasing need for STEM skills and more rigorous high school requirements will require a high quality math and science teaching force. Michigan Tech's teacher preparation program has focused on certification of mathematics and science teachers for secondary schools. The Department of Education, working with other academic units on campus, has also offered a M.S. program in Applied Science Education (MSASE), as well as professional development programs for teachers to improve their content knowledge and pedagogical skills. New tracks in the MSASE program now are available to students seeking teaching skills who wish to pursue Peace Corps service, and to science teachers who wish to become certified in the Earth sciences.