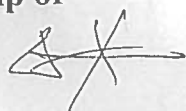


Research under the MEd-STEM degree program of OSU-AMU partnership of USIEF



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Abstract

The Ohio State University (OSU) received in 2013 a high-proce Obama-Singh 21st Century Knowledge Initiative award of the US India Education Foundation for "THE STEM-FACULTY PROJECT: Training the Next Generation of STEM Faculty at Higher Education Institutions in India" during 2013-2017 in partnership with Aligarh Muslim University (AMU) in India. Under it we developed for the Ph.D. students in Indian institutions a new 2-year long dual degree program, MEd-STEM (Masters of Education with specialization in STEM subjects) that involves all STEM (Science, Technology, Engineering, Mathematics) Departments and the college of Education at OSU. Information of the project can be found at <http://www.astronomy.ohio-state.edu/nahar/obama-singh.html> This novel pilot program, the rst of its kind, provides two types of training, i) learning the world class teaching skill for undergraduate students, ii) experience and carry out cutting edge research in STEM elds with an OSU advisor which will become a part of the Ph.D. thesis. Both parts carry equal number of credit hours. OSU provided considerable additional funding to support the program. Two male and two female graduate students of AMU were selected for equal opportunity. The program started with OSU live classes via distant learning to a smart classroom at AMU during summer 2014 before the students arrived to OSU in Fall 2014. After completion of one academic year of courses and research the students returned to AMU for second year of the program when they taught undergraduate class for Field Experience credit hours, carried out research in their STEM elds and on an education project. I will present as the overseeing research advisor the successful aspect of research experience of the students and the enriched breadth of research of one student who worked with me. I will also present the progress of our extension program for the research experience for a new batch of four AMU students.

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