## For Immediate Release



# AUB international conference on math and science education: Teachers should be proactive in class

Beirut, Lebanon- 05/04/2012 - Lack of resources in the classroom have put Lebanon below the international average in math and science, but teachers have the power to make a difference, said professors of science education at AUB's annual science and math conference.

"Things are not well in science in the Arab world and we need to change the system, which is an incredibly hard thing to do in this part of the world. Do not wait for the system to change," said AUB alumnus and professor of science education Fouad Abd-EI-Khalick from the University of Illinois at Urbana-Champaign, in his keynote speech at the 14<sup>th</sup> annual Science and Math Educators' Conference (SMEC).

Associate Dean of Arts and Sciences John Meloy and AUB Provost Ahmad Dallal agreed that SMEC continues to be an important annual event in Lebanon, with over 500 educators and researchers from the Arab region and abroad coming together to share intellectual ideas in an active learning environment and through professional development activities; participants have the opportunity to benefit from exposure to new techniques and new materials that can improve their performance and their students' performance.

"Only a small minority of Arab students seem to have the aptitude and perceived ability to elect to pursue a future in science," said Abd-El-Khalick.

According to him, the United States dedicates about 40 percent of the entire world's budget on science and engineering education and development, attracting global talent to run its scientific enterprise. Only 20 percent of college students in the Arab region compared to 28 percent in the US and 47 percent in China want to major in science, technology, engineering, and math education

However, Abd-EI-Khalick stressed that schools can make a difference. He proposed teambased learning, which he implements in his own classroom through the scientific method, having students build theories, make observations, test the idea, share them with their fellow students, and get feedback through peer review, thus engaging students to become their own learning community.

"It all starts with you," he said. "A lot of small changes will make a difference for the thousands of students you teach."

In his keynote speech, Mogens Allan Niss, professor of mathematics and mathematics education at Roskilde University (RUC), Denmark, overviewed the curriculum he had created for his government.

"Mathematics teachers have a key role to play if the teaching of mathematics is to pursue the development of mathematical mastery," noted Niss in a recently published paper on math education that explained the importance of the competencies of both students and teachers, their ability to communicate, reason, problem solve, use critical thinking, and utilize teaching aids to their advantage.

Marjorie Henningsen, principal of Wellspring Learning Community in Mathaf, called on teachers to consider themselves as researchers in the classrooms, identifying tools and methods that help them improve their teaching techniques and immediately implementing changes whenever needed.

Following the speeches, the day was lined with various research sessions and developmental workshops providing teachers with information on new and creative teaching methods such as using interactive whiteboards as a teaching tool to bring enthusiastic teaching and learning back into the classroom.

"Change happens when you change," said Abd-El-Khalick

Print distributors and publishers, Levant Distributors, Librarie Antoine, Librarie du Liban Publishers, Medilab SARL and Partner SARL exhibited their publications in the West Hall Common Room during the conference.

## **ENDS**

## For more information please contact:

Maha Al-Azar, Associate Director for Media Relations, <u>ma110@aub.edu.lb</u>, 01-353 228

## Note to Editors

## **About AUB**

Founded in 1866, the American University of Beirut bases its educational philosophy, standards, and practices on the American liberal arts model of higher education. A teaching-centered research university, AUB has more than 600 full-time faculty members and a student body of about 8,000 students. AUB currently offers more than 100 programs leading to the bachelor's, master's, MD, and PhD degrees. It provides medical education and training to students from throughout the region at its Medical Center that includes a full service 420-bed hospital.

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