

The King Hussein Foundation's Jubilee Center for Excellence in Education (JCEE) was founded in 1998, as part of the Jubilee Institute of the King Hussein Foundation, to enhance national and regional standards for education by utilizing advanced educational technology and state-of-the-art testing tools. Since its inception, the center has pioneered Robotics and introduced several STEAM (Science, Technology, Engineering, Arts, and Mathematics) programs in schools and local communities.

Today, thousands of students and teachers throughout Jordan and 11 Arab countries have been trained by JCEE's expert teams. Through JCEE's programs, students, particularly those from marginalized populations, are transformed from test-takers to avid learners as lessons are given to practical applications by connecting science and technology to daily life. Teachers also acquire skills to enhance self-learning through teamwork, increasing analytical skills, and improving research proficiency.

JCEE trains local and regional teams to participate in global STEAM competitions such as the Formula One (F1) in Schools competition. For the last 15 years, the center has also organized numerous annual national and regional competitions such as the National Robotics Competition, FIRST LEGO League, and the Arab Open Robotics Championship which it continues to do to this day. Robotics has been one of JCEE's core programs since 2004, introduced to fulfill the need for research in design, construction, operation and application of robots. The program promotes learning, innovation, and invention among youth, preparing them to become "future scientists".

Of the centers various programs are Great Exploration in Math and Science (GEMS) - a leading resource for innovative science, After Schools Kids Math (ASKM)- a mathematics enrichment program, and After School Kids Science (ASKS) -an inquiry-based science education program for grades 3-5. These three programs were developed by the Lawrence Hall of Science, University of Berkeley of which the JCEE has been a partner, distributing these programs in Jordan, since 2004 and 2011 respectively.

All of these activities and events promote students' creative problem-solving skills by finding solutions for challenges and obstacles in their communities, countries and the world at large, including climate change, renewable energy, food production and physical impediments.

Since 2009 the JCEE has extended its work to embrace aspiring youth who are seeking a safe haven in Jordan. In partnership with the UNHCR, young refugees from Syria, Iraq, Yemen and Sudan are granted higher education scholarships at Jordanian universities through the DAFI scholarship program. These students also receive well-being and life skills support programs that enhance their quality of life. The young scholars are provided with the opportunity to lead fulfilled and dignified lives both in Jordan and their country of origin. Inclusion and equal opportunities are also fundamental to the JCEE programs. Female participation in all activities exceeds 50%, encouraging female engagement to seek future careers in science and technology fields.

In 2015, funded by the United States Agency for International Development (USAID) through a 2-year grant from the USAID Civic Initiatives Support Program, the JCEE established the first STEAM center in the northern Jordanian governorate of Irbid. The center offers after-school training to students and teachers and is located in the city center with access to local transportation. It includes three training rooms and is fully equipped to meet students' needs of in-depth study of STEAM topics and is able to provide a variety of experiences across disciplines. Additionally, two STEM-equipped labs were established in two public schools in Irbid offering spaces that provide Jordanian female and male students with equal access to the highest-quality education. This achievement was part of a year-long effort to bring STEM curricula to the Irbid governorate.

An independent assessment was conducted in 2017, to investigate the effectiveness of the JCEE STEM USAID funded program in Irbid. Major findings included the improvement of the academic achievements of students who participated in the project, teachers indicated that integrating interactive, project-based teaching methodologies and techniques was a source of confidence and empowerment to their teaching approaches, and a key factor in turning lessons into stimulating learning experiences.

Building on this success, the JCEE was granted additional funds from USAID in 2018 to continue the provision of services at the center in Irbid, in addition to developing a novel STEM curriculum in Braille, and set up a special lab at the Abdullah Ben Maktoum Academy for the Visually Impaired that provides comprehensive educational classes to visually impaired youth from all over Jordan. To further improve inclusion in education, a specially trained team from JCEE pioneered a STEM program for hearing-impaired students at Al Amal public school in Amman.

In 2017, the JCEE also received a grant from the US. Embassy to implement a Mobile Makerspace project in Irbid. The project "Ask, Imagine, Create, and Improve" Program included training of hundreds of teachers and students on Robotics, Intelligent Electronics, and GEMS (Great Explorations in Math & Science).

To date, the JCEE continues to reach out and promote STEM programs through introducing students and teachers to innovative technology, knowledge, skills and attitudes necessary for the evolving requirements of the competitive global labor market.