

Activating the role of the Children University-Fayoum University in supporting STEM Education in the light of the "National Strategy for Science, Technology and Innovation 2030 " (STI-EGY 2030) and the experience of United States of America & Australia.

Abstract:

Children's University (CU) emerged as a type of informal education for children in the field of science education and many disciplines sponsored by university institutions, and is offered to children from 5 to 18 years old; To provide high-quality, innovative and exciting learning experiences outside of the regular school day, on weekends and summer holidays; It is a means designed to enhance the learning of schoolchildren and raise achievement in the areas of the curricula, especially science of all kinds. With pleasure it is stored longer in long-term memory and can be used more efficiently and more creatively; By allowing young children to enjoy university facilities and practice scientific activities, their motivation to learn increases. The philosophy behind the establishment of children's universities internationally is to encourage children to think critically and be curious about science, introduce them to universities, increase their awareness of academic culture, and provide them with guidance in their future preferences. It is so popular in the world that independent assessments conducted by the University of Cambridge have shown that Children's University makes a difference to children's learning and achievement, in and out of school.

The "Child University" program was launched in Egypt - adopted by the Academy of Scientific Research and Technology (member of the European Network for the Child University) - in 2014 as a national project in the field of informal creative education for science, discovering and embracing distinguished children in the early stages of education, spreading practical culture and creating an environment Stimulating scientific research, innovation, and the development of new and innovative ways of education. One of the most important goals of the Child University in Egypt is to ensure that all educational activities of high quality are available to every child free of charge, regardless of his social background, and in successful partnership with Egyptian public and private universities. Fayoum University was one of the first public universities in The Children's University program was adopted in 2015, which is a glimmer of hope in supporting the technological and scientific skills of the children of Fayoum Governorate.

Although the Children's University program in many countries of the world centers its primary mission on guiding children and youth to future professions and jobs based on STEM skills, this role is still marred by many obstacles in Egypt in general - and Fayoum in particular; It lacks more attention, especially with regard to community awareness on the part of civil society institutions, parents, and the university community, in addition to the fact that the activities carried out by children are still of a theoretical nature to a large extent, as well as the degree of participation of industrial community institutions as learning destinations. Scarcely

Accordingly, the current research proceeded according to the following steps:

(1)(research methodology); It included (Introduction, Problem, Objectives, Importance, Limits, Terminology, Previous Studies), (2) Contemporary educational literature dealt with the role of Children's University in supporting STEM education, (3) Presentation of some features of the American and Australian experiences in the role of Children's University in supporting STEM education In light of the cultural and societal forces and factors affecting each of them, (4) standing on the most important features of the Children's University at Fayoum University in supporting STEM education in the light of the National Strategy for Science, Technology and Innovation 2030 and some influencing cultural and societal forces and factors, (5) conducting a comparative analysis to identify similarities And the difference between the United States of America, Australia and Egypt in light of the forces and cultural and societal factors affecting each of them, (6) Developing a proposed vision to activate the role of the University of the Child at Fayoum University in supporting STEM education in the light of benefiting from the experiences of the United States of America and Australia in line with the requirements of the National Science Strategy Technology and innovation 2030.

key words : Child University, STEM Education, America, Australia, Egypt.