

Abstract: A comparative study of some of the applications of the environmental theory of science, technology, engineering and mathematics (STEM) in kindergartens and elementary schools in the United States and Australia and the possibility of benefiting from them in the Arab Republic of Egypt

Preparation

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The study problem is identified by answering the following question

How can some of the applications of ecosystem theory be used in learning STEM in kindergarten and primary school in the Arab Republic of Egypt in the light of foreign experiences?

The study deals with some of the applications of ecosystem in learning of science, technology, engineering and mathematics (STEM) in kindergarten and primary education in the United States and Australia in terms of policies and legislation, informal learning, programs and teachers.

The study seeks to present suggested procedures to benefit from the application of the theory of ecosystems in learning STEM in kindergarten and primary school in the Arab Republic of Egypt.

To achieve this objective, the study applies the comparative method following the introduction of G.Beredy Bearday according to the following steps:

The first step: Providing a theoretical framework on STEM education in kindergarten and primary school, policies, programs and teachers, and the theory of ecosystems and their applications in STEM learning.

Step 2: Describing the applications of ecosystem theory to STEM learning in kindergarten and primary education in the USA and Australia.

Step 3: Learning about the Egyptian efforts in STEM Education.

Step 4: Developing suggested procedures for utilizing the applications of the ecosystem theory in STEM learning in kindergarten and primary school in the Arab Republic of Egypt.