Unitar Online Catalogue

CIFAL Istanbul- Science, Technology, Engineering, Art, Math (STEAM) + A Method

Population

Type:	Conference
Emplacement:	Web-based
Date:	1 jan 2020 to 15 nov 2020
Durée:	12 Months
Zone du programme:	Decentralize Cooperation Programme
Site internet:	http://cifalistanbul.org
Prix:	0.00 $US
Personne de référence de l'évenement:	ahmet.aydemir@eas.bau.edu.tr
Partenariat:	Fulford Academy in Brockville

ARRIÈRE PLAN

At Fulford Academy, integrating the concept of STEM+A into the school's curriculum demonstrates to students that concepts and content need not be learned in "silos," but should be combined and implemented into real-life scenarios that require creative problem solving.

Fulford’s approach to STEM+A is as a transdisciplinary method, meaning that it combines "the collective expertise from many disciplines to pose and solve problems in a manner which foregrounds the problem, not the discipline". Students shift their focus to the problem and attack it however they see fit, bringing subject knowledge from any discipline to bear. STEM+A thereby represents a holistic approach to both the content and the student, requiring interdisciplinarity, creativity, authentic or real-world learning, and project-centered thinking”.

When introducing problems that are to be addressed using STEM+A approaches, Fulford Academy teachers use the Stanford “d.school” design model, which assists in creating a planning framework, as it tells users to Empathize, Define, Ideate, Prototype, and Test. Not only does this help students to plan their approach to a given problem, but it also assists faculty in planning, "providing structure for uncertain teachers to develop more creative and interdisciplinary practices”.

STEM+A provides Fulford teachers with an avenue to integrate subject areas and create engaging lessons; students investigate real-world issues and create authentic products and solutions, realizing the power they have to effect change. Students develop empathy and understanding for the plights of others, and their collaboration skills improve dramatically.

OBJECTIFS DE L'ÉVÉNEMENT

This event aims to promote the STEM + A method to students with the objetive to design projects that foster a “solution-oriented, innovative mindset” focused on the SDGs.

CONTENU ET STRUCTURE

The event covers the following topics:

- Introduction of problem
- Review of Design Thinking principles
- Group brainstorming session to Empathize with stakeholders, define problems, and Ideate potential solutions
- Sessions for building Prototypes and Testing

- Group reflection and brainstorming to identify issues, shortcomings, and obstacles

AUDIENCE VISÉE

Students from all over the world from grade 6 - 12