Cooperation for the promotion of Social Innovation

ATLANTIC SOCIAL LAB
STUDY VISIT REPORT - STUDY VISITS HELD IN CORK CITY

A. GENERAL INFORMATION

Date	27 – 03 – 2019	**Location:**	Cork City
Name	STEAM Education Limited		
Legal Status	Company for Profit		
Contact Details	Responsible: Alice D'Arcy Email: info@steam-ed.ie Phone no.: +353 (0)214205437 Website: www.steam-ed.ie		

B. SHORT DESCRIPTION

Objectives *(identify the main goals of the project and target groups addressed)*	The main objective of the company is to inspire kids to "love" the STEAM subjects – Science, Technology, Engineering, Maths and Art. Secondly. According to the members of the STEAM Education[1], there is a shortage of highly qualified graduates in the STEAM fields, so their logic is to create an interest in these subjects. The interest in these subjects should be created early enough to "get in" before the children have had negative experiences of these subjects. Thus, the STEAM Education main public/target is the primary school. Briefly, the company has in its core the mission of developing a sustainable model to plug the gap in the market for appropriate, innovative, commercially viable solutions for the thematic areas of Science, Technology, Engineering, Maths and Art.
Methodology *(identify the methodological principles, mode of operation and level of intervention)*	The company is made up of a group of individuals passionate about STEAM subjects. The main mode of operation was to bring together individuals from backgrounds in industry, academia and youth education to address the serious gaps which exist in these areas of the education system, including the widening shortfall of highly qualified STEAM graduates, and in particular, graduates who can think both critically and creatively. The level of intervention of the activity is at the moment local and regional but the company is heading to reach national and international levels. As stated earlier, the vision of STEAM Education is to inspire children to love STEAM subjects and to become the future generation of Scientists, Technologists, Engineers, Artists and Mathematicians. The *modus operandi* used by the company to reach this purpose is by providing innovative, fun, hands-on educational programmes in these subject areas, which are delivered in primary schools using a co-teaching model. The co-teaching model is the strategic core of the initiative, that is, they "insert" real life STEAM experts from industry and academia to work with the primary school teacher with specially designed tools and content to deliver the STEAM programme and, therefore, inspiring kids.

---

[1] Photograph 1: ASL partnership attending the presentation on STEAM Education Limited

C. MAIN FINDINGS

Social Needs *(identify the social needs the organisation intends to fill)*	From its methodology, objectives and mission that guide the STEAM Education, this company intends to meet and fulfil the huge gap in the jobs market in Ireland and across the world. In other words, and according to STEAM Education worldwide STEAM education is under-funded, under-resourced with regard to specialist skills, tools and equipment, appropriate and functional curricula, and continuity of education and engagement. Consequently, the majority of the children, and indeed the society are poorly literate in these areas. Due to this lack of knowledge in the STEAM Areas, the industries manifests a shortage of suitable STEAM-enabled graduates. Thus, the social need that STEAM Education intends to fill is the "hole" in the education system in Science, Technology, Engineering, Maths and Art. Briefly, they will be able to encourage children to pursue these thematic areas filling the social need of qualified professionals in these areas and promoting a stable and well-paid job for the future.
Social Innovative Practices *(identify the main social innovative practices developed and the extent to which the work developed responds to those needs)*	Earlier in this report it has already been mentioned that the main social need the company intends to fill is the gap between the education system and the STEAM teaching. This gap will be bridged from co-teaching among teacher and STEAM education experts. They place real-life experts in primary classrooms week after week during the academic year, with specially designed tools and content for each lesson, to co-teach with the primary teacher. This innovative practice connects industry and third level institutions with schools to disseminate knowledge. The STEAM Education company currently provides three hands-on programmes to enhance and compliment the primary school curriculum. Each programme focuses on demonstrating a fundamental principle of science/engineering/maths, largely through activity-based learning. The class is provided with tools, activities, lesson plans and supporting materials specifically tailored to primary school children. The three engaging hands-on programmes are: • Science-in-a-Box[2]: This programme is a 25-week programme designed to guide 9 -13 year olds through a tour of the history of the universe, discovering the excitement and wonder of science along the way; • Engineering-in-a-Box[3]: This programme is a 10-week programme designed to guide 9 -13 year olds, providing the lesson plans, activities, materials, and training in engineering required to solve problems; • Maths-in-a-box: This programme is a 10-week programme designed to guide 9 -13 year olds that aims to lay the foundations

---

[2] Photograph 2: ASL partnership participating in a Science-in-a-Box class/activity
[3] Photograph 3: ASL partnership participating in a Science-in-a-Box class/activity

	for primary school children of a number of key mathematical principles and demonstrate how they are both relevant to and applied in real life the fields of science, technology, engineering, arts and more.
Collaboration and Networks *(identify the main connections of the organisation)*	Its collaborative network has as agents, the Cork City Council, Science and Engineering Companies; Universities; Research Centres (MAREI Centre; INSIGHT); Science Foundation Ireland; Social Enterprises.

D. MAIN CONSTRAINTS TO SUCCESS	
Challenges and Barriers *(identify the main problems that the organisation faces: financial resources, human resources, networks, innovative environment…)*	STEAM Education has not explicitly engineered any major barriers. The company only mentioned that for a business in the area of social innovation to succeed it is necessary to have time and the key people (staff and stakeholders), and there may be some "difficulty" in this matter.

E. CONCLUSIONS	
Key Concluding Lines	In conclusion, STEAM Education aims to bridge the educational gap in the thematic areas of STEAM, thereby trying to meet the demand of companies in specialized professionals in this area while trying to ensure a more promising future for children. From its co-teaching methodology, there is an inter-help between school teachers and STEAM professionals/experts, thus having a practical and fun way to get children to enjoy and learn the thematic areas of Science, Technology, Engineering, Maths and Art.
Other information considered relevant	Nothing relevant to add.

Study Visit Photos

Figure 1 - ASL partnership attending the presentation on STEAM Education Limited

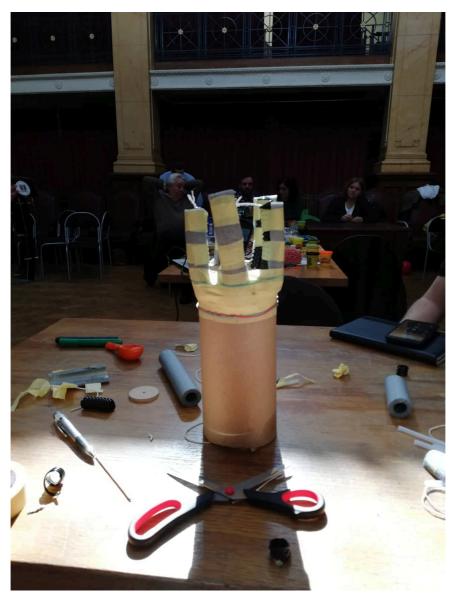*Figure 2 - ASL partnership participating in a Science-in-a-Box class/activity*

Figure 3 - Photograph 2: ASL partnership participating in a Science-in-a-Box

Partner: Centre for Social Studies of the University of Coimbra

Author(s): Fábio Sampaio and Hugo Pinto

Review: Hugo Pinto and Atlantic Social Lab Partners