Why do we learn? A public engagement project for Egyptian schools

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Commissioned by the Public Engagement division at Cambridge University, this project aims to trigger cross-generational public debate about the purpose and value of schooling, utilizing the arts as an awareness raising filter and as a platform for self expression. In this paper, I outline the rationale and relevance of the project, the role of the arts as a mediator between mathematics teachers and society as well as some preliminary findings in relation to partnership negotiations between societal stakeholders, schools and art institutes. The paper concludes with a discussion about implications of the project along with opportunities for upcoming public engagement.

Keywords: schooling; learning; microcultures; society

Introduction

The institution of schooling as it stands today has, arguably, over the years taken a shape that is very alien to the natural process of learning in the everyday setup (Berg, 2007). Prior to the institution of schooling, children used to grow up surrounded by people of different age groups. They used to learn through facing problems in their everyday lives and finding ways of resolving these. In a sense, their problem solving capability would be measured by the extent to which they could persist and overcome a challenge or hurdle they were facing (Servant-Miklos, 2019). As it stands today, the learning process is formalised. Students learn within a similar age group cohort and mathematical problem solving is taught and assessed through formal channels of curriculum and examination (Ernest, 2009). Across contexts, it is actually hard to find a common understanding about mathematical problem solving, as each instructional context seems to define problem solving in a different way (Jader, 2020).

The rationale for the project

In my attempt to explore how Egyptian mathematics teachers related to the learning construct of mathematical problem solving, the wider study, upon which this project is based, included a holistic investigation of various mathematics teacher groups across different teaching and learning socio-cultural contexts in Egypt (Makramalla, 2020). Teachers engaged in multiple activities, which in turn triggered a wider discussion about the perceived meaning of problem solving. During one of these discussions, one teacher made a particularly interesting statement, in view of problem solving integration in the daily classroom:

> "Of course, I would like my students to learn problem solving skills But the society does not seem to view this [the teaching and learning of mathematical problem solving] as the core value of why the school exists. Extra curricular centres offer activities for this sort of thing. As far as the parent is concerned, the school is a centre for certification not a learning hub."

As a result of this conversation, I felt strongly compelled to call for a public engagement project that would challenge the societal perception of the role and value of schooling, particularly in the national schooling compulsory education sector in Egypt (i.e. guided by the national mathematics curriculum and extending between year 1 and year 9).

In the following, I start by presenting the project at a glance. Building on this holistic presentation, I then zoom into the embodiment dimension of the project, arguing for why I chose the arts as a platform for embodying this wider societal debate. I then present ongoing partnership negotiations with schools and art councils, highlighting challenges of buy in and implementation. Finally, I conclude by noting implications of the project for the Egyptian and the wider Middle Eastern context, opportunities for transferring the project to the UK context and practical next steps.

The project at a glance

Centered around the question: "Why do we learn?", the project aims to bring together groups of teachers, parents and students in a constructive reflective debate, embodying the stereotypical cross generational opinions across different cultures of schooling (Figure 1)
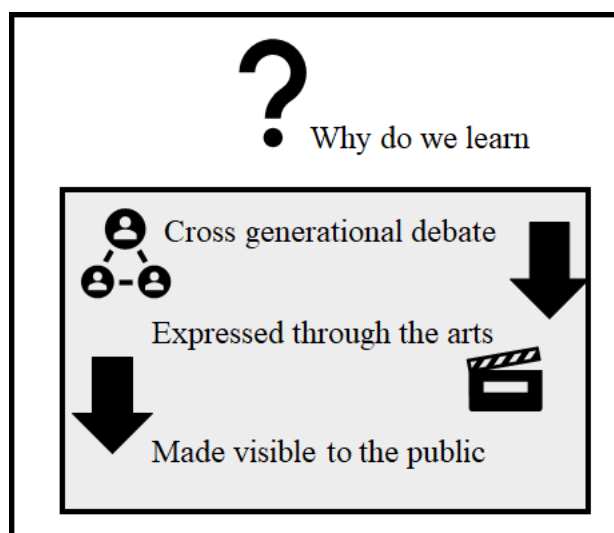

Figure 1. The project at a glance

As depicted in Figure 1, the idea is to bring together teams of parents, teachers and students within and across different schooling communities. Each team is to discuss the question; "Why do we learn" and embody their discussion in the form of a comic or a short film. A judging panel then evaluates the submitted work and winning teams are further mentored to create professional show-casting material that is made public to decision makers. Figure 2 presents the overall envisioned timeline of the project.
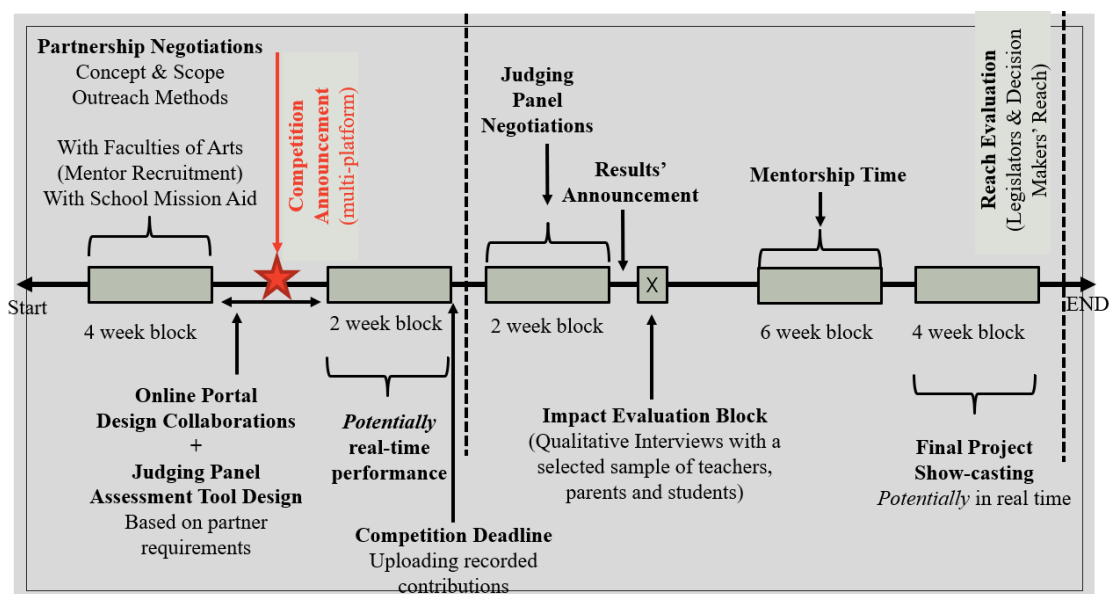
Figure 2. The project timeline

Figure 2 presents the timeline of the project. Currently, the summer season will witness a small-scale piloting of the project, focusing on three summer schools in the slums of Egypt that serve 9-12 year old children. Following that, the first round of the project is to run in the school year 2021 in collaboration with two national schools (one girls school and one boys' school) and one international school. The project will mainly cater for year 6-9 students.

The choice of the arts as an embodiment methodology

The use of the arts as an embodiment methodology is not new to the literature exploring the identity of mathematics educators and learners (White & Lemieux, 2015). It is argued, that the methodology of using the arts as an intermediate filtration layer allows teachers and students the freedom to express subtle and vulnerable opinions that would not be expressed in more confrontational setups.

Furthermore, the artifact that comes out of this productive cross generational debate can be used as a trigger for public debate and as a tool to refurbish the bridge between practitioners and decision makers (Curtis, 2011). The artefact becomes a medium that communicates to decision makers, where practitioners currently stand.

Partnership Negotiations

Figure 2 presented the timeline for the project. As emphasized in Figure 2, partnerships were necessary in order to facilitate reach, quality and visibility of the project. For the scope of this project, partnerships were necessary with:
- School governing organisations, to recruit the participating schools
- Media and production centres, to cater for the mentorship period
- Cultural centres, for show-casting purposes
- IT Support Centres to transfer the project to an online portal
- Individual artists and educational consultants, to be recruited to the judging panel

In the following, I discuss briefly, challenges and opportunities in relation to each partnership negotiation. I believe, that the degree of buy in is illustrative of the various societal stakeholder awareness of the relevance of this project.

School governing organisations

Across the geographical topology of national schooling in Egypt and across the socio-cultural spectrum of national schooling micro-cultures, partnerships were sought with institutions that govern school clusters, in an attempt to have a varied representation of societal stakeholders. Across the schools, the main challenge seemed to be that the project was perceived as an arts project. The arts dimension of the project was not perceived as embodying a wider societal debate but rather as a target in itself. Much awareness is yet needed to make clear to schooling stakeholders, their role in their stationed societies and the role of the arts as a means for them to take up this role.

Media production centres and cultural centres

Negotiations with different potential providers revealed the willingness and the zeal of this group of stakeholders to become active players in raising awareness to the societal debate embodied in the question: "Why do we learn?".

As stated by the programme manager of the Jesuits Arts Cultural Centre: "As cultural centres, we long to engrave in society the role of the arts as a tool for stirring public debate." Stakeholders from the arts sector emphasized the yet missing societal appreciation to the role of the arts in its multifold representation. They expressed an interest to become more active part-takers and contributors to societal debates.

The same was true for negotiations with individuals, who were recruited to be part of the judging panel. Artists, scholars, educators, practitioners and individuals from the development sector all unanimously expressed the willingness to volunteer to be on the judging panel. "I really am keen to see what these students will come up with" expressed the director of an NGO that works with schools in the public sector. Individuals, that were recruited to be part of the judging panel, generally expressed an interest in awareness raising campaigns that initiate from the educators, caregivers and learners.

Virtual Platform Arrangements

Given the COVID related restrictions, negotiations were necessary with software companies and platform developers, in order to make it possible for the project to run virtually. Though this was originally envisioned as a straightforward endeavor, the actual unfolding of the situation revealed a two-fold challenge. On the one hand, developers did not seem familiar with the idea of a cultural activity serving an educational purpose to exist virtually. The ethos of the project and its virtual embodiment required months of explanation in order for it to be materialised. On the other hand, educators did not all seem to be digitally literate. This called for further training in order to familiarise the school representatives with the idea of using a portal for purposes of student engagement.

Implications of the project

Despite the fact, that the project has not yet fully materialised, I believe that the reported journey is still worth reflecting on. The various partnership negotiations revealed implications about: the lack of readiness of many schools to embrace their roles as change agents in society, the unfulfilled endeavor of cultural stakeholders to become key players in raising awareness about societal challenges and the lagging digital inclusion for many educators.

These three factors are worth exploring across contexts, in an attempt to unpack the role that each of the aforementioned stakeholders play in establishing the value for schooling in a given society. In a recent conversation with the governing body of low-income schools, the project manager made the following note: "I think that if this project were to be adopted in the UK, most likely the short films and the art works that the students would come up with would be quite similar. Yet the difference lies in the sense of ownership. The sense of ownership of a school in wanting to support such a project".

Practical next steps

The current status includes a school engagement strategy that will most likely recruit eight national schools and one international school across the geographical and socio-cultural landscape of schooling. Schools should start getting involved with the project starting October 2021. In the summer of 2021, the project is to be piloted at a small scale.

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