

STEM (Science, Engineering, Technology, and Math) have been crucial content areas for the year 2018 and beyond (Matthews et al, 2017). Thus, STEM professionals, and the educators who train them, have been identified as some of the most needed people in the workforce and, inevitably, one might argue that this calls for STEM training in the classroom as well in order to train these individuals (Sandifer, 1997). However, educational opportunities in STEM learning for many individual students are hindered by lack of access, ranging from financial to location of these opportunities. These issues affecting underserved students are a part of the challenges with STEM education in urban schools, often even if these students live in a location close to the museums such as the campus in Chicago, home to some of the world's largest museums). Another example is the 'tech corridor' within Austin-Houston in Texas, where a growing number of STEM professionals are moving, but a large opportunity gap exists among public school students who live in that urban region with regard to their access to opportunities to learn math and science (Fuller, 2009).

STEM educational activities are not the only resource that assists students in their growth within science education and careers. Giving students both mentorship and leadership opportunities supports their engagement in subjects and academic growth (Howden, 2012). By giving students the opportunity to engage in leadership activities at the museum, students are also given the chance to grow and feel confident and mature in their responsibilities. Additionally, by allowing them to try hands-on science activities in a self-directed manner, they are allowed to engage with a skill set that is also expected of professionals at a post-secondary level. Finally, the emotional and personal development for students in these programs were also a part of the growth seen in these programs. The outreach into under-resourced communities for

education and enrichment has quickly become a role for museums throughout the United States (Falk, 2004). In urban centers, museums are redefining themselves as not only collections of antiquities, art, and knowledge, but also as community-oriented facilities where citizens can gather, learn, and contribute back to their own community, whether it is a local neighborhood or the greater world at large (Gledhill, 2012).

Understanding how science education, especially under the new lens of STEM education, which has become popular in the current paradigm of education, has been transformed by societal needs is an important one due to the common issue of prestige in this career track (Maltese & Tai, 2011). However, this is also a current issue within many engagements of this field, as more importance is based on the economic role of the STEM subjects and less on the holistic development of the individuals that partake in it. This is not a unique issue that has come about with the changes of education in the 21st century, but rather, the repeated experience of one that has simply evolved in response to the greater demands of social pressure and the need for both museums and other places of education for the larger audience that they reach, as detailed below in the evolution of society, as well as the forms of education that they face.

Why are degrees in science and technical fields, and pursuing subsequent careers in these fields, so important in both historical and contemporary American society, and why does personal growth play a role in their importance? We also ask what role neoliberalism may play in the development of this concept as well. As of 2018, it can be argued that these careers are the highest growing in terms of both employment and pay, especially within fields such as medicine and software engineering (Koedinger, 1997). Systemically, they are also some of the careers that attract the least amount of interest from many marginalized student bodies, including students

that are female, an ethnic minority, or of a low socioeconomic status, most often due to a lack of opportunity (Beilock et al, 2010). The rise of neoliberal methodologies in education is a common one, such as using workforce training in lieu of a classical education, which has been a recurring phenomenon in traditional education since the beginning of public education, as will be explored in further detail. With that being stated, there are still many powerful modes of quality that come out of these informal learning programs for youth, especially in a fairly nontraditional place of learning like a planetarium, where students have reflected greater senses of emotional and personal developments after participating in these types of programs.

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