

Aviation as a platform for STEM education

Parents from lower socioeconomic origins face significant challenges; the students' ambition is more to survive quote to earn money instead of pursuing a career with opportunities. Parents want to give their children the best possible future but cannot afford to develop their children's skills.

I've heard, read, and talked from and with various professional areas, particularly aviation, that talent is needed to safeguard the future, and the development of human resources.

In the aviation industry, I noticed a big call due to a perceived shortage of pilots, mechanics, and engineers. It has already come to the point when airlines entice helicopter pilots to move to fixed-wing areas to meet their deficit. I know from experience that helicopter training requires not only a passion for flying but also perseverance and a bottomless pocket.

It takes a while for a company that offers helicopter service to have an experienced helicopter pilot on board. <u>HAA</u> - a leading helicopter academy provider in the USA stated on their blog on August 2023:

"There is a substantial shortage of qualified helicopter pilots in the global industry, with a projected shortage of 61,000 pilots by 2038."

This was a very brief summary of the aviation market, but it should give you an idea of how vital it is to begin inspiring children to make the most of their lives and give technical assistance to organizations, and schools for those students who cannot afford further education.

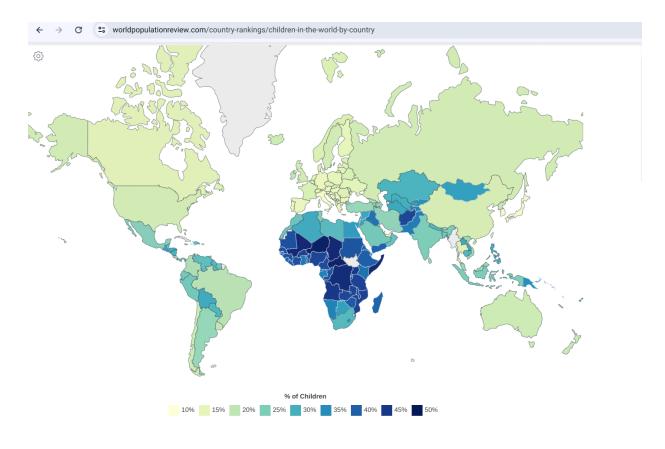
I don't want to go into depth about figures or percentages because they're confusing and easily misread.

So one figure here: *333 million (Source: UN).

This figure depicts the number of children living in extreme poverty households worldwide.

I recognize that this figure does not speak much about the current situation of a lack of people resources in academics, but do compare it to the number I obtained from the website *World Populations Review.

"In 2017, the number of children <u>under five years</u> <i>old was 681 million. This is expected to fall to 401 million in 2100."



The research article published in 2022 <u>"The Impact of Low Socioeconomic Background on a</u> <u>Child's Educational Achievement"</u> stated kids from low socioeconomic backgrounds are more focused on employment instead of pursuing their studies after completing their secondary education.

'Such students end up in unskilled or blue-collar jobs.'

Action speaks louder than words. Creating programs, like STEM, will playfully encourage kids to pursue further education and interests.

STEM stands for Science, Technology, Engineering, and Mathematics.

I am an aviation enthusiast, particularly of helicopters. When you see a helicopter land and a child nearby, look into the child's eyes; this speaks everything. Aviation is a great instrument for inspiring children to seek more for their future, open opportunities, and motivate them to pursue their careers.

Yes, all of this sounds incredibly simple and far-fetched to be true. But, I do know personally some NON-Profit organizations that took their own heart in those matters and created programs that support STEM through aviation.

I interviewed Zac Woonsam, Executive Director of Youth Inspiration Nation Inc. from California (USA) and STEM advocate, who stated:

"As parents witness their children actively engaged and excited about aviation and STEM, they become advocates for the importance of this program and in their children's education and future careers."

This interview will appear in the spring edition of the popular magazine Helicopter Life (UK) in 2024. If you are interested in knowing more about this organization's challenges and accomplishments in advocating for low-income households by delivering STEM programs through aviation, please send me a brief email.

'Supporting Science Technology Engineering Maths (STEM) initiatives and opportunities in aviation'

This quote you will read on the website of the *CAA. CAA is a Civil Aviation Authority based in the UK in Europe. The CAA has started campaigns, like 'Duke of Edinburgh's Award' or the 'Virtual Work Experience Programme' which provides children a valuable insight into the aviation and aerospace industry.

However, this is not all that CAA promotes with STEM: Quote:

'The CAA STEM site is home to **free-to-access resources** to support the teaching and learning of science, technology, engineering, and mathematics (STEM) subjects with an Aviation and Aerospace theme.'

Free resources are a significant motivator for children from low-income families, as well as their parents.

CAA is an authority and most likely has excellent access to financial resources, but many NGOs and schools require adequate financial and technical aid. There are most of the time rely on sponsors, which can be very time-consuming, and continue to battle to keep their STEM program alive.

Advocating for STEM has become globally popular but is still underfunded and underemphasized by politics.

STEM, for example, was first significantly referenced in my home nation of Austria in Europe last year too.

'The plan, announced on 6 June, includes partnering with social media influencers and other science ambassadors to promote Stem study and careers.'

Whirly-Girls International Women Helicopter Pilots is one of many non-governmental organizations (NGOs) that have developed the "Give it a Whirl" initiative to promote STEM through the instrument of aviation and to allow children to participate in active social activities rather than merely dreaming about it.

The number of children living in poverty, as well as the study I cited earlier, are just two examples of how we need to do much more to protect human resources and not only our future, but the future of generations yet to come.

*333 Million: Source: UN Link: https://news.un.org/en/story/2023/09/1140687

*World Population Review: Link: <u>https://worldpopulationreview.com/country-rankings/children-in-the-world-by-country</u>

*CAA Link https://stem.caa.co.uk/

Further links: Youth Inspiration Nation Inc Whirly-Girls International Women Helicopter Pilots