

Future of Stem Education

I stare at the historical text in front of me. The title “Over 40% of undergraduates at Stanford flock to study CS” makes me smirk a bit. The young kids had no idea what they were in for. Sure, CS degrees got you into that old company called Google to make you a cushy income to all but forget about the real world. STEM or whatever kinda degrees don’t exist anymore. It’s March 27, 2040 and degrees are now only ever mentioned in the history books. Once OpenAI automated basic human tasks, entire industries disappeared and entire workforces were laid off. Scarcity became scarce. Life became about thriving and achieving instead of just about making ends meet. The big tech companies of the day couldn’t adapt to this new world. Their successors formed the “Institute”. The original founders of the “Institute” realized it was the hard problems in the world and learning communities that would yield the greatest benefits to humanity. With this insight, the “Institute” used technology to create a scalable research system to evolve the human race

millions of years ahead. To do accomplish this, they developed a new education system.

From the day you could speak to the day you died, you would be enrolled in the Institute. An education no longer meant getting an undergrad degree, but a lifelong journey of learning. It meant getting a personalized education and picking up the fundamentals while exploring the world around you. It's pretty common for kids nowadays to pickup the foundations for algebra and calculus while trying to figure out the fastest orbital drone they can make. It's laughable now to look back and see the curriculum for a STEM degree. How arrogant they were when they thought 4 years would be enough time. Even the elders who are now over 120 years old are still continuing on their lifelong journeys of learning. Also, they return and teach to the next generation. Some of the greatest breakthroughs in the last decade have come from insights coming out of teaching and the mentor and mentee relationships formed at the Institute. In particular, education became not about what you know, but about the "softer skills". The most successful students learned how to ask the most important questions and how to connect the unrelated dots.

In this manner, research became the greatest focus for and skill for humans on Earth. The limits of human knowledge elude us. Every answered question leads to five more unanswered questions. Thus, education and work, academia and industry, blended together to pursue the endless possibilities for what we as humans can accomplish. Like an ant colony, humans add and consume tiny pieces of the global knowledge base we slowly accumulate. Growing this heterogeneous mass has become a matter of life and death for the human race. Life will disappear

from our galaxy unless we can find the answers to the questions of today. You would be surprised. There are much bigger and unexpected problems out there that no one knew about today. As a result, every “student” out there contributes to the evolution of the human race by researching and finding answers to questions they are interested in.

In the past, research was driven by a lot of personal incentives to get published and recognition. Nowadays, collaboration and teams became everything. Our education system empowers people to become domain experts in multiple fields instead of pushing people to specialize in one area like in the past with STEM degrees. Thus, the cross pollination between research efforts has led to surprising findings and has been crucial to our progress so far. Who would have thought evolving the antiquated research system in the world would have led to the greater discoveries and progress?

We are now on the edge of figuring out the answers to our unresolved question. Our education system has been crucial to our work. Fostering a lifelong education full of passion, research, and collaboration have been our greatest lessons thus far.