

ON TEACHING TECHNOLOGIES

For ITI Students based out of Jharkhand



Location: Bokaro & Jasidih

Duration: November 2018 - July 2019

OUR AIM WAS TO IMPART KNOWLEDGE ABOUT BASIC TO COMPLEX TECHNOLOGIES THROUGH WORKSHOPS



The world is changing, and quickly, with regard to technology. PCs came to India in the 1990s, cell phones became popular post 2000, and Jio is now bringing internet to entire sections of the society that had no access 3 years ago. AI is driving our Amazon searches, facebook is a threat to privacy, the google assistant is listening and answering on feature phones now, and industries are looking towards digitalization. The digital divide is getting wider by the day, with a few creating the tools and masses consuming. The CoLab team has worked on two kinds of workshops to bridge this gap - teaching high-end tech, and teaching computers.

CHALLENGE

To impart knowledge about technologies to students studying at private Industrial Training Institutes

Apart from the world growing technologically and the need to catch up with it, technology is also shaping the future of employment, with new demands being made out of potential employees, old roles diminishing to make way for new ones. In this context, the worst affected are the ones on the lesser privileged side of the digital divide.

SOLUTION

We conducted short term workshops on industrial exposure and digital technologies with ITI students which led us to develop long term workshops focused on teaching digital life skills through computers.

In 2018, we conducted an eight-hour rigorous workshop with 25 students from a private ITI in Bokaro. These were students looking for jobs and we had decided to cover three broad topics with them - soft skills (communication & conflict management), industrial exposure (included a brief about major technical industries in India and different job roles in them) and exposure to the latest technologies like 3D Printing, Artificial Intelligence, and Internet of Things. All of these were driven by the desire to help them make more educated choices about where they wanted to work, what kind of work they wanted to do, and how that industry could possibly change with emerging technologies. All of this was done in an activity oriented and group learning format.



LEARNINGS

- Latest technologies are very exciting to learn about but of little consequence for the students here. With little access to devices like 3D printers, or courses where they can learn more about these, such a short-term training is not very useful, except for a little knowledge building.
- The students requested for a 40 hour training instead. The activity oriented approach was very new to these students who are used to lecture based classes. They were infused with energy and were hungry for more. This made us believe that a digital platform where students could continue their learning would be very helpful.
- Soft skills is a major gap
- Industrial exposure was also a major gap, with students close to finishing their courses having little to no knowledge about how industries like those for steel-making, automotive manufacturing, and mining work and what kind of jobs they could take up there.

THE FUTURE OF WORKSHOPS

Keeping the above learnings in mind, we redesigned our approach to the workshop, keeping the following things in mind-

- We have narrowed our focus from advanced digital technologies to what we call the ABC of tech - computers. We believe that understanding the different ways in which one can use a PC adds to one's ability to learn online, and eventually is connected to using tools like 3D printers.
- Instead of focusing on a rigorous and one-time training, we have refocused to teaching specific aspects over a period of time, with a special focus on teaching self-learning.
- We also learned that with something as new as this, candidates seek a consistent presence, thus we are also focusing on establishing permanent centres.
- Lastly, to increase use of digital technologies for learning, we are also focusing on building a digital platform that simplifies important tools and resources for them.

So far we've conducted workshops with another set of 25 students on the basics of computers and see a lot of potential in this turning into a life-long-learning and growth opportunity.