

CIET panel - Artificial Intelligence in Education



Gurumurthy K, IT for Change

National Coalition on the Education Emergency

What is Artificial Intelligence



- analysing our past to identify patterns and benefit from that understanding
- predict learning paths and learning needs
- Needs lot of data to ‘learn’
- Needs diverse data / data from all contexts to provide ‘generalized’ support

Dangers



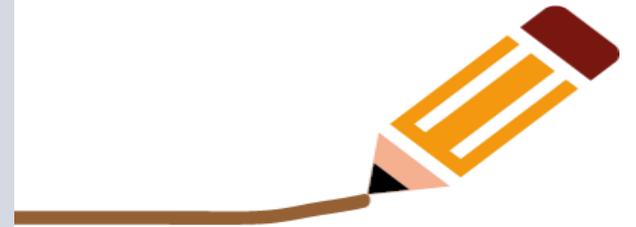
- Bias is inherent in AI
- Bias of the designer / developer
- Bias of the parameters / weights offered
- Bias in the data

Learning is a socio-cultural process (social constructivism)



- Digital technology based learning cannot provide same environment as in-person learning
- Human personalized learning v/s machine personalized learning
- The aim of education is to support teacher agency and learner agency
 - Agency means going beyond the past and striking a new future
 - AI inherently limits this

Humanized Personalization	Dehumanized Personalization
Powered by <i>humans</i>	Powered by <i>technology</i>
Connects learners through collaboration, vulnerability, and human connection	<i>Isolates</i> students through individualized tracks, competition, and cultures of shame
Uses assessment as a tool for <i>knowing learners</i>	Uses assessment to <i>compare</i> and <i>categorize</i> learners
Curates a <i>high-interest curriculum</i> that exposes learners to new and relevant topics to broaden experiences and schema	<i>Relies on interest-driven curriculum</i> , limiting learners to preferred learning topics and narrowing experiences and schema
Leverages <i>whole-group, small-group, and individualized practices</i>	Leverages technology tools that <i>individualize</i> curriculum
Understands individual learner's needs <i>in the context of the collective learning community</i>	Values individual needs <i>without considering</i> the collective learning community
Promotes <i>agency and autonomy</i> through social-emotional learning and structured choice	Limits <i>agency and autonomy</i> through automated, didactic curriculum delivered through digital technology
Uses technology to <i>preserve or enhance human connection</i>	Uses technology to <i>accelerate dissemination</i> of curriculum
<i>Considers identity, advocates for representation, and promotes equity</i>	<i>Ignores identity, limits representation, and proliferates inequity</i>



Indian context



- Education has failed to serve as a basis for socio-economic mobility
- After 70 years of independence and 35 years after NPE 86 we still have an inequitable system. Stratification has increased in both government and private schools systems
- Caste, class, gender, religion clear markers of privilege
- Occupations based on caste (and other markers) continues predominantly.

Overall AI in education has good potential to harm



- AI project should be undertaken only with clarity on the aims to be achieved by the project
- Not by ‘discovery’ - this will cause harm.
- AI in education – aim should be teacher empowerment
- Focusing directly on student will not be useful (like with all digital technologies)