

# Right Digitalization in Education?

Summary note with suggestions for action

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## Context

Digitalisation has been taking place across sectors for a while now but has gathered a lot of pace in the last couple of years, even more so during the pandemic. In the education sector, the unexpectedly long school closures increased the role of digital technologies in education with both private and public education systems attempting to provide digital education to students through different means. Several new models for integrating technology in education are emerging and in this context, it is important to bring in critical perspectives on this issue to build a deeper understanding of the benefits and harms of Ed-tech, and tease out principles that should underlie its adoption.

## Discussions

Digital Technology (EdTech) in education is not a new phenomenon and has existed for over 30 years. Although, the imaginaries that existed in the past are very different from the ones that exist now. As new imaginaries around education technology are now evolving, it is important to look at ed-tech from a socio-historical context and understand the economic, political and other interests that are driving them. It is crucial to consider and analyse questions of why we desire technology, what we expect it to do and what costs we pay in terms of time, money and effort. The suspicion that there is something wrong with schooling as a mechanism for the education of our children, that the structure we have created to foster education in schools is inadequate, is causing us to be forever in search of tweaks and tricks to “patch up” the problem.

Ed-tech is being made out to be the solution to achieve ‘outcomes’ however the necessary ‘inputs’ are being ignored, with the state abdicating its constitutional responsibility of investing in education to build the right kind of learning environment

in schools. Even today, 12 years after the implementation of the RTE act, the national average of the compliance of the minimum standards and norms prescribed in the act is just about 25%. The very understanding of policy makers and the state about building a vibrant education system is at stake. For instance, the NEP 2020 hardly makes any references to the implementation of RTE. Recognition of a “failed” education process is what is driving Ed-tech vendors to promote solutions, many of which, seen in the past few decades, have not been relevant or adequate to address the issues in education; they have been at best a “part solution of a misdiagnosed part problem”. Although, ed-tech, if used appropriately, for the right kinds of problems and if designed keeping education first and technology next, has enormous potential. The discourse on education and Ed-tech cannot happen in isolation from each other – the purpose, aims and the role of education as a process of socialisation, social transformation and a way to deepen democracy needs to be understood and made central to the whole discourse.

Earlier, ed-tech was looked at as a way to aid teaching in the classroom and not substitute the way a teacher engages in the teaching-learning process, but now we're heading that way. There has been an increased emphasis on ‘personalised learning’ which poses a host of challenges. Lack of alignment with the aims of education, attempts to bypass the teacher, lack of regulation of data collection and privacy, learnification, endangerment of teacher and student autonomy, manipulative algorithms that may push education towards “radical behaviourism”, ownership by big-tech, possibilities of techno-determinism driving education, are some of the key issues peculiar to AI, ML based technology. While in the past there have been waves of technologies promising transformation and we have seen that they did not really make any real impact on education, the current wave of digital technologies driven by AI, ML cannot be ignored and dismissed as not being capable of bearing impacts on education, especially negatively, because the digital is a medium that is capable of doing large scale damage. The harms of digital technology use in education would be aggravated if designed in a centralized manner. Creating infrastructure and administrative reforms of a centralised nature will not give any possibilities of mitigation or relapse. Therefore, it is crucial to understand the political aspects of the digital medium, recognise the threats it poses, linked with the larger trends of inequality and concentration of power, build strength in the system to evaluate educational technology at all levels and argue for software and content licenses that empower teachers and learners in ed-tech programs.

In the current context, ed-tech is following principles of “shock doctrine”, ruining educational access and attempting to fleece middle class and poor families. We are at a historically significant time when there is popular sentiment against the false claims of ed-tech companies and shared trauma of online learning, a desire for change and certain receptivity on the part of policy makers to the idea that certain steps need to be taken. Therefore, we need to act now.

## **What is needed**

1. Education technology needs to be looked at comprehensively, to evaluate and identify how tech should enable teaching-learning processes, curriculum design and development, teacher development, etc.
2. Teachers should be empowered to interpret and have a critical understanding of Ed-tech. For this, media literacy is a must and discussions amongst teachers on what tech means, how do they own tech, how do they take it to classrooms, needs to be prioritised.
3. Comprehensive assessment of the effects and impacts of newer technologies on technological, pedagogical, political, and economic fronts is required to be done and widely shared
4. Using open standards and free and open software is essential as a means to politically resist centralised monopolies within the digital space. Decentralisation and diversity can be built into the system only with the use of public, community owned software and keeping out proprietary big-tech.
5. It should be required that digital tech experiments should not be on a large scale but in small sections so as to ensure power at the local level (large scale projects also have potential for large scale harm)
6. Participatory governance of ed-tech (by having representatives of teachers, parents and civil society representatives) to ensure that the way it is being implemented is in the best interest of students and not those of the management of ed-tech companies and technocrats is necessary.
7. Entities (students, teachers & school systems) must co-own AI that is produced from their data, co-shape the functioning of algorithms and be able to decide and direct its use.

## **Principles:**

1. Education first and technology next – Aims and purposes of education to be central to ed-tech discourse
2. Teacher as a mediator and interpreter of technology and not just a consumer – Technology must not bypass the teacher

3. Distributed and decentralised technology infrastructure enabled by use of FOSS and open licenses - Keeping out proprietary big tech as drivers of ed-tech
4. Where and how to use technology, and to what extent determined by assessment of technology, its potential for benefit and harm, by the system
5. Community ownership of technologies - Entities who are subject to rules of platforms must co-shape those rules and be able to decide and direct its use

### **Further steps:**

1. Form a network of individuals and organisations to collaborate and engage in discourse concerning Ed-tech (Immediately we plan to setup a Telegram group 'EdTech India Watch' for this network and encourage all those who participated in the meeting on 23<sup>rd</sup> to join this group, as well as share this group invite with others who may be interested)
2. Research on Ed-tech programs planned and underway in different states. (this will include desk research on EdTech programs, collaborations, government schemes and procurements, as well as field research to understand and assess impact of EdTech programs)
3. Develop a framework for assessment of Ed-tech products and services taking into account technological, pedagogical, political, economic parameters (This can be collaboratively evolved by EdTech India Watch)
4. Advocacy to build awareness on the implications of Ed-tech on students, teachers and school systems
5. Advocacy arguing the kinds of software and licenses that must go into Ed-tech programs, to determine aspects of ownership, custody and control over digital resources - infrastructure, software, content and data
6. Research and advocacy to counter the idea that public system is broken and EdTech is the solution. Emphasize the need to significantly increase public investment in education and support decentralized decisions on procuring infrastructure and services
7. Provide inputs to governments for Ed-tech policy and regulatory framework and make a push for governments to steer clear of proprietary big-tech and focus on public, community owned software. Prepare a roadmap to in this regard, engage with policymakers