RETHINKING TEACHING AND LEARNING IN THE DIGITAL AGE

Dr. Ruth Z Hauzel Assistant Professor, Department of English, GITAM University, Hyderabad

Abstract
The digital revolution is transforming the economy and society. While this revolution brings about new opportunities for improving the human condition, they also introduce new challenges, especially in education. There is a risk of creating divisions regarding access to technology and its benefits. It also increases the need for additional technical and soft skills in the labor market to participate in society fully. There's no denying that the digital revolution brings learning into every classroom and allows for more open and rapid communication between teachers and students. These challenges necessitated the need to look at our current educational system's role in terms of content, materials, and delivery method to prepare students for the labor market and be responsible citizens.
Keywords: digital age, teaching, learning, classroom, skills

Introduction

The field of education is witnessing a revolution right now. All the gadgets we use today are changing the way we think about teaching and learning. Today, with new technologies all around us, children of all ages are exposed to different technology, from video games to simulations in the classrooms. In western countries, there are opportunities for students to take online courses at high schools and colleges, and adults are managing their professional lives through social networks and online learning environments. In India, we have MOOCs, which is slowly becoming an essential part of the learning environment. Owing to all these, rethinking of the education system in the digital age should be a priority for today's policymakers. It is believed that only education can prepare a qualified workforce for future occupations and a changing labour market. Also, only education can create the preconditions for social inclusion and equal engagement in a digitalized democracy for the citizens. As a result, rethinking education in the digital age is a requirement for future global competitiveness and critical for preserving the values like equality, democracy, and the rule of law.

Understanding the Current Situation

Students, teachers, and parents face numerous obstacles today in India's educational system due to technology. While students face learning barriers, technology concerns, and unequal possibilities for self-learning, teachers are lacking in the abilities needed to prepare pupils to face the challenges of the twenty-first century. Adding to all these, parents are finding it challenging to meet the demands of today's educational requirement. Currently, schools are set up on industrial lines, encouraging rote learning, where students are expected to master the same subjects and are graded based on predetermined criteria. This situation is indicative of a factory mentality. A paradigm change in the teaching-learning domain is urgently required keeping in mind the demands of the current situation.

With the protracted absence of synchronous (in-class) learning, even for children who can manage to come to school, and restricted availability of asynchronous learning (apps/content/recorded lectures, etc.) due to the present epidemic, learning has become even more difficult. The pandemic has brought to light the flaws in our current educational delivery methods. Lockdowns, physical separation, and restricted travel have all impacted school, college, and university education worldwide. Nonetheless, the pandemic represents an opportunity. Forward-thinking educational institutions are paving new paths by reimagining their delivery approaches. New technologies open up new learning options that challenge traditional school and college procedures. Thanks to these new learning technologies, people of all ages now have the opportunities to pursue learning on their terms. Today, education is not confined to the classrooms as homes, libraries and offices have transformed into a place for learning as one can choose where, when, and how they want to study.

Despite the rapid adoption of digital technology, the mismatch in required digital skills between education and industry continues to be a problem for the future of work. Some people are ill-equipped to succeed in careers that require at least a basic set of digital skills. As a result of rapid technological innovation, traditional and developing learning deficits might put people at higher socioeconomic risk by widening gaps and increasing unemployment. At the same time, getting an education does not

ensure meaningful learning. Furthermore, providing successful education in today's fast-paced environment includes growing cognitive knowledge and developing emotional and social abilities.

Looking Beyond Information

People automatically associate technology with education when they think of education and learning. People can transfer, read, represent, and change data in a variety of ways using computers. Education and technology are both tied to information, thus the two seem natural together. During the last fifty years, psychologists and educational academics have realised that learning is more than merely the transmission of knowledge, building on Jean Piaget's landmark work. Learning is an active process where people develop understandings and awareness of the world and things around through investigation, experimenting, conversation, and reflection, rather than a passive process in which academics dump material into students' heads.

Rethinking How We Learn.

We need to start from the ground up and restructure educational classrooms. The redesign could be aided by a more entrepreneurial approach to learning, rather than a centrally controlled strategy - a teacher providing content to students in a classroom. If the teacher serves as a consultant rather than the chief executive, students will become more active and independent learners. We should focus on cross-disciplinary topics and projects that allow us to take use of the rich links across diverse areas of knowledge rather than partitioning the curriculum into distinct disciplines (math, science, social studies, language). Instead of segregating children into age groups, we should encourage them to participate and share and learn from one another (and learn by teaching one another). Students should be encouraged to focus on tasks for extended periods of time rather than breaking the school day into hour-long chunks, allowing them to thoroughly and effectively follow through on ideas that arise from their work.

Rethinking What We Learn

Today, much of what students learn in school has been created for the paper-and-pencil age. Curricula must be updated to match the digital age and schools must equip students with the new skills and ideas necessary to live and work in a digital world. Another, less visible issue is that new technologies are altering what children should study and can learn. As it is difficult to teach and learn using only paper, pencil, books, and a chalkboard, many important ideas and topics have long been missed in standard school curriculum. Because of the imaginative use of modern digital technologies, some of these concepts are now available.

Students, for example, can now examine the workings of numerous environmental systems in previously unimaginable ways using computer simulations. Some topics that were previously only taught in academic contexts could have been learned far sooner. Finally, and probably most crucially, the curriculum should emphasise "methods for learning what you don't know" rather than "things to know." It is believed that learning to become a better learner is more important than simply memorizing global capital or multiply fractions as new technologies continue to increase the pace of change in many facets of our lives.

Rethinking When and Where People Learn.

The majority of educational reform efforts presume that learning occurs only between the ages of six and eighteen during school hours. On the other hand, schools are just one component of a larger learning ecosystem. Learning may become a daylong and lifetime endeavour in the digital era. In schools, at home, and in the community, education should try to extend learning opportunities. The Ministries of Education and Business and Industry in Denmark, for example, collaborated to form Learning Facility Denmark. This new research centre looks at learning in many settings and stages of life. The Internet will provide new learning opportunities in the coming years by allowing the creation of new forms of "knowledge-building communities" where children (and adults) from all over the world work on projects and learn from one another.

Towards a More Creative Society

The shift from the "Industrial Society" to the "Information Society" was widely debated in the 1980s. Natural resources and industrialization would no longer be the driving forces behind our economies and civilizations. The new king was information and the term "Knowledge Society" gained popularity in the 1990s. It was realized then that information alone would not be sufficient to effect significant

change. What mattered was how people transformed information into knowledge and dealt with it. The focus on the transfer from information to knowledge is a positive step forward.

Digital technologies have highlighted the value of creative thinking in many aspects of lives and provided techniques to develop and redefine ourselves. Computing and communications technologies are fueling a new entrepreneurial mindset around the world, resulting in new goods and services as well as greater productivity. It is more crucial than ever before to have a well-educated and creative population. In this transition to the Creative Society, children should play a critical role. Childhood is a time in our life when we are at our most imaginative.

To enable childhood imagination to last a lifetime, we must ensure that children's creativity is nurtured and developed, as well as that they are supported in learning how to broaden and polish their abilities. To attain these aims, new methods to education and learning, as well as new types of technology to support those approaches, will be required. The main goal is to create a community of forward-thinking people who are constantly looking for ways to improve themselves and their communities.

Learning Outside of the Classroom

Living and working in today's society necessitates teamwork, innovation, problem solving, and dealing with uncertainty; education should cultivate skills that equip learners with meaningful and effective lives in such a world. However, very often schools offer just the opposite. Despite the growing number of distinctive interests and passions, curricula and mandated evaluations have acted as a conservative force against them, highlighting the importance of everyone learning the same subject with the same standards at the same time. Similarly, the education elite and policy makers have attempted to control what students learn by prescribing the school curriculum. The ever-growing amount of non-mainstream knowledge exposes a disconnect between our current environment and traditional schooling, which focuses on a narrow range of abilities.

When evaluating the direction of learning across a lifetime, one result of digitalization is that we must decide which jobs should be left to trained human brains and collaboration among varied human minds, and which duties may and must be taken over or supported using technical artefacts. The ability stems from information that is meaningful, relevant to the lives of people and pertinent to the work at hand in today's information-rich society. We also argue further down that digitalization has had such a significant impact on how individuals learn and know outside of school that schools are gradually becoming outdated in their current configuration.

According to research on everyday cognition (National Research Council, 2009), There are significant distinctions between formal learning in schools and informal learning in real-world situations. Individual cognition, memorization, and learning broad facts are typically emphasised in schools, yet learning in the real world demands the utilisation of shared resources, tools and external information sources, as well as situation-specific knowledge. In turn, individualised and contextual demands give a foundation for thinking about learning as a long-term process. Systemic difficulties, on the other hand, demand a higher level of expertise than any one person can provide, since the knowledge required to formulate or address these challenges is frequently scattered across contributors from diverse professions.

Development of Technologies to Transforming Cultures

Moving away from a school-centric view of learning allows for a better understanding of learning in a variety of settings. Home schooling, learning from the workplace, remote learning, adult education has all become increasingly popular, creating the framework for some new educational systems. Research on cognition stated that there are major differences between formal learning in schools and informal learning in practical environments (National- Research-Council, 2009). Information and communication technology has opened up new possibilities for reimaging and rethinking learning, instruction, and collaboration. While technology does not dictate social structure or change in human behaviour, it may influence and encourage changes in many aspects of human life and activity at the personal, social, and community levels. Identifying future-relevant knowledge is thus partially a question of anticipating future knowledge usage, but it is also a question of how education is supposed to function as a social component.

The goal and educational narrative must be reinforced on a frequent basis. Individual abilities are becoming increasingly important, given the contemporary emphasis on individual performance. And if we don't know where we're going, it's futile to participate in transformational attempts to enhance

education; there's no right way to get there if we don't know where we're going. Do we still want to teach children in these areas, considering that machines will exceed humans in many ways? If so, why? We may concentrate on social, perceptual, and creative qualities rather than cerebral abilities. As a result, our present evaluation, measurement, and testing systems, as well as teachers' roles sandwiched between public-private sector test data mediations and faced a whole new set of issues (Ratner et al., 2019).

Culture, not isolated technology, is the constant backdrop for human development (Bruner, 1996). For gain new goals and empower learners, innovative technology advances are necessary, but not sufficient. New digital technologies enable a shift in learning culture, but do not, however, promise it. Many of the new technology utilised today are just reinforcing established teaching practises. Even though scientific and technological breakthroughs have an impact on agriculture, health, and industry, teaching and learning concepts and practises have largely remained constant. The bulk technology used today assist lifelong learning. Analyzing the mutual interrelatedness of culture and technologies reveals that technologies are socially defined and integrated in new activities through adoption processes. Not when cultures adopt new technologies, but when new behaviours emerge that lay the groundwork for cultural shifts (Shirky, 2010).

Conclusion

Every educational institution now needs to develop a comprehensive platform adoption system that can adapt to the three learning environments – offline (physical schools open), online (schools closed), and hybrid (schools open but children/teachers are sick or local lockdowns in a few areas) – while also providing a framework for learning improvement. The traditional educational system is currently undergoing a paradigm shift, and pupils of this age must be taught new learning methodologies. Technology can assist educators and students in overcoming these obstacles and achieving their goals. It is impossible to find the future of how we live, think, create, work, learn, and interact; it must be produced and built. The central thesis of this study is that new technologies are necessary yet insufficient. It is necessary to explore the co-evolution of new learning and teaching concepts, new media, and new learning organisations in order to transform cultures.

We must recognise that attending to school requires much more than learning new information; it also entails becoming a member of a community. Therefore, ‘learning about’ must be followed by 'learning to be' (Brown and Duguid, 2000). A considerable corpus of policy work on digital education and education in the digital age has been created by transnational, national, and subnational policymakers. For the past two decades, policy effort has primarily concentrated on 'soft' variables such as teacher training, improving teacher and student competence, and content development. Though, educators today routinely employ digital tools, digital applications, on the other hand, are frequently insufficiently customized in pedagogically meaningful ways. Furthermore, the vast majority of teachers do not or only irregularly participate in digital education-related professional development. Teachers, on the other hand, frequently lack training and a supportive framework (including school curricula) for emphasising the "soft" and "citizenship" skills that are critical in the digital age. New teaching technologies, on the other hand, may provide chances for personalizing learning environments, thereby increasing student engagement and retention. However, when adding corresponding instructional tools, issues like algorithmic discrimination and data protection must be addressed and solutions provided.

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