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Revisiting Educational Philosophies: Exploring the Relevance in Digital Era

Anju Saxena, Research Scholar, Department of Education, University of Delhi, Delhi, India.
e-mail id: asaxena@cie.du.ac.in

Corresponding Author: Anju Saxena, e-mail id: asaxena@cie.du.ac.in

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Abstract: The recent development of digital technologies has brought enormous challenges but at the same time has created a lot of opportunities for modern education. The era is characterised rapid transformation in every sphere with the inclusion of digital technologies. These technologies are changing the way we create, interact and disseminate the knowledge. There has been shift in the role of teachers, learners and curricula. The educational spaces are redefined with this recent advancement. The question arises: Will the role of teacher remain same in the redefined educational spaces? How relevant the philosophies of education, ‘which mostly were part of pre-industrial or industrial era’ will be in the digital age? Can we adapt from these philosophies to address the challenges presented by the digital divide, algorithm biases and ethical considerations inherent in digital education? This paper aims to critically explore the relevance of traditional educational philosophies in the digital age. By analysing the works of Dewey, Freire, and Tagore within the framework of current digital transformations in education, the study aims at providing critical insights into how traditional educational values and philosophies are still relevant in this digital transformation of learning. Finally, the study elucidates on the integration of these two contexts in broader educational purpose.

Keywords: Digital Transformation Era, Constructivism, Pragmatism, Humanism, Critical Pedagogy
Algorithm Biases, Data Privacy

INTRODUCTION

Educational philosophies have been the foundation of the pedagogical practices, determining how teaching and learning conceptualised, planned and disseminated (Ngene, 2023). The educational philosophies rooted in the work of thinker’s John Dewey, Paulo Freire, Rabindranath Tagore and contemporaries, have provided a foundation for the education system that has shaped the present education scenario. Our education system draws upon the aims and meaning of education from these philosophies. Contemporary education system is rooted in the principles of critical thinking, human growth and social transformation (Nowosad & Karmolińska-Jagodzick, 2014). These philosophies have shaped the curricula and classroom practices, guided the role of teachers in nurturing intellectual, emotional and social growth. Most of these philosophies are rooted in pre-industrial or the industrial era. At present there is the transformation and everything around us is changing rapidly, this era is marked by the rapid technological advancement, which is changing the process of teaching learning and transforming our classroom environment. In this era of rapid transformation, it is crucial to understand the relevance of these philosophies in which our education system is still rooted. We need

to critically analyse the relevance of these philosophies in the contemporary education scenario where digital tools and online platforms are mediating learning.

In this era which is characterised by rapid growth and integration of technology in every sector, the education system is revolutionised. From integration of Information and Communication technologies (ICT) into the physical classrooms to digitisation of the classroom in the form online learning platforms, immersive learning, automated learning, Artificial intelligence (AI), Virtual reality (VR)(Mhlanga, 2024). Augmented realities (AR) have significantly transformed the ways students interact with the content and the knowledge is disseminated (Siemens,2005). These technologies have expanded the scope of education, making learning flexible, accessible and personalised (Anderson & Dron, 2011). In this digital era, students can engage in self-paced learning, gain access to vast online resources, and access the educational communities around the world, fundamentally changing the role of teachers and structure of curriculum.

Despite this radical shift, question arises whether the traditional methods of teaching and learning remains same in digital age. Will the role of teacher remain same in the redefined educational spaces? How relevant the philosophies of education, ‘which mostly were part of pre-industrial or industrial era’ will be in the digital age? Can we adapt from these philosophies to address the challenges presented by the digital divide, algorithm biases and ethical considerations inherent in digital education?

Purpose and Significance

The purpose of this paper is to critically analyse the foundational role of philosophies Jhon Dewey, Paulo Freire and Rabindranath Tagore in context of digital transformation in the education scenario. The rapid changes have witnessed the changing role of teachers, Knowledge, curricula, learning environment and the way learner interact with these components of education system. Thus, this paper aims to critically explore the relevance of traditional educational philosophies in the digital age. By analysing the works of Dewey, Freire, and Tagore within the framework of current digital transformations in education, the study aims at providing critical insights into how traditional educational values and philosophies are still relevant in this digital transformation of learning. Founding in these philosophies, researcher looks into the reimaged role of educators and the curriculum as we expand the horizon of vast and accessible knowledge. This study offers an insight into the ethical challenges posed by the digital learning such as data privacy, digital divide, and ensure the digital education is inclusive, critical. Through this exploration researcher aims at determining the integration of core values of these philosophies in the digital learning context, ensuring the role of education in the development of well- rounded, thoughtful and engaged citizen. This exploration aids to determine how these educational philosophies can be integrated into the digital learning context, ensuring that education continues to prioritize the development of well-rounded, thoughtful, and engaged citizens.

Scope of the study

The study is framed by the critical exploration of the traditional education philosophies and their relevance in the digital age. The research focuses on three key philosophers; John Dewey’s pragmatism and democratic education, Paulo Freire’s critical pedagogy and Tagore’s humanism and naturalism to critically examine their relevance in digital tools and technologies. These theories found most relevant for this study as they influence the modern educational thought. Investigating the impact of emerging educational technologies, such as AI, VR, online platforms, and personalized learning, on teaching and learning practices. The study explores how these technologies intersect with traditional educational values. Rising ethical concerns are also explored in this study for integration. The study focuses primarily on the theoretical aspects, offering a philosophical inquiry rather than empirical analysis. It is intended to contribute to both the field of educational philosophy and the ongoing discourse on the integration of technology in education.

METHODOLOGY

A philosophical inquiry approach is used to analyse and synthesise the educational philosophies of John Dewey, Paulo Freire and Rabindranath Tagore in the context of the digital transformation of education. Using primary texts and critical interpretations, the research investigates concepts as pragmatism, critical pedagogy, and holistic education in order to assess their relevance to contemporary issues in education. A comparative analysis of these philosophies is conducted by situating the principles within the digital era of AI, online learning, and virtual environments. Deductive and inductive reasoning guide the development of a reimagined conceptual framework that harmonizes traditional educational values with technology-mediated learning. Ethical considerations, including the digital divide and digital biases, are critically examined. While theoretical in nature, the study offers insights into integrating humanistic principles with digital innovations, bridging the gap between traditional and modern education. Selecting particular philosophies and restricting to the theoretical data is the limitation of the study.

Philosophical Foundation of education and Relevance in digital Age

The core educational philosophies that lay foundation of education determining the aims, meaning and Role of teachers are the constructivism which is deeply rooted in John Dewey's work, the principle of developing critical thinking drawing upon Paulo Freire's work of critical pedagogy, and Humanistic approach resonates the philosophical principles of the Rabindranath Tagore's work (Garavan, 2010). There are other philosophies that lay foundation of the education but stated earlier this research takes into consideration the work of these three philosophers which resonates the core principles required as a skill in the education system.

These philosophies support the experiential learning, learning through active engagement and personal experiences. The National education policy emphasises the shift of traditional methods of teaching to more experience based and active learning which leads to a holistic development of the learner. These principles are deeply reflected in the Dewey's educational philosophy which emphasises learning through active engagement and through learner centric approach, where individuals construct knowledge by interacting with their environment (Laverty, 2016). Digital tools amplify experiential learning by offering immersive and interactive platforms. Virtual Reality (VR) and Augmented Reality (AR), enable learners to explore complex environments, such as historical sites or scientific simulations, fostering deep engagement. Gamification integrates game-like elements into learning, encouraging motivation and retention through interactive challenges. Platforms like *Kahoot* and simulation-based tools like *Lobster* bring constructivist principles into digital learning spaces, promoting active participation and problem-solving (Abbas Shah et al., 2024).

Pragmatism, advocated by John Dewey, highlights the application of knowledge to real-life problems. Its values inquiry-based learning, adaptability, and "learning by doing" as essential components of education. Digital environments encourage pragmatic approaches through hands-on activities and collaborative problem-solving. Massive Open Online Courses (MOOCs) offer diverse problem-based learning opportunities, enabling students to tackle real-world challenges. Project-Based Learning is emphasised more in NEP 2020, online tools and collaborative platforms facilitate teamwork and practical applications of concepts (Cui et al., 2014).

NEP 2020 recognises critical thinking, ethical reasoning and cultural awareness as essential skills for this age. With changing scenario in education system where there is a continuous threat of cyber-attacks, data privacy issues and other ethical concerns arises (Aithal & Aithal, 2020). Here learners engaged with the gaming, online learning or simply connecting with the online world are in a continuous exposure of all kinds of situation where they need to make several choices. The engagement of the learners in online learning platforms cannot be monitored. It requires learners to be aware of the ethical consideration and make informed choices while interacting with the digital world. With Artificial intelligence around that creates an immersive experience for learners, is often exposed to the data biasness and can be interacting with learners in unmonitored way. All this requires learners and the user to make informed choices in how they want to interact with these technologies and the other

future technologies (Holmes & Porayska-Pomsta, 2022). This is supported by the critical pedagogy of Paulo Freire where he emphasises empowering learner through critical thinking. NEP 2020 lays emphasis on the importance of fostering critical thinking, ethical reasoning, and cultural awareness in learners. The NEP reimagines classrooms as inclusive, dialogical spaces where students are empowered to question and transform their realities.

Technological integration in education calls for a reconciliation of innovation with the core humanistic values. NEP 2020 espouses a student-centred multidisciplinary approach that stimulates problem-solving ability creativity and promotes all-round development of the learners. An understanding of Tagore's philosophy that sustains holistic growth, creativity, and humanity will force us to look at how digital tools can achieve convergence with humanistic values. While Tagore focused on learning in harmony with nature, virtual reality can recreate natural settings, which enables students to learn from nature and find their own connection with it remotely (Holmes et. al., 2022). Tagore's concentration on creativity and freedom is reminiscent of what digital platforms can do-first, create a platform where students are able to learn in a personalized way and express themselves creatively, such as through an online digital art studio or music composition tool. Tagore's call for a close teacher-student relationship has another remarkable function, where emphasis on human connections is made within digital learning such that technology should help improve the role of the educator but not replace them as guides and mentors. Additionally, his idea of a world citizen, united for global education, aligns with online learning platforms' democratizing tendency in transcending geographical and social boundaries. Tagore's philosophy provides us with valuable lessons on how digital education can be integrated in ways that enhance human development, and yet are theoretically grounded in issues of ethics, culture, and environment (Quayum, 2016).

Historical and Contemporary Practices in Education

Historically, the education systems were more holistic and experiential. The Gurukul tradition was prevalent in ancient India. The concept was such that learning was not merely the acquisition of knowledge but nurturing the total person, intellectually, emotionally, and spiritually (Jayalakshmi & Smrithi Rekha, 2022). Rabindranath Tagore's educational thought also belonged to this direction. To be integrated with nature is what he ardently advocated for. He believed in the organic relationship between education and environment: the students learned in natural settings, and a sense of harmony and balance was fostered (O'Connell, 2019). Emphasis was placed on direct teacher-student interaction, where the teacher served as a guide for self-discovery and creative expression.

The landscape of contemporary education has changed drastically, especially with digital technologies on the rise. For instance, the now-widespread notion of flipped classrooms has revolutionized traditional pedagogy altogether; students consume content outside of class, typically in the form of videos or readings, and engage in collaborative and interactive discussions inside the classroom (Jang & Kim, 2020). Personalized learning has also become prominent, with AI-driven platforms like Duolingo and Coursera providing adaptive education based on individual student progress and learning preferences (Kim et al., 2018). This allows for student-centred learning in a more increased manner, such that the learning is presented in a holistic fashion, allowing learners to determine their progression. Contemporary practices, however, are not without challenges. For instance, the digital divide remains a serious concern, especially in terms of technology access. Socio-economic and geographical inequalities place restrictions on the equal, just access to digital education for marginalised communities, which restrains the potential of digital education toward universal inclusivity. These are significant gaps that must be addressed in order that the benefits of digital education accrue to all learners irrespective of their background.

Ethical Considerations in Digital Learning

As digital learning continues to increase, there are many different ethical considerations that need to be addressed to ensure equitable and responsible educational practice. Perhaps one of the most compelling is accessibility (Slade & Prinsloo, 2013). The digital divide remains a significant challenge

in underserved regions, where the inability of people to access technologies and the internet creates disparities in educational opportunities. It is, therefore, important to bridge such a gap so that digital learning by all learners, regardless of their socio-economic background or location, is effectively levelled. To this effect, investments in infrastructure, affordable devices, and programmes in digital literacy need to empower and bridge marginalized communities (Javaid et al., 2023).

The other ethical concern to be considered is privacy. The ethical use of data would be an issue with the increased use of AI, particularly in education, through platforms such as personalized learning platforms and automated assessments. These platforms tend to collect, store, and analyse learners' personal information and learning behaviour. Thus, it becomes important to maintain the trust and confidence in digital education systems by providing security for data as well as responsible use of AI in the interest of protecting students' privacy (Pardo & Siemens, 2014). Public and institutional policies on data should be transparently adopted, and data should be used only for academic purposes while proper measures should be put into place against unauthorized access.

Finally, engagement versus exploitation in gamified learning environments is an ethical challenge. While gamification can encourage higher motivation and engagement, it may also lead to manipulation, wherein learners are encouraged to engage with content in ways that emphasize profit or data collection above genuine educational outcomes (Toda et al., 2022). Learning experiences should therefore be structured and designed to balance such engagement with ethical considerations that emphasize learners' interests over commercial goals (Lachheb et al., 2023).

Reimagining Educational Philosophy in the Digital Era

The digital age calls for an evolved educational philosophy that integrates timeless principles with the latest technological advancements in the area (Markov & Volkova, 2020). This means fusing philosophic frameworks such as constructivism by Dewey, critical pedagogy by Freire, and holistic values by Tagore together to blend into an adaptive human-centred learning ecosystem (Harris, 2017). Dewey's focus on experiential and learner-centred education aligns with the need for interactive digital tools, while Freire's emphasis on critical consciousness empowers learners to navigate the complexities of the digital age (Johnston et al., 2022). Tagore's advocacy for holistic, creative, and nature-integrated education reminds us to preserve humanity's core values amid technological growth (O'Connell, 2019).

Critical thinking is one of the core elements in this reimagined philosophy because it is an important skill for distinguishing good information in an avalanche of data (Dwyer et al., 2014). Creativity, or finding the ability to innovate and express in such an ever-changing world, is also essential (Kanematsu & Barry, 2016). Collaborative learning, which technology makes possible, helps in making global contacts where learners can get ideas and solve problems collaboratively while still adhering to humanistic principles like inclusivity and empathy (Ouamani et al., 2014).

Finally, the philosophy recognizes the ethical and appropriate use of technology through engaging both learners and educators with digital tools in a responsible manner. It calls for the protection of data, bias in algorithms, and equal access to digital learning environments (Jain & Menon, 2023). This philosophy does not only equip the learner with the skills to respond to technological change but also restores education as the force, which continues to evolve humanity towards good and ethics. The enduring significance of traditional educational philosophies lies in their profound understanding of human development, creativity, and the interconnectedness of knowledge and life. The principles of Dewey's constructivism, Freire's critical pedagogy, and Tagore's holistic approach continue to provide timeless guidance in addressing the evolving challenges of education. The overarching emphasis of these philosophies on critical thinking, creativity, and ethical foundations is essential for creating an informed, empathetic, and socially responsible citizenry (Breault & Breault, 2013; Garavan, 2010; Kupfer, 2015; Rorty, 2008).

A balanced approach to adaptation is critical in the education sector as it moves to the digital age. While digital innovations like AI, gamification, and virtual learning environments offer immense

potential that could make learning more accessible, engaging, and personal, they also pose challenges; namely, ethical concerns, data privacy issues, and a risk of sliding away from humanistic values. Embedding these tools within traditional philosophies ensures technological progress complements the core principles of education. This integrated approach inspires not only lifelong learning but also deeper global citizenship and ethical awareness. Leverage the strengths of both traditional and digital paradigms to transform education into a holistic process that can effectively empower learners to traverse the complexities of the modern world and yet cultivate timeless humanistic values.

CONCLUSION

The integration of digital technologies into education puts forth unprecedented opportunities along with significant challenges. As this transformation reshapes the educational landscape, revisiting and reimagining traditional educational philosophies is inescapable. The works of John Dewey, Paulo Freire, and Rabindranath Tagore provide a robust foundation for navigating these changes. Emphasis on experiential learning, critical thinking, and holistic development align with the imperatives of the digital age, providing a compass for addressing its complexities.

The constructivist philosophy of Dewey is pertinently relevant in the current educational scenario, especially through interactive digital tools like virtual reality, gamification, and online collaborative platforms. The critical pedagogy of Freire, emphasizing empowerment and ethical reasoning, underlines the importance of students critically engaging with digital tools, eliminating problems such as data biases, misinformation, and ethical dilemmas. Tagore's vision of creativity, harmony with nature, and holistic growth resonates deeply, reminding educators to retain humanistic values amidst technological advancements.

With the digital divide, data privacy, and algorithmic biases as challenges, interventions become necessary to ensure equity and inclusivity in education. Critical consciousness, creativity, and ethical engagement must replace the outdated, dogmatic aspects of the profound thoughts of these individuals with the dynamic potential and innovative impulses of digital innovations. This is aimed at critically rethinking educational philosophy as far as non-dogmatic and nontotalitarian aspects of modern digital innovations are concerned, replacing them with timeless values.

Ultimately, the importance of these educational philosophies lies in their broad ability to meet changing needs for learners while retaining the fundamental aim of education: helping students grow as knowledgeable, empathetic, and socially responsible members of society. With the infusion of more traditional principles coupled with modern digital advancements, education can continue to evolve into a transformative force of personal and societal growth in the 21st century and beyond.

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