Evolving Learning Spaces in the Twenty-First Century

S. T. Sreenidhi[1], Dr. P. Sathya[2]

[1]Reg No:22113044012007), Research Scholar, Department of English, Holy Cross College (Autonomous), Nagercoil, Affiliated to Manonmaniam Sundaranar University, Tirunelveli,
Email: sreenidhi.st@holycrossngl.edu.in

[2]Assistant Professor, Department of English, Holy Cross College (Autonomous), Nagercoil, Affiliated to Manonmaniam Sundaranar University, Tirunelveli,
Email: sathya.p@holycrossngl.edu.in

Abstract

Anthony Seldon claims "Robots will replace human teachers by 2027". (Houser, 2018) According to Seldon, the transformation in the educational field with the changes occurring in the society, people, environment and science is the reason for the replacement. In Indian educational system, the term 'Guru-Shishya Parampara', discusses the bond between a teacher and a learner. Guru was considered as a spiritual guide responsible for imparting knowledge and values to the learners. Post colonial educational system followed the same footsteps. At present, with the upgradation in technology, COVID – 19 pandemic and generation filled with tech – savys the relationship between teachers and learners has altered. The dependence, guidance, prominence and bond between teachers and learners are replaced with internet and learner relationship. The search engines and chatbots has made learning process easier and entertaining. This paper analyses the detached Guru – Shishya Parampara and attached Google and AI bots through qualitative research.

Keywords: Guru-Shishya Parampara, Technology, Bonds, Teachers, Learners

1. Introduction

Education is fundamentally a relational and bond-based process. It is a key factor in developing a nation emotionally, intellectually, and spiritually. Education is interconnected to society, and a classroom reflects social and emotional bonding among the teachers and learners. Reliance on technology and the COVID-19 pandemic, an environmental crisis, increased the implementation and adoption of digitalization into classrooms. Thus, a transition from the traditional methods to the contemporary pedagogical models' marks an echoing of the changes in educational philosophy, technology, and spatial design, fundamentally reshaping teacher-student relationships and the dynamics of the learning community.

ELT in India and Technological Adaptation

In India, English was introduced by Britishers and was spread through missionaries. It still continued to serve as an official language of the country after the Independence by comprehending Nehru's statement, "English is the window to the world." From then, English and English language teaching in India have undergone remarkable changes, including pedagogical transformations, learners' needs, and struggles to acquire it. A language classroom witnesses the shift in pedagogies, values, and relational dynamics between the teacher, student, classroom and materials. Remarkable transformations from rote-learning models to learner-centered and constructive approaches assisted ELT teachers act more than teachers – as facilitators, mentors and cultural guides.

The rapid development of technology and the present generation's needs, interests and circumstances are different, hence the teachers blend technology with education in order to make teaching learning process more interesting and interactive. Effective use of technology began before COVID-19 pandemic but the percentage of its usage by learners has drastically increased during this period. The gadgets which were minimally exposed to the learners were forced to be accessed for education. Though beneficial, it also creates physical and mental issues for the learners, as they became more self - centered and emotionally detached from the world. Pandemic and Gen Alpha learners accelerated the rise of digital learning platforms and technology-mediated relationship. It also created space for the silent and introvert learners to participate, by increasing their interaction with internet. Inclusion of technology has detached the genuine human connection and relationship among learners.

Technology blossomed Media, Internet and Artificial Intelligence makes the learning process fun, easy and entertaining. Digital prominence in classrooms raises deep physical, ethical and psychological risks for the teachers and learners along with the process. The algorithmic authority defines the modern pedagogical bond through AI technologies, including intelligent tutoring systems, specialized chatbots, and Large Language Models (LLMs) such as Gemini and Perplexity AI. They provide functional benefits like personalized instruction, adaptive material creation, automated feedback, and real-time error correction across the foundational language skills (listening, speaking, reading, writing). AI empowers ELT by enabling 'mono-active language practice,' where learners learn at their own pace, catering efficiently to diverse learning styles and proficiency levels. Learners' extreme dependence on the varied AI tools results in erosion of 21st century learning skills – critical thinking, creativity, collaboration and communication. Similarly, AI technologies abundantly offer personalized learning experiences, automated assessment, adaptive content creation, and real-time feedback motivating the learning process.

Transformation in Bonds

Educational system of India has withstood notable transformations over the last few decades. They can be categorized into five major eras:

1) The Gurukul or Vedic educational system: It promoted the Guru – Shishya Parampara
2) The Monastic educational system: Introduced by Buddhism and Jainism. It aims at providing religious and secular education
3) Muscats and Madrasas: Muslims focused on Quran, Persian, Arabic literature along with Mathematics, Astronomy and Traditional Science
4) Western Education: British colonization with Charter Act of 1813 and Macaulay's Minutes, 1835 transformed the notion of educational pattern in India
5) National Educational Policy (NEP) 2020: amendment of the post-independence national policy to standardized curriculum integrating digitalization promoting multi-disciplinary holistic education.

These transformations have marked the cutting edges of the Indian education system.

As it began with traditional holistic education and shifted to western education with the invasions and colonization. The modern educational scenario synthesizes and adapts science, technology, engineering, arts and mathematics to excel in multi-disciplinary education.

The Gurukul educational system highlighted the concept of 'Guru-Shishya Parampara'. Here, 'Guru' refers to a teacher and 'Shishya' refers to a disciple. The guru is considered as a mentor, guide, counselor, motivator, role model, spiritual guide, expert and master of a field with extensive knowledge and wisdom through world experience and self-realization. Learning in Gurukula is holistic, value based and multidisciplinary approach targeting to shape an individual. During the period of education, shisya stays in the gurukula which is also the ashram/ house of the guru as a family member. The environment and the period foster close, familial relationship between guru and shishya along with knowledge.

The bond between Guru and shishya is built on the foundation of 'Shraddha', a Sanskrit term implying deep respect, reverence, faith and devotion. The aim of the guru is to teach a learner beyond academic or linguistic instruction and aid them to attain liberation or moksha and inner perfection in life. The shishya acquires knowledge, from philosophical principles to skills like music, handicrafts, war tactics, etc mostly by observing guru's daily life. According to Kula-Arnava Tantra, the victory of a guru lies in the growth of his shisya to the of a guru, by attaining the ontological bond of guru-shishya parampara relying on one's principles, spirituality and self-realization. Thus, implying the unwavering belief of a learner on the gurus toward the path of self-discovery.

Anthony Seldon (2018) in his work *The Fourth Education Revolution* discusses about the four-revolution undergone in educational environment. He discusses about the four revolutions as he mentions them as 'Organized learning, Necessary Education' received from family units, groups and tribes. 'The coming of schools and universities: Institutionalised Education' eg) Nalanda University, Oxford University followed by 'Printing and Secularisation; Education for the Masses'. The contemporary revolution involves the 'Artificial Intelligence (AI)', along with Augmented Reality (AR) and Virtual Reality (VR). As Seldon (2018) mentions the revolution of education, printing and education for mass numbers shifted education from Gurukul's to enclosed learning environment with framed curriculum and syllabus covered within restricted time. This alteration in the teaching-learning process decayed the trust, faith and bonding between the teacher and learner. The colonial and post-colonial educational system formulated the teaching-learning

process, place and time with preoccupied standardized tests aiming for highest marks. These constraints create a vacuum between teachers and learners. The COVID-19 pandemic forced educational institutions in rural and urban to alter and introduce new digital methodologies into classrooms to solve the unplanned crisis in the globe. This abrupt transition without adequate policy consultation, comprehensive training, resource allocation, created profound challenges. It was hectic for teachers, because of the challenging technical skills and significant stress of ridicule detaching their bond with learners. The physical distance strained the quality of the relationships found in the classrooms. The traditional focus of teachers in nurturing the character, skills, emotional support and personality development of the learners dissolved in the digital or virtual space. This altered scenario has acknowledged Anthony Seldon's claim, "Robots will replace human teachers by 2027" as computational agents are challenging the teacher's role through bots and robots and by Suad Merchant in Gulf Newspaper article dated on 29 September 2025 titled "When AI can teach, What's School For?".

Impact of COVID – 19

In a survey conducted by UNESCO, during the spread of the deadly coronavirus, it was recorded that about 1.38 billion students or about 80 percent of the students enrolled at, primary, secondary, higher-secondary along with the tertiary levels were being affected and prevented to visit the educational organizations with their closure at global level (Carthy, 2020). In India, many steps were initiated under the Indian government in order to provide unique platforms to teachers as well as the students during lockdown, so that their education is not hampered (Jena,2020). The Ministry of Human Resource Development (MHRD) opened many new tv channels including radio for the continuous learning process. Students as well as the teachers became competent users with different online support systems such as telegram, zoom, google-meet, YouTube, Facebook live, and many more.

Pandemic is not a boon to all fields but in education it has provided ample opportunities for learning and innovating new strategies in a very short span of time which in turn has helped in restructuring the foundation of the education system at the global level. Some of the negative aspects of COVID in education are on the physical activities, employment opportunities, and unpreparedness on online modes, unavailability of digital platforms or their knowledge (Jena, 2020). Thus, the education sector has got a chance to choose a golden path towards competency-based learning and teaching programme through online platforms. In such circumstances, the education stakeholders have very quickly adapted themselves to the e-learning and online teaching modes without affecting the performance of the students moving towards a hybrid system of teaching and learning without any professional training in this regard (Rajhans et al, 2020). The pandemic supported to explore more effective methods in order to interact with and engage the learners. Core beliefs and principles of the education system are tested and made to reflect, rethink and revise the practices and beliefs that were once followed by the educators. Professional development programmes for teachers provided support to transform and upgrade their teaching - learning process. The learning spaces transformed into more interactive with new teaching and learning methods.

Shift in Learners' Generations

A significant change and shift in generation and their education is a result of their different needs, experiences, and expectations when it comes to learning. Learners who were born between 1946 to 1964 are referred to as Baby Boomers. They grew up in a different time period with a different set of values, beliefs, and cultural norms and educated in the traditional, classroom-based model of education that emphasized rote learning, memorization, and discipline. In the mid-20th century, progressive education emerged as a response to the change in needs of society. It emphasizes active learning, critical thinking, and creativity.

The Gen Z generation, commonly referred to as the iGeneration, includes learners who were born between 1997 to 2012. They are the first generation to have experienced the access to the internet, smartphones, and social media, which has had a significant impact on their communication and learning habits. They are tech-savvy's learners and prefer to use technology as a learning tool. They have a unique set of characteristics that influence the way they approach education and learning processes. This has led to the rise of online learning platforms, educational apps, and virtual reality technology in educational sector. This shift has also led to a greater emphasis on personalized learning experiences, where learners can learn at their own pace, on their own schedule, and according to their own interests. Another characteristic of Gen Z learners is their preference for collaborative learning experiences. They value group work and enjoy participating in discussions and debates. This led to a greater emphasis on collaborative learning activities such as group projects and team-based assignments. Additionally, Gen Z learners are multitaskers and gathers information from multiple sources simultaneously. This has led to a greater emphasis on interactive

and engaging teaching methods, such as gamification, which appeal to their need for instant gratification and reward. The unique characteristics of Gen Z learners have led to a shift in the way education is delivered and consumed, with a greater emphasis on personalized, collaborative, and technology-driven learning experiences. Educators need to adapt to these changes and incorporate new teaching strategies and technologies to better engage and support Gen Z learners in their educational journey.

The generation born after 2012 is referred to as Gen Alpha, or the "digital natives." Since they were born and raised in the digital era, they are regarded as the technologically literate generation to date. They are accustomed to utilizing technology from a young age, and assumed to be more vital as a tool for learning. These generational learners are growing up in a world that is more technologically advanced, globally interconnected, and environmentally conscious than ever before. In terms of education, Gen Alpha learners are expected to be highly educated and skilled, as they enter rapidly changing job market. This has led to a greater emphasis on developing skills such as critical thinking, problem-solving, and creativity. Additionally, like Gen Z learners, Gen Alpha learners also prefer personalized learning experiences and are more environmentally aware. They are in a world facing significant environmental challenges, and the awareness shapes their values and beliefs as they progress through their educational journey. Educators adapt various teaching methods and approaches to meet the needs of the learners, incorporating new technologies and personalized learning experiences, while also developing critical thinking, problem-solving, and creative skills.

Literature Review

Prashant Shrivastava in his article "Role of Media – Assisted – ELT to the Non – Native speakers' Classrooms: An Analytical Approach" (2015) deals with the effective ways through which language can be taught through media and video aids in order to develop the language of the learners. It pictures the traditional classroom difficulties and the necessity for the intervention of media in classrooms along with its snag. It highlights the scope of language development with the integration of media. He concluded media attracts learners' attention and promotes effective learning.

Yuvika Singh in his article "Emergence of COVID - 19: A Golden Path to Explore Innovative Pedagogies in Education Sector" (2021) discusses how emergence of COVID - 19 has explored innovative pedagogies in the educational sector. It explores the way educators adapt online teaching and learning with other pedagogies like blended learning, personalized learning and gamification. It further discusses the importance of developing digital literacy and critical thinking skills in students.

Aruna Pavate in his article "Innovative trends that influence on teaching and learning process towards the revolution Education 4.0" (2021) explores innovative trends that are influencing the teaching and learning process towards the revolution of education 4.0. The author explains that Education 4.0 is characterized by the integration of technology, such as artificial intelligence and Internet of Things into the learning process to develop the 21st - century skills as critical thinking, creativity and problem solving among the learners.

Analisa Hamdan et al in their article "The Acceptance of M-Heutagogical Practice in Higher Education: A Systematic Literature Review" (2021) presents a review on the acceptance of m- heutagogical practice in higher education. M- Heutagogy refers to mobile self- directed learning, where learners take control of their learning using mobile devices. It has been found that m-heutagogical practice enhances learner engagement, motivation and self-directed learning. It also has technical issues and resources in implementing m-heutagogy.

Affero Ismail et al (2022) in their article "Implementation of Distance and Digital Learning During Pandemic Covid- 19 in Malaysia" shares about the implementation of distance and digital learning during the Covid - 19 pandemic in Malaysia. It highlights the challenges faced during the pandemic and the transition it faced by adopting digital learning in the Malaysian classes. Despite challenges it also had a number of advantages and concluded that further research and support is needed to ensure an effective teaching and learning process.

Research questions

1. What is the influence of teacher learner spaces – then and now?
2. What is the future of these bonds with the influence of AI?

Research objectives

- To analyse the transitions in education
- To record the transitions undergone in the bonds of teaching learning spaces

- To decode the 'Guru-Shisya Parampara'
- To comprehend the influence of AI among the learners.

Methodology

Participants

The researcher opted for convenient sampling method and chose ten in service English staff from different colleges in Kanyakumari district, Tamil Nadu. Convenience sampling, a non- probability sampling technique also known as availability sampling. This method allows the researchers to gather data from the participants who are easily accessible, quick and cost-effective. The participants included lecturers and assistant professors from both rural and urban background. They teach in arts and science colleges and gained work experience ranging from 5 to 15 years. The profile of the staff involved in the study is presented in Table 1:

Table 1 Profile of the participants

Teachers Number	Age	Mother Tongue	Area	Qualification	Position	Teaching Experience
T1	45	Tamil	Rural	Ph.d (English)	Assistant Professor	25
T2	37	Tamil	Urban	Ph.d (English)	Assistant Professor	8
T3	39	Tamil	Urban	Ph.d (English)	Assistant Professor	12
T4	25	Tamil	Urban	M.Phil (English)	Lecturer	4
T5	41	Tamil	Rural	Ph.d (English)	Assistant Professor	15
T6	29	Tamil	Urban	M.Phil (English)	Assistant Professor	4
T7	45	Tamil	Urban	M.Phil (English)	Lecturer	20
T8	29	Tamil	Rural	M.Phil (English)	Lecturer	5
T9	29	Tamil	Rural	M.Phil (English)	Lecturer	6
T10	32	Tamil	Rural	Ph.d (English)	Assistant Professor	10

Tool

A qualitative data collection tool was adopted for the study involving data collected from research articles and semi-structured interview following by informal conversations. The interview was based on observations of the teaching learning environment. The participants were provided with the details and clarity on the study conducted by the researcher before the interview. Prior permission and information were provided to them about recording their conversation and assurance was given to protect their anonymity and privacy. After the interview their responses will be transcribed and recorded for the study.

Twelve questions were asked to the participants on the transition among bonds in the teaching learning space to the teachers belonging to the English department. Each interview lasted around 25 to 35 minutes and the respondents answered in English. The researcher followed a line-by-line transcription to obtain the data accurately. The data obtained from the participants was anlaysed using thematic analysis. Thematic analysis supports the researcher to identify the pattern or themes in the data provided by focusing on the recurring data elements.

The questions were grouped together under themes as transitions in education, relationship among teachers and learners, and role of AI in education and was supported with sub-themes to discuss these themes

transitions in education	• Guru-Shisya Parampara • Pedagogical Transformation • Shift in Learners Generation • Transformation in bonds • Impact of COVID-19 • Evolution in AI • Technological Adaptation • ELT in India
relationship among teachers and learners	
role of AI in education	

Data Analysis

The respondents with their understanding on the research topic answered the questions, the researcher has summarized the key points:

Research Objective 1:

Transition in Education

Digitalization has transformed education into a more flexible, accessible, and learner-centered process. It has democratized knowledge, enabled diverse learning styles, and expanded the classroom beyond physical boundaries. However, the pace of change also demands careful balancing to ensure that technology supports, rather than replaces, meaningful human interactions. A modern teacher should embody both roles to sculpt a better human for the society. As a guru, they should inspire, mentor, and guide character formation and as a facilitator, they should encourage independent thinking, collaboration, and inquiry-based learning.

Research Objective 2:

Relationship among teachers and learners

Trust can be formed in all the classrooms, but it is often weaker and slower in online classrooms compared to physical classrooms. Similarly with the upgraded technology and AI learners frequently rely on search engines, AI tools, and digital resources for quick answers rather than having a healthy clarification from teachers. It has added to the challenges faced by a teacher as they have to guide students to use technology responsibly without disconnecting from human mentorship. The shift towards blended learning post-pandemic has made teachers to adept technologically, while educational institutions increasingly value hybrid models. It is a fact that digitalization has reshaped all academic relationships reducing face-to-face emotional bonding.

Research Objective 3:

Guru-Shisya Parampara

The Gurukul system and Guru–Shishya Parampara emphasize discipline, moral values, close teacher-student bonding, and holistic development. In the contemporary educational system and modern generation, it is not fully applicable to follow the ancient educational pattern, but their core ideals like respect, personal guidance, character formation, and learning through life can be implemented.

Research Objective 4:

Evolution of AI

Teachers' role will be prominently altered and evolved with the usage of AI. Inclusion of AI for standard academic practices or tasks will aid teachers to irreplaceably serve their roles as mentors. Teachers face challenge and compulsion to exhibit their Intelligent Quotient, Emotional Quotient, Spiritual Quotient and 21st century skills in par with AI. This pressure seems intriguing and stimulating but it also creates emotional and psychological burden eventually. Institutional support, technical accessibility, availability and apprehension assist teachers to minimize these issues.

In ELT classrooms, augmentation of AI and digital sources has enriched the learning environment tremendously. Structures and guided application of technology enrich the classroom engagement, language proficiency and knowledge. The process of language learning involves sympathy, empathy, altruism, creativity, imagination and cultural understanding. Extensive dependence or usage of AI will affect the nuances of the process. Hence, teachers should deploy and structure the class according. Substantially

technology and AI can support, enhance, and streamline the teaching-learning process, but they cannot completely fulfil it.

Findings

The other major findings of the study are:

- Technology's role in education is undeniable
- Technology fails to replicate empathy among learners as a teachers
- Dependence on technology impacts the psychological factors of learners and teachers in the process of teaching and learning
- Learners create contrasting opinions on values or ethics as a result of self-centeredness
- Teachers should be provided AI literacy
- Revision of assessment pattern
- The Psychological Cost of Automation

Conclusion

A cultural duality is embarked in Indian classrooms, where respect for teacher authority coexists with contemporary expectations of collaboration. This tension defines the evolving bond where teachers must balance the role of the contemporary "facilitator" with that of the traditional "guru." The shift signifies a cultural reimagining of education as well as a pedagogical shift. Teachers of English now act as cultural, technological, and emotional mediators. Their developing relationships with students redefining teaching and learning as shared human experiences rather than as distinct activities.

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