

EFFECT OF DIGITAL TECHNOLOGY IN LANGUAGE TEACHING AS PERCEIVED BY TEACHERS AT SECONDARY SCHOOL LEVEL

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ABSTRACT

Technology becomes part and parcel of everyday life especially in the teaching-learning process. The covid- 19 pandemic highlighted the necessity for teachers and students to have digital skills for effective online teaching-learning competently. Teachers face difficulty in handling online classes and they realised the importance of exploring technology to exploit, use, and apply digital technologies in all teaching-learning activities inside and outside the classroom. The perception of a teacher on the effect of digital technology in the class room plays an important role in the use of technology in the classroom transaction. This study aims to analyze the perception of teachers on the effect of digital technology in the teaching-learning of language at the secondary school level. The investigator developed a scale as a tool to measure the teacher's perception on the effect of digital technology in language classrooms. The sample comprised 223 secondary school language teachers in Kerala. The perception of teachers on the effect of digital technology was compared based on the language they are teaching ie; English, Hindi and Malayalam as categorical variable. Along with the descriptive statistics namely: mean and standard deviation, the test of significance of the difference between the means of two large independent samples was also used for data analysis 0%

Keywords: Digital technology, Perception, Language teaching

Acquisition of language is a process with which the learner interacts with the peer group, family members, teachers and even with interactive software available in the digital world. Digital learning technology can help the learner in many ways to achieve a language. The basic language skills LSRW can be achieved by the students as part of transaction of curricular objectives and learning outcomes in the formal classroom setting. Presently any language can be learned through the use of digital technology. Teachers can use digital technology for advance learning, mitigate learning loss, and create opportunities for social and emotional engagement during the transaction of curricular content.

In a classroom when the learner and the teacher are interacting with each other, the various digital technology can be made use by the teacher and it will reduce the digital divide in a school. Those students who are not having any access to the digital environment in their home can use the facilities in the school and digital learning should be as fast and accountable as possible. When the schools got closed due to Covid-19 pandemic, the institutions, teachers, parents and students were in search of alternative ways and means for teaching-learning. Digital technology becomes now popular even to common man. Majority of people shift to smart devices especially smart phones of varying capacities and the companies start producing smart phones with minimum essential softwares and digital platforms to make people with low socio-economic status to use the device for accessing normal life in the

globalised world. Children were “SMARTER” than parents or teachers with higher educational qualifications and ability to use modern technology. Thus, the teaching-learning process could be extended to remote learning environment. Teachers now-a-days are more efficient in using virtual modes for teaching the contents to students.

Schools were trying to ensure all students had access to technology through proposed “challenges” and arranged different options for staying connected and supporting students, parents, and families. In order to achieve the promise of digital learning, each of the students and teachers need access to a device, the internet, digital tools and resources, and the skills, norms, and practices to ensure digital learning is empowering, engaging, and productive. 5%

Thus, the pandemic made the teachers and students achieve digital literacy and digitally skilled. Teachers then started to rethink about the approaches to education and strengthen the partnership among parents, families, teachers, and leaders to best serve our nation’s students. Technology helped to achieve a myriad of teaching, learning, and assessment goals regardless of the educational environment in which the teacher, whether a virtual, face-to-face, a hybrid including both virtual and real teaching, or an alternative approach, such as teaching the large class after breaking into micro-classes so that effectiveness of transaction of curriculum enhanced. Use of educational technology was broadened to support four key goals:

Access, Digital Citizenship & Safety, Privacy & Security: Empowering students with the mindsets and skills to use devices responsibly and meaningfully, safely, and securely engage in digital learning.

Personalize Learning for Students: Meeting individual students’ needs through technology supported personalized learning.

Collaborate with Parents and Families to Support Students: Engaging parents as full partners in their child’s success and connecting with students in a virtual, hybrid, or in-person learning environment

Teacher Professional Learning and Well-Being: Building pathways to continually learn and refine strategies for using technology to its fullest potential.

Through the purposeful use of technology, the teacher can make the students read, listen to, and view authentic, engaging, and timely materials from the learning environment. In the context of language teaching the teacher can provide opportunities to students practice interpersonal skills as they interact with others via video, audio, or text in real time through WhatsApp, emails etc. Language teachers can use various educational technology for teaching-learning and also for evaluation to enhance the effectiveness of language instruction, practice, and assessment. When the teaching of language through digital platforms like google classroom, moodle etc, students may be permitted to present debate, seminars, quiz, papers, recitations, elocution or any other learning activity in the desired language at anytime and anywhere. The students can record their language performance without any anxiety and place in the platform. Teachers and peer members can comment and thus can improve.

Another opportunity is that the students can utilise language blogs and observe vlogs and the teachers can give assignments to analyse critically the language performances available in this digital world. Listening to native language speakers and eminent lectures will help them to acquire listening skills for which the teachers should assign suitable assessment

activities after that. When students are getting opportunities to access online content and/or utilize computer adaptive programs managed by the teacher and it will help the students to work at their own pace. Students can practice discrete skills with engaging online games and applications. In an inclusive classroom students can benefit from differentiated instruction when technology based multiple applications are used to assign varied tasks, track data, assess students, give real-time feedback, and manage classroom activities.

The role of digital technology in teaching-learning language by using various possibilities discussed above mainly depends on the teacher factors like their perceptions, attitude, interest, digital device using skills, digital literacy etc. The perception of the teacher plays a vital role in the effective use of digital technology in teaching-learning language. The Role of a teacher in the digital era as a professional practitioner, is likely to become a role model or model teacher for his or her students. The use of digital technology should be carefully put into the pedagogical framework. It requires the teacher to possess good pedagogical and didactical knowledge and be able to apply this in such a way as to promote learning processes.

The growing importance of technology-assisted language learning Mohammad Reza Ahmadi (2018) argued that educational technology tools appeal greatly to language instructors due to their contribution to language acquisition.

Abbasova & Mammadova (2019) conducted a study to examine the Role of Digital Technology in English Language Teaching in Azerbaijan. In-depth interviews were conducted with six teachers who are currently employed by Khazar University, Azerbaijan. Both the students and teachers are involving in digital media and the effectiveness of second language teaching with technologies at higher educational institutions of Azerbaijan is also high. Some of the teachers displayed negative attitude towards use of modern technologies on getting students' attention, positive feedback is more available.

Bui (2022) conducted a study titled "English teachers' integration of digital technologies in the classroom." A total number of 20 empirical studies, drawn from peer-reviewed journals, were selected based on several inclusion criteria before being carefully synthesized and evaluated. In this study it is found that several contributing factors in digital technologies adoption should include teachers' pedagogical beliefs, competence and confidence in digital technologies integration, availability of resources, professional development and socio-cultural context.

Andrei (2016) conducted a study which examines how three middle school teachers of English as a second language (ESL) use technology in the classroom. The study found that teacher attitudes and beliefs towards technology as well as lack of time and adequate resources may influence teachers from integrating technology in their lessons.

Teo, Huang & Hoi (2018) conducted a study which examines the intentions of English teachers in China to use technology in their classroom teaching. This study contributed to the understanding of technology acceptance theories by contextualizing the current study to Chinese educational context.

Perspectives of teachers on the role of digital technology in language education at secondary school level were studied in terms of the use of digital content, transactional contexts and assessment of learning objectives and outcomes. The following objectives were set for the present study :

1. To study the perception of teachers on the effect of digital technology in language teaching in terms of use of digital content, transactional contexts and assessment of learning objectives and outcomes at secondary school level.
2. To find out whether there is any significant difference in the perception of teachers on the effect of digital technology in language teaching in terms of use of digital content, transactional contexts and assessment of learning objectives and outcomes for different languages.

Survey method was adopted by the researcher. Data was collected from 223 language teachers teaching English, Hindi and Malayalam at secondary school level. Both qualitative and quantitative analysis were used for interpreting the data. A three-point scale to find out the effects of a digital technology on the teaching-learning process of language classroom at secondary school level was developed by the investigator. The tool consists of 18 items, out of which 6 items are related to content, 6 items related to transaction and 6 items related to assessment. The data collected were analysed as per the objectives.

ANALYSIS AND INTERPRETATION

The data collected were analyzed by calculating the mean, standard deviation, and test of significance of the difference between means of two large independent samples. The details of the analysis as per the objectives of the study are given below:

Perception of teachers on the effect of use of digital technology in language teaching at secondary school level is calculated in terms of mean and standard deviation of the variable measured for the total sample and relevant subsamples.

Table 1:

Mean and standard deviation of Perception of teachers on the effect of the use of digital technology in language teaching at secondary school level

Variable	Sample	N	Mean	SD
Perception of teachers	Teaching English	87	43.90	3.99
	Teaching Malayalam	92	42.96	5.78
	Teaching Hindi	44	43.52	4.19
	Total	223		

Among the sample of 223 teachers, 87 English teachers, 92 Malayalam Teachers and 44 Hindi Teachers from secondary schools. From table 1, it is seen that the mean and standard deviation of the variable perception of teachers on the effect of digital technology in language teaching are 43.90, 42.96 and 43.52 respectively for English, Malayalam and Hindi teachers. The standard deviations are 3.99, 5.78 and 4.19 respectively.

The investigator further identified the teachers with varying level of perception on the effect of digital technology in language teaching (high, average and low) using mean (M) and standard deviation (σ) distance method. Those who scored between $(M + \sigma)$ and $(M - \sigma)$ were considered as prospective teachers with average digital readiness; those who scored above $(M + \sigma)$ were considered as prospective teachers with high digital readiness and those

who scored below $(M - \sigma)$ were considered as prospective teachers with low digital readiness. Then the percentages of prospective teachers belonging to each category were found. The details are given below in Table 2.

Table 2:

Level of perception of teachers on the effect of digital technology in language teaching at secondary school level

Category	Number of teachers	Percentage
High perception	43	19.28 %
Average perception	141	63.23 %
Low perception	39	17.49 %

From Table 2, it is clear that most of the teachers were having average level of perception of teachers on the effect of digital technology in language teaching (N=141; 63.23%). Those who possessed high perception of teachers on the effect of digital technology in language teaching (N=43; 19.28%) are greater in number than those who possessed low perception of teachers on the effect of digital technology in language teaching (N=39; 17.49 %).

Comparison of perception of teachers on the effect of digital technology in language teaching classified on the basis of language of specialization

Perception of teachers on the effect of digital technology in teaching different languages ie,. English, Malayalam and Hindi were compared using One Way ANOVA. The data and results of ANOVA of effect of digital technology in language teaching as perceived by teachers of different languages ie,. English, Malayalam and Hindi are given in Table 3

Table 3:

Data and results of ANOVA on the effect of digital technology in language teaching as perceived by teachers classified on the basis of language of specialization

	Sum of squares	df	Mean Squares	F
Between Groups	39.935	2	19.967	1.034
Within Groups	4246.872	220	19.304	
Total	4286.807	222	4.19	

From Table 3, it is clear that the three group of language teachers are not differing significantly in their perception on the effect of digital technology in language teaching as perceived by teachers

DISCUSSION OF RESULTS AND CONCLUSION

In the present century of technology, the power of technology cannot be under estimated. The present educational system is trying to integrate technology into every walk

and talk of education. The study present study attempts to find out the perception of secondary school teachers on the effect of digital technology in language teaching and it revealed that 19.28% of language teachers have the perception that the digital technology used in teaching language has high effect and 63.23% of language teachers have the perception that digital technology in teaching language has an average effect. The study revealed that 17.49% of language teachers have the perception that effect of digital technology in teaching language is low. Those who have a perception that digital technology has high effect on teaching language (19.28%) is greater in number than those who have a perception that digital technology has low effect on teaching language (16.58%). It is therefore concluded that majority of the language teachers at secondary schools are effectively transacting language curriculum using technology.

ANOVA of data collected from the three group of language teachers indicates that perception on the effect of digital technology in language teaching is not differing significantly among the groups. The study revealed that most of the teachers have the perception that the use of digital technology in teaching language is effective in content transaction and evaluation activities at secondary school level. Hence it is suggested that the language teachers need to be encouraged to use digital technology and those who are not competent enough to use digital devices and softwares to teach language should be supported with training and need to be enhanced through professional development programmes. Onsite support and department level monitoring can also be arranged. This can also be achieved by incorporating more digital content in the curriculum of teacher education programmes and pre-service training may be provided to achieve the skills in using advanced technologies. The teacher education curriculum includes ICT that enhances digital readiness, digital technology awareness, techno pedagogy and digital skills for teaching for prospective teachers and teacher educators. Incorporating digital skills into the curriculum will enhance the teachers' cognitive as well as non-cognitive skills. A teacher with high cognition can make use of digital platform with specific vision to improve the language related skills and proficiency. Teachers can create such an environment where the chance for practicing digital skills like digital proficiency, digital competency, etc., will enhance the students' digital readiness too. Becoming digitally competent citizen to encounter technological glitches while using digital modes of teaching-learning like blended learning, online learning etc.

Continuous professional development (CPD) for teachers through online courses, instructional videos, webinars, and e-conferences can be arranged by SCERT and other teacher training institutions to develop teaching skills related to educational technology and language teaching methodologies.

Modern language teaching and learning technology is not limited to language labs, digitalization, multimedia devices, mobile phones, audio/visual multimedia content, EdTech solutions, and social media which can facilitate faster and more comprehensive language progression. Artificial intelligence driven tools will help the language teachers to create a better learning environment in which virtual images and virtual media supported activities to

develop the linguistic skills among students either individually or in small groups depending on the availability of facilities. Technology based classes will increase the possibility of a much wider range of language teaching methods and resources when compared with traditional language teaching methods that could make students passive and bored. Computer based simulations, language games, films, articles, e-news paper and other such digital resources will help the students to learn language more effectively. Audio and video which are giving opportunities to listen native speakers meaningfully increases the exposure to the target language and thus make the students more proficient in language elements. These resources offer increased flexibility and can be easily updated, making them a valuable tool in language teaching. Technology in the classroom such as videos, images, and software solutions empower teachers to incorporate the larger real world into the classroom. Turning theories into practical experiences motivates students to practice and be deeply immersed in language learning. Technology will save time in lesson planning and organization technology provides tools and platforms that help teachers plan, organize, and share their lessons more efficiently.

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