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The growth of digital literacy and 21st-century skills in English language Education through ICT

Mr. N. Narendran[1], Dr. C. Vairavan[2] and P. Kamalesh Kumar[3]
[1]Research Scholar, Department of English, Academy of Maritime Education and Training (AMET)-Deemed to be University,
[2]Associate Professor, Department of English, Academy of Maritime Education and Training (AMET)-Deemed to be University,
[3]Research Scholar, Department of English, Academy of Maritime Education and Training (AMET)-Deemed to be University,

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ABSTRACT
The integration of Information and Communication Technology (ICT) into English language education has become a catalyst for nurturing digital literacy and essential 21st-century skills among learners. This paper explores how digital tools, online platforms, and interactive technologies are reshaping language learning practices to promote communication, collaboration, critical thinking, and creativity. As English functions as a global lingua franca, the effective use of ICT not only enhances language proficiency but also vests learners to navigate digital environments responsibly and competently. The study highlights the pedagogical shifts from traditional approaches to technology-enhanced, learner-centered practices that prepare students for academic, professional, and social contexts in a digitally driven world. By emphasizing the interconnected growth of digital literacy and language acquisition, this research underscores the role of ICT in arming learners with the competencies required to thrive in the 21st century.

Keywords: Digital literacy, 21st century skills, English language education, Communication ICT, Technology-enhanced learning, Digital pedagogy.

INTRODUCTION:

ICT helps the teachers to motivate their students by motivating them through audiovisual aids. It enables teachers to present their lessons in a variety of engaging ways using music, video clips and other multimedia elements. Moreover, it increases the confidence of reserved learners by providing them with the opportunity to practice language skills freely and without fear, which will help them to remain actively engaged in the learning process. This not only boosts their motivation but also reinforces their commitment and perseverance. The fast pace of development of digital tools and resources presents both huge opportunities and significant challenges. In English language teaching, it is important that ICT is used in a good pedagogical way which meets the individual needs of the learners. Equally important is the introduction and the encouragement of the use of ICT in the context of relevant teaching and learning methods, which can contribute to a culture of lifelong learning.

Today, Information and Communication Technology (ICT) has become embedded in all aspects of daily life, transforming the way people work, communicate and entertain themselves. It has empowered communities and given young people the tools to solve complex problems, share new ideas and pool resources with peers and partners, allowing them to participate in the global economy more widely. Although ICT has changed the way of doing business and society in many parts of the world, many educational systems are still based on traditional teaching methods based on isolated tasks, memorization or isolated exercises. In this context, ICT plays a key role in transforming education in order to prepare learners for the challenges of the 21st century, affecting the way they access knowledge, research, communicate, and collaborate effectively.

"A language learning environment where dramatic activities are used to practice

The language is used to generate discourse in authentic conversations"- Altun

Education is a strategic and central part of our nation's development and priorities. The education policy of India is designed to provide equitable access to quality education with the aim of imparting knowledge, skills, and attitudes required to become a dedicated and responsible citizen. In today's educational environment, Information and Communication Technology (ICT) has become a more and more important part of education. From primary schools to universities, classrooms are becoming dynamic, engaging and innovative spaces that support new ways of teaching and learning. ICT overcomes the constraints of traditional knowledge delivery and offers a platform to develop knowledge and life skills.

In this era of educational growth, there is a great need to improve the quality of education and to improve English language communication. Information Communication Technologies have the potential to greatly enhance the quality of education by improving learner motivation

and commitment, among other things. The Government of India has envisioned a strategy for Faster, More Inclusive and Sustainable Growth which is based on the four pillars of Expansion, Equity, Excellence and Employability. Within this context, Information and Communication Technology (ICT) has been identified as an important catalyst in broadening access to education and enhancing its quality. To take advantage of the opportunities presented by smart technologies, a number of schemes and initiatives have been launched. The National Policy on Education, which was revised in 1992, also emphasized the use of educational technology as a means of improving learning outcomes.

As noted by Asabere and Enguah, the rapid growth of e-learning industry is indicative of its ability to cater for the increasing demand for higher education. UNESCO (2002) defines information and communication technology (ICT) as the convergence of information technology and communication technology, and states that ICT is becoming increasingly influential across different sectors of human activity, such as education, governance, business, labor, economics, trade, agriculture, and commerce at national and international levels. A range of ICT tools and delivery channels have already been used to enhance access to and effectiveness of education. These include the internet, e-mail, teleconferencing, audio and video conferencing, television lessons, radio broadcasts, interactive radio counseling, voice response systems, and traditional media such as audio cassettes and CD-ROMs (Sharma, 2003; Sanyal, 2001; Bhattacharya and Sharma, 2007).

REVIEW OF LITERATURE

Barbot (1997) pointed out that learners need more support to develop autonomy because of feelings of isolation. He was of the opinion that human contact should not be sacrificed in the learning process even in self-directed or technology-based learning environments. Catherine Snow et al. (1998) reviewed the literature on reading difficulties among English Language Learners (ELLs) and demonstrated that ELLs are at increased risk for future reading difficulties for a number of reasons. The study emphasized the need to focus on pronunciation and reading skills for overall proficiency. Ellinger, et al. (2001) noted that learners may be reluctant to engage in computer-based lessons due to their lack of computer skills and even fear of new technology. This brings up an important obstacle to the adoption of computer-assisted learning.

Embi (2004) recommended that language learning strategies can play a major role in improving the learning outcomes of learners. By developing learner autonomy or "learning-to-learn" skills, learners can become more autonomous and successful language learners. Hismanoglu (2012) wrote about the problems of ICT integration in language teaching. He observed that the nature, level and delivery of ICT training to teachers were inadequate and that they lacked the necessary competence and prior knowledge to effectively integrate technology into their teaching practice. In A Course in Classroom Language and Teachings, Jane Ellis (1999) emphasized interactive activities as an important part of language learning. She referred to games, role-plays, improvised dialogues and interviews as effective strategies in teaching oral English, adding that these strategies help in developing communicative skills. Lukmani (1972) described that the high school students who speak Marathi were instrumentally motivated to learn English, and their instrumental motivation scores were found to be significantly correlated with English proficiency scores. This shows the significance of motivation as a motivating force for language learning. Warlick (2015) referred to technology as a necessary educational resource and coined it as the "pen and paper of our time." He emphasized that technology is not only at the heart of teaching and learning, but also of how students and teachers experience and engage with the modern world.

Learner Motivation and Autonomy

Ellinger et al. (2001) suggest that learners can readily accept computer-based lessons if they have adequate computer literacy, implying that technological skills can help to develop motivation. The eagerness is both a result of novelty and a result of empowerment: if learners feel confident in their ability to navigate digital platforms, they are more likely to be willing to experiment with learning tools, which increases engagement. In many situations, particularly where learners have some exposure to technology beforehand, the classroom is a gateway to applying these skills in real-life language learning situations. Barbot (1997) points to a different aspect of learner autonomy by emphasising the fact that not all students need intensive scaffolding. For some, having a strong sense of connection in the learning environment helps to lessen the sense of isolation. This observation highlights the fact that autonomy does not imply isolation. Rather, it is enhanced by meaningful human contact, either with peers or instructors. Consequently, digital learning environments should not remove the role of the teacher but rather reposition the teacher as facilitator of technological and interpersonal interaction.

Embi (2004) goes further to highlight the role of language learning strategies in developing self-directed learning. By motivating learners to engage in "learning-to-learn" practices, teachers help learners to become more effective and independent language users. For instance, strategies such as goal-setting, self-monitoring and reflective practices can be easily integrated into ICT-based platforms, thus combining autonomy and guided practice. The relationship between motivation and proficiency is also found in Lukmani's (1972) study of Marathi-speaking high school students. The research found that integrative motivation in which learners are motivated to integrate with the target language culture is positively correlated with proficiency levels. This finding is consistent with more general theories of motivation in language learning, in which integrative orientation is frequently thought to be more enduring than instrumental motivation. When learners have aspirations to make cultural and social connections

through language, their engagement tends to increase and this leads to sustained learning outcomes.

Rethinking Classroom Practices

From a pedagogical point of view, the development of classroom practice indicates a growing focus on participation on the part of students, rather than passive reception. Naqui reports that successful English classes go beyond simple classroom copying of prescriptive texts to include active participation, cooperative writing and interactive note-taking. With it, a pedagogic reorientation of the priority is involved: while teachers were previously preparing students exclusively for exams, they are now required to develop communicative competences. In well-controlled environments of manageable class size and physical conditions such as ventilation and seating, the teachers have more leeway to use learner-centred methods. Such circumstances tend to promote participation, creativity and critical thinking. Instead of memorizing fixed dialogues or grammar prescriptions, students practice free interaction, discussing with each other or completing tasks cooperatively, which reflect the use of language in real life.

In this sense, Gokak explains the shift from lecture approaches with a gradual approach. He argues that today's language teachers are becoming more and more well-versed in modern teaching methods that include the likes of task-based learning, problem solving, and project-based learning. These approaches are consistent with the communicative language teaching approach in which meaningful use of the target language is emphasized over rote. In other words, the classroom is being reenvisioned as a collaborative environment where teachers no longer are the sages and students are no longer the passive recipients. This reconfiguration corresponds well to the larger thrust towards autonomy, motivation and ICT integration in education.

Authority and Dependability of ICTs in Learning

ICT integration in ELT has been praised for its ability to produce valid, authentic and motivating learning environments. The "authority" of ICTs, however, is that they permit contact between learners and other learners on the other side of the world and provide authentic opportunities for practicing language. Unlike contrived classroom communication exercises, online communication requires real-time understanding, negotiation of meaning and context-sensitive responses. The richness of language and cultural nuances of these materials greatly enrich the learning experience by exposing learners to various linguistic inputs and cultural nuances.

Another important characteristic of ICT-based learning is its reliability, which is due to the authenticity and flexibility of the delivery system. Our learners are no longer confined to artificial textbook dialogues, but are confronted with real and meaningful interaction. For instance, through online forums, collaborative wikis or virtual exchange programs, learners have the opportunity to use the language in the context of authentic communication. In addition, ICT tools can help to engage the learners by offering multimodal inputs in the form of visual aids, audio-visual materials, and interactive exercises that accommodate different learning styles. ICT motivates the students using its interactive presentation modes. Visuals, simulations and interactive tasks provide stimulating learning experiences. Importantly, using ICT tools enables learners to work at their own pace, a self-pacing that may not have existed in a traditional classroom environment. Such flexibility makes it possible to challenge students of varying abilities so that work is neither too easy nor too difficult. Therefore, ICT is an authoritative and reliable learning medium for language learning. Its role lies not only in complementing the classroom activities, but in redefining even the very nature of the possibilities of language learning, in an autonomous, interactive and inclusive way.

Challenges in Learner Performance Evaluation

It is important to note that despite the pedagogical developments described above, at this time the system of learning achievement assessment still focuses on reading and writing while giving short shrift to listening and speaking. This imbalance is problematic since oral communication skills are crucial to both professional success and participation in a global society. For example, graduates going abroad into the workforce need to be able to listen to different accents and speak fluently in different situations. Computer-assisted language learning (CALL) presents new and exciting possibilities for the testing of listening skills. By means of incorporating software that displays dialogues, lectures or authentic conversations, students can be tested for comprehension with true-or-false questions, short written answers or multiple-choice questions. Not only do these methods assess understanding, they also prepare learners for international standardized tests, many of which assess listening and speaking ability. Speech recognition technology, peer-assessment or synchronous video interactions can be used to assess speaking skills. These techniques yield immediate feedback and so support iterative improvement. By contrast, conventional written tests are not able to measure learners' communicative competence, and therefore there is a gap between achievements in the classroom and real-world needs.

Using Information Technology to Bridge the Gaps

Technology in Education: Information technology has the ability to fill in systemic gaps left by traditional education. For populations that do not have access to quality instruction, digital platforms are cheaper and scalable. Online resources, virtual classrooms, and mobile applications can help bring learning to students who otherwise wouldn't be able to access it. As such, when limited but precious resources like qualified teachers are added to ICT, there is an exponential increase in the teaching-learning process. For example, a teacher skilled in communicating methods could use ICT to reach beyond the four walls of the physical classroom to communicate with the learners asynchronously using discussion boards or to give

personalized feedback through e-learning platforms. Digital literacy, then, is no longer a choice. It has become a key necessity for both the learners and the educators. In addition to the skills to use technological tools, digital literacy in an ELT context also involves the critical skills to analyse online materials, the ability to cross cultural boundaries and to use technology as a supplementary tool for autonomous learning.

The Problem of Teacher-Student Interaction in Large Classes

One perennial problem in language learning, especially in higher-level language learning, is the sudden shift from native language to English medium. Many learners can't adapt to the change - so they need small-group attention that's hard to provide in large undergraduate classes. Such classes are massive and it is difficult for the teacher to fully interact with all the students, therefore there is less room for individualized feedback. This lack of interaction makes it very difficult for weaker learners. Unwilling to raise their hands in big groups to ask for clarification, they often find support through friends or other better students in the class. This dependence creates a superficial learning rather than deep learning. On the other hand, the more able learners often find themselves being bored as the classroom work is pitched at the average level. Lack of motivating activities reduces their motivation and impedes their potential. Too often language classes are relegated to the level of ordinary subject classes, with the result that the main focus is on examination performance rather than communicative competence. This diminishes the transformative possibilities of ELT and results in learners being poorly equipped to meet real world language demands.

Towards a Well-balanced and Inclusive ELT Framework

The points analysed above lead to the conclusion that a balanced ELT framework, which combines ICT, learner autonomy and dynamic classroom practices and addresses the weaknesses in evaluation systems, is necessary. Such a framework would give priority to:

1.Holistic Skills Development - Equal emphasis on the four skills of Listening, Speaking, Reading, and Writing

2.Learner-Centred Pedagogy - Moving away from teacher-centred, lecture-based learning towards interactive, collaborative, and task-based learning

3.ICT Integration - Using digital tools to engage, empower and personalise our learning

4.Teacher Facilitation - Redefining teacher as a guide and facilitator not as authority figure.

5.Equity and Inclusion - Making sure that all learners, both weaker and advanced, have appropriate support and challenge

6.Continuous Assessment - Implementation of performance-based and technology-enhanced assessments that align with the authentic communicative proficiency.

Practice of ICT in Education

The practice of integrating Information and Communication Technology (ICT) into teaching and learning varies significantly across rural and urban educational settings, reflecting differences in infrastructure, teacher preparedness, and institutional policies.

ICT Use Among Teachers in Rural Areas

Instructional teachers in the rural areas are relatively inferior in ICT skills, particularly in basic ICT practices like using computers for classroom presentations, browsing for teaching materials on the internet, sending emails, or performing basic word-processing tasks. Reports showed that ICT was rarely used in everyday practice in the classroom; for instance, in some cases teachers indicated that they used ICT for subjects such as Art less than twice per month. This non-systematic use reflects not only a general lack of access to resources, but also the absence of a systematic institutional policy for the incorporation of ICT in the curriculum. This problem is compounded by the lack of training given to teachers. Many rural instructors had never been through professional development programs that included joining pedagogy with technology. In the absence of structure and guidance, teachers tend to slip back to conventional teaching methods and make excessive use of chalk-and-talk. As a result, rather than a tool used every day, ICT is used as an intermittent aid. Institutions and colleges in rural areas did not have a clear strategic plan for the integration of ICT in subject areas. Where policies existed, they were either too broad or had been poorly implemented, leading to discontinuous and non-sustainable practices. In effect, ICT was quite often seen as an "add-on" activity instead of an integrated part of the teaching-learning process.

Students' Self-Assessment of ICT Skills

The self-assessment of ICT skills by students provides additional insight into the divide between rural and urban contexts. Surveys revealed that approximately 40% of both rural and urban students rated their ICT skills as "good." However, disparities emerged in the higher proficiency levels: 12% of urban students rated their skills as "very good," compared to only 6% of rural students. This difference can be largely attributed to infrastructure. Urban institutions generally had better access to computer labs, reliable internet connectivity, and consistent electricity supply, while rural colleges often faced interruptions and resource scarcity. Interestingly, nearly 40% of students across both contexts reported that they had learned computer skills independently. This indicates a strong degree of learner initiative, particularly in contexts where formal ICT instruction was limited. Another 33% attributed their learning to teachers, reflecting the important though uneven role educators play in ICT training. However, the reliance on self-directed learning also highlights gaps in institutional support, as many students lacked structured opportunities to systematically develop digital literacy.

Students generally reported using ICT for basic tasks such as word processing, preparing presentations, or browsing for academic purposes. While these activities represent an essential foundation, they also point to a narrow range of applications. The potential of ICT to support higher-order skills such as collaboration,

problem-solving, and critical engagement with digital resources remains underutilized.

Limitations in Access and Institutional Practices

Despite the acknowledged importance of ICT, its prioritization within the academic curriculum remains relatively low. In most institutions, ICT was treated as a peripheral subject rather than a core competency. Students were often allotted only a single class period per week in a computer lab, amounting to approximately 30–40 minutes of access. Such limited exposure was insufficient to develop advanced ICT skills or foster meaningful integration into subject learning. The lack of regular and prolonged exposure also undermined students' ability to connect digital skills with language acquisition. For example, while ICT tools can facilitate listening comprehension, online writing collaboration, or oral presentations through video conferencing, these activities were rarely implemented in practice due to constraints on lab time and inadequate teacher preparation.

ICT and Language Education

The integration of ICT into language education is increasingly recognized as essential, not optional. The expanding capabilities of technology are reshaping traditional learning environments by making instruction more interactive, engaging, and authentic. Numerous studies have emphasized that when ICT tools are blended with language teaching, learners experience enhanced motivation, improved communication skills, and greater opportunities for meaningful practice. Technological tools such as laptops, interactive whiteboards, LCD projectors, internet-based platforms, and social networking applications enable teachers to create a more natural learning environment. For instance, the use of social media for collaborative writing tasks can encourage peer interaction, while video conferencing platforms allow learners to practice oral communication with native speakers. Similarly, interactive whiteboards and projectors facilitate multimodal presentations, supporting visual and auditory learners alike.

Importantly, ICT allows learners to use English in authentic contexts. Rather than limiting learning to artificial textbook exercises, technology provides opportunities for students to interact with real-life texts, multimedia content, and global audiences. Such practices make language learning dynamic, flexible, and less restrictive.

Moving Towards Better ICT Practices

To maximize the benefits of ICT in education, particularly in language learning, several structural and pedagogical changes are necessary. First, computers should not remain confined to specialized labs but should be accessible within regular classrooms. This integration would allow technology to become a natural part of everyday teaching and learning rather than an occasional, isolated activity. Second, institutions could consider establishing mobile ICT facilities, such as laptop trolleys or "computers on wheels," equipped with laptops, projectors, and printers. These mobile units can be conveniently moved from one classroom to another, ensuring wider accessibility without the need for fixed infrastructure in every room. Moreover, because the equipment can be securely stored in centralized spaces after use, security concerns are minimized.

Third, consistent awareness campaigns are needed to familiarize both students and teachers with the available technologies and their potential applications. Workshops, orientation sessions, and peer-support systems can help teachers integrate ICT meaningfully into their pedagogy, while also encouraging students to move beyond basic applications towards more advanced and collaborative uses. Teacher training remains a cornerstone of sustainable ICT integration. Professional development programs must focus not only on technical skills but also on pedagogical strategies for blending ICT with language instruction. Teachers who are confident and creative in using technology are more likely to design engaging lessons that leverage the full potential of ICT tools.

CONCLUSION

The practice of ICT in education, particularly in rural contexts, continues to face challenges of limited infrastructure, inadequate training, and insufficient institutional policies. While students demonstrate initiative in learning ICT skills, structural barriers prevent them from fully leveraging these competencies in academic and language learning contexts. For ICT to become a transformative force in language education, accessibility must be expanded beyond labs, mobile solutions should be explored, and teacher training should be prioritized. By making ICT an integral part of the classroom experience, institutions can create more dynamic, authentic, and inclusive learning environments. Ultimately, consistent efforts to raise awareness, improve access, and enhance pedagogical practices will ensure that ICT fulfils its potential as a tool for both effective teaching and empowered learning.

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