



IMPACT OF THE USAGE OF ICT TOOLS IN THE TEACHING OF ENGLISH LANGUAGE TO INTERMEDIATE STUDENTS IN MAHBUBNAGAR DISTRICT

Vemula Sravanthi M.A.(Eng.) M.Ed.,

Research Scholar of English, Anurag University, Hyderabad, Telangana
<https://orcid.org/0009-0002-0577-8463>

Article DOI: <https://doi.org/10.36713/epra23987>

DOI No: 10.36713/epra23987

ABSTRACT

The twenty-first century has witnessed a remarkable transformation in the way knowledge is imparted, largely due to the integration of technology in education. The teaching of English, a global lingua franca and a gateway to higher education and employability, has particularly benefited from the rise of Information and Communication Technology (ICT) tools. This research study investigates the impact of ICT tools in English language teaching among intermediate students in Mahbubnagar District, Telangana, with a sample size of 300 students drawn from both government and private institutions. A mixed-method approach was used, combining structured questionnaires with focus-group interviews to capture both quantitative and qualitative dimensions of student perceptions.

The study is guided by three hypotheses: (H1) ICT tools significantly improve student engagement in English language learning; (H2) access to ICT resources is positively correlated with English proficiency; and (H3) infrastructural and teacher-training challenges are the primary barriers to ICT integration. Data analysis revealed that 76% of students perceived ICT-enabled classes as more engaging, and students with greater access to ICT facilities demonstrated, on average, a 14-point higher proficiency score. However, infrastructural gaps, insufficient training for teachers, and unreliable internet connectivity were highlighted as persistent obstacles.

The findings underscore the urgent need for blended learning models, sustained teacher capacity building, and equitable infrastructure investment. This study contributes to the growing body of evidence that ICT is not merely a supplementary aid but a transformative tool for English language pedagogy in semi-urban and rural districts of India.

KEYWORDS: ICT tools, English language teaching, Intermediate students, Mahbubnagar District, digital pedagogy, blended learning

1. INTRODUCTION

The teaching of English has always posed unique challenges in India, particularly in semi-urban and rural contexts where exposure to the language is often limited outside the classroom. In districts such as Mahbubnagar, where a majority of intermediate students come from Telugu-medium backgrounds, English is both an academic subject and a bridge to higher education and employment opportunities. In this context, ICT tools—such as language labs, multimedia projectors, mobile applications, online resources, and digital classrooms—offer a unique opportunity to enhance motivation, participation, and learning outcomes.

Globalization has further increased the demand for English proficiency, and the Indian education system is under constant pressure to modernize its teaching strategies. While elite urban institutions have successfully integrated ICT, many government and private colleges in tier-2 and tier-3 towns struggle due to infrastructural and socio-economic barriers. This study, therefore, seeks to assess the actual impact of ICT in English classrooms in Mahbubnagar District, guided by structured hypotheses and empirical evidence from a sizeable student population.

2. REVIEW OF LITERATURE

A substantial body of research has established ICT's role in making language learning more interactive and learner-centered. Warschauer et al. (2000) emphasized how computer-mediated communication creates authentic learning environments, while Chapelle, C (2003) highlighted the role of CALL (Computer-Assisted Language Learning) in individualized learning. In India, Neeli Ramesh (2017) found that ICT improved pronunciation and vocabulary acquisition among engineering students. Similarly, Rani (2019) reported that ICT-aided teaching in rural Andhra Pradesh significantly boosted student confidence in spoken English.

At the same time, scholars such as Selwyn (2016) caution that ICT integration is not a panacea, as unequal access creates a digital divide. Studies in Telangana (Mahesh V, 2022) suggest that although ICT labs exist in many colleges, poor maintenance and untrained faculty limit their potential. This duality—promise vs. implementation gap—forms the background for this study.

Research Objectives

1. To assess the availability and use of ICT tools in English classrooms in Mahbubnagar District.



2. To evaluate student perceptions of ICT effectiveness in learning English.
3. To examine the relationship between ICT access and English proficiency.
4. To identify the infrastructural and pedagogical barriers in integrating ICT.
5. To provide recommendations for enhancing ICT-driven English pedagogy.

Hypotheses

- **H1:** ICT tools significantly improve student engagement in English language learning among intermediate students.
- **H2:** Students with greater access to ICT resources (labs, devices, apps) demonstrate higher English proficiency than those with limited access.
- **H3:** Lack of infrastructure and teacher training are the most significant barriers to effective ICT integration in English classrooms.

4.DATA ANALYSIS

Table 1: Availability of ICT Infrastructure (n=300)

ICT Facility	Available (%)	Not Available (%)
Multimedia Projectors	65	35
Computer Labs	58	42
Language Labs	40	60
Mobile-based Learning Apps	72	28
Reliable Internet/Wi-Fi	46	54

Table 2: Student Perceptions of ICT Effectiveness

Statement (Likert-based)	Agree/Strongly Agree (%)	Neutral (%)	Disagree (%)
ICT makes English classes more engaging	76	12	12
ICT improves speaking and listening skills	69	18	13
ICT resources improve exam performance	63	20	17
Lack of ICT reduces learning opportunities	71	15	14

Hypothesis Testing

Hypothesis	Statistical Test	Result	Decision
H1: ICT improves engagement	Chi-square test ($\chi^2=21.8, p<0.01$)	Significant association between ICT use & engagement	Supported
H2: ICT access ↔ proficiency	Correlation ($r=0.45, p<0.01$)	Positive correlation	Supported
H3: Infrastructure barrier	64% of students cite poor infrastructure & untrained teachers as top issue	Supported qualitatively & quantitatively	

5.FINDINGS

The analysis of responses from the sample of 300 intermediate students in Mahbubnagar District provided valuable insights into the role of ICT in English language teaching. The results were examined in light of the three hypotheses formulated for the study.

Finding 1: Confirmation of H1 – ICT tools increased classroom participation and interest levels.

Data from the questionnaire revealed that nearly **76% of the respondents agreed or strongly agreed** that ICT tools made their English classes more engaging and interesting (Table 2). Students reported that the use of multimedia projectors, online videos, and mobile applications created an interactive

3.METHODOLOGY

This study employed a mixed-method design. A structured questionnaire was administered to **300 intermediate students** drawn from 10 colleges (6 government and 4 private) in Mahbubnagar District. Stratified random sampling ensured representation of gender, urban-rural divide, and socio-economic background. The questionnaire consisted of 20 items, grouped under three categories: (i) ICT access and infrastructure, (ii) student perceptions of ICT effectiveness, and (iii) challenges and barriers. A 5-point Likert scale was used to capture perceptions.

In addition, semi-structured focus group interviews were conducted with 20 students and 10 teachers to capture qualitative insights. The quantitative data was analyzed using descriptive statistics, chi-square tests, and correlation coefficients, while the qualitative data was analyzed thematically.

classroom atmosphere where they were more attentive and motivated to learn. Thematic analysis of student interviews supported this conclusion, with several students remarking that ICT lessons “broke the monotony” of traditional lectures and “encouraged active involvement.” The chi-square test further confirmed a statistically significant association ($\chi^2=21.8, p<0.01$) between ICT use and student engagement, thereby validating **Hypothesis 1**.

Finding 2: Confirmation of H2 – Students with greater ICT access demonstrated higher proficiency.

The analysis revealed a strong positive correlation ($r=0.45, p<0.01$) between student access to ICT tools and their self-reported English proficiency. Students with regular access to ICT facilities scored an **average proficiency of 68**, while those



with limited or no access scored **54** on the same scale. In particular, students from private institutions, which had better ICT infrastructure, reported higher confidence in listening and speaking activities compared to those from government colleges. This finding supports **Hypothesis 2**, establishing that ICT access is not only a matter of convenience but also a critical factor influencing student achievement.

Finding 3: Confirmation of H3 – Infrastructural and teacher-related barriers persist.

While the majority of students expressed positive attitudes toward ICT, **64% identified infrastructural challenges** such as unreliable internet connectivity, poorly maintained computer labs, and frequent power interruptions as obstacles to effective ICT integration. Additionally, many students indicated that their teachers lacked formal training in using ICT tools beyond basic functions like PowerPoint presentations. The qualitative data from teacher interviews revealed that while teachers were open to ICT adoption, they often felt unprepared and under-supported in terms of training. These findings confirm **Hypothesis 3** that infrastructural gaps and lack of teacher preparedness are the most significant barriers.

Finding 4: Blended learning emerged as the preferred model.

Interestingly, both students and teachers suggested that while ICT tools greatly enhanced engagement, they could not completely replace traditional methods of teaching. **71% of students agreed** that ICT should be used in combination with blackboard teaching, textbooks, and face-to-face explanations. This reflects the preference for a **blended learning model**, where ICT supplements rather than substitutes traditional pedagogy. Students felt that such a combination would balance the strengths of both approaches: the interactive and visual appeal of ICT with the structure and clarity of conventional teaching.

Finding 5: Digital divide between urban and rural institutions.

The results also indicated disparities between students in urban and rural areas of Mahbubnagar District. Urban colleges, especially private institutions, were better equipped with projectors, language labs, and internet facilities, while many rural government colleges lacked even basic ICT infrastructure. This digital divide created unequal opportunities for students, with rural learners at a disadvantage in accessing modern learning tools.

Finding 6: Student attitudes toward ICT were overwhelmingly positive.

Despite infrastructural challenges, over **80% of students expressed enthusiasm** for the continued use of ICT in their English classrooms. They viewed ICT as a means of not only improving their language skills but also preparing them for future higher education and professional environments where digital literacy is essential.

6. DISCUSSION

The findings affirm global trends while situating them within Mahbubnagar's context. Students were quick to embrace ICT, especially mobile applications, which they found useful for

pronunciation, grammar, and listening practice. However, the rural-urban divide remained visible: rural colleges lacked reliable internet and functional labs. Teachers expressed willingness to adopt ICT but lacked formal training in digital pedagogy.

The strong positive correlation between ICT access and proficiency highlights the transformative potential of technology. Yet, the barriers identified show that policy-level interventions are necessary to ensure sustainable ICT integration in semi-urban districts.

7. SUGGESTIONS / RECOMMENDATIONS

Based on the findings of this study, a number of practical and policy-level recommendations can be made to enhance the use of ICT tools in the teaching of English to intermediate students in Mahbubnagar District.

1. Infrastructure Development

One of the primary barriers identified was the lack of proper infrastructure. Many government colleges either lacked ICT facilities or had poorly maintained labs. To overcome this, it is essential that policymakers and educational administrators invest in setting up fully functional ICT laboratories with adequate computers, multimedia projectors, and reliable internet connections. Solar-powered backup systems may also be considered to address frequent power interruptions in rural areas. Ensuring that every classroom has at least basic ICT support will create a uniform platform for learning across urban and rural colleges.

2. Teacher Training and Capacity Building

Even where ICT facilities were available, their usage was limited due to teachers' inadequate digital training. It is therefore recommended that regular **professional development workshops** be organized for English lecturers. These sessions should not only cover technical skills (operating ICT tools) but also pedagogical strategies for integrating ICT into language teaching—such as designing interactive tasks, using online quizzes, managing blended classrooms, and utilizing mobile applications effectively. Teacher training must be ongoing rather than one-time, ensuring that faculty keep up with new technologies and educational software.

3. Student Support and Accessibility

The study revealed that students were enthusiastic about mobile learning apps and online resources. Institutions should therefore provide **curated, mobile-friendly platforms** where learners can access digital content related to grammar, vocabulary, pronunciation, and communication skills. Special emphasis should be given to designing low-data applications that can function even with limited internet speed, given that many rural students may not have consistent access. In addition, colleges could provide digital literacy workshops to equip students with basic ICT navigation skills.

4. Adoption of Blended Learning Models

Findings highlighted that students prefer ICT when combined with traditional methods. Hence, the recommended approach is **blended learning**, where ICT tools complement but do not entirely replace face-to-face teaching. For example, a lesson on



grammar can be explained through direct teaching, followed by reinforcement activities using an interactive app. Similarly, listening and speaking skills can be practiced in digital language labs alongside classroom discussions. Blended learning ensures that students benefit from both the structured clarity of traditional pedagogy and the engagement offered by technology.

5. Monitoring and Feedback Mechanisms

To ensure the long-term success of ICT integration, a systematic monitoring framework should be established. Each institution should develop mechanisms to collect **regular feedback from students and teachers** about the usefulness of ICT tools, the challenges faced, and areas requiring improvement. This feedback should be analyzed at the district and state education department levels to guide policy decisions. A periodic evaluation of ICT infrastructure and teaching practices will ensure accountability and continuous improvement.

6. Bridging the Digital Divide

Given the disparities between rural and urban colleges observed in the study, special attention must be paid to government institutions in rural Mahbubnagar. Allocating additional funds, prioritizing ICT-enabled classrooms, and partnering with NGOs or private organizations for resource support can help reduce inequality. Mobile learning kits (low-cost tablets, offline resources) may also be distributed to students in remote areas.

7. Curriculum Integration

ICT should not be treated as an “add-on” but as an **integral part of the English curriculum**. Lesson plans should be redesigned to include ICT-based activities, ensuring that students use digital resources as part of their regular coursework rather than occasional enrichment. Examination and evaluation models should also incorporate ICT-supported learning outcomes.

8. Policy and Institutional Support

Finally, sustained policy-level support is required for ICT adoption. Education boards and universities should mandate ICT inclusion in teaching plans, allocate specific budgets, and provide institutional incentives for teachers and colleges that actively integrate ICT in English teaching. Such recognition would encourage more institutions to adopt innovative practices.

8. CONCLUSION

This study validates the three proposed hypotheses: ICT tools significantly enhance engagement, access to ICT correlates with proficiency, and infrastructural/teacher-training gaps remain the primary challenges. For Mahbubnagar District, the integration of ICT in English language teaching is not optional but essential. Policymakers, educators, and administrators must collaborate to bridge the gaps, ensuring equitable access and teacher readiness. With consistent investment and innovative pedagogy, ICT can transform English education for intermediate students in semi-urban India.

REFERENCES

1. Chapelle, C. (2003). *English Language Learning and Technology*. Cambridge University Press.
2. Das, A. (2017). ICT in English language teaching: A case study in Indian engineering colleges. *ELT Voices*, 7(1), 34–45.
3. Ramesh, G., & Devi, K. (2021). ICT integration in Telangana classrooms: Opportunities and challenges. *International Journal of Education and Development*, 9(2), 56–70.
4. Rani, S. (2019). Effectiveness of ICT in rural English classrooms of Andhra Pradesh. *Indian Journal of Applied Linguistics*, 45(3), 101–118.
5. Selwyn, N. (2016). *Education and Technology: Key Issues and Debates*. Bloomsbury.
6. Warschauer, M. (2000). The changing global economy and the future of English teaching. *TESOL Quarterly*, 34(3), 511–535.