

Original Article

RETHINKING PEDAGOGICAL SHIFT IN ESP TEACHING-LEARNING APPROACHES ACROSS CROSS-CULTURAL EDUCATION

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ABSTRACT

With the accelerating pace of societal and technological development, global communication has compelled educators to accept, adopt and adapt to English for Specific Purposes (ESP) pedagogy. Therefore, education must go beyond language proficiency to include development of cross-cultural digital literacy. This study investigates the use of digital tools in ESP learning among university students of diverse cultures in Nagaland. This study explores changes that have led to a pedagogical shift in ESP, influencing classroom practices - teaching methods, curriculum designing, teacher's role and learning goals and engagement. This paper aims to examine the influence of technology and societal globalization on teaching methodologies, and identify the ways in which cross-cultural literacy contributes to language learning and communication. It evaluates the effectiveness of digital platforms in promoting intercultural collaboration and literacy. Additionally, to propose pedagogical approaches that respond to these emerging demands. The study employs a mixed method of qualitative and quantitative research design based on extensive literature reviews and thematic analysis (empirical and conceptual) from the recently published research articles and journals between 2020-2025 along with response data gathered through questionnaires and focus group discussions with university lecturers. Key themes such as teacher identity, technological adaptation, and intercultural competence were analyzed to identify how digital learning innovations are implemented, adopted and experienced in a culturally, linguistically diverse educational setting. In response to this gap, the study proposes a broader perspective that situates ESP within the ongoing social and technological transition that reshaped education in our state today. Findings have also revealed that most students acknowledge incorporation of technology in their learning process aligning ESP instruction to the evolving communicative demands of the 21st century

Keywords: ESP Pedagogy, Cross-Cultural Competence, Digital Learning, Teacher Identity, and Communication

INTRODUCTION

In recent years, the education system in Nagaland has undergone substantial shifts, especially after the post-pandemic years that have further emphasized the need to adapt to education which is increasingly shaped by globalization, digital innovation and cross-cultural interactions. The field of Languages for Specific Purposes (LSP), and more specifically English for Specific Purposes (ESP) has not remained unaffected by all these shifts in the field of language teaching and learning. The classrooms today need to adapt to teaching methods that respond to new modes of teaching rather than sticking to traditional methods of teaching. It is no longer

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Received: 22 November 2025; **Accepted:** 15 January 2026; **Published** 05 February 2026

DOI: [10.29121/granthaalayah.v14.i2SE.2026.6638](https://doi.org/10.29121/granthaalayah.v14.i2SE.2026.6638)

Page Number: 84-91

Journal Title: International Journal of Research -GRANTHAALAYAH

Journal Abbreviation: Int. J. Res. Granthaalayah

Online ISSN: 2350-0530, **Print ISSN:** 2394-3629

Publisher: Granthaalayah Publications and Printers, India

Conflict of Interests: The authors declare that they have no competing interests.

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Authors' Contributions: Each author made an equal contribution to the conception and design of the study. All authors have reviewed and approved the final version of the manuscript for publication.

Transparency: The authors affirm that this manuscript presents an honest, accurate, and transparent account of the study. All essential aspects have been included, and any deviations from the original study plan have been clearly explained. The writing process strictly adhered to established ethical standards.

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limited to face-to-face interaction or textbook based instructions. It has evolved beyond traditional classroom settings to creating space where technology and culture intersect. Also, gave rise to digital platforms where students are expected not only to master grammar rules and forms but also to develop the ability to communicate effectively across cultural diversity and professional settings such as ESP (English for Specific Purposes) classrooms. ESP has become a vital component of higher education, particularly in regions like Nagaland, India where English serves both as an academic and professional bridge, though ESP is still at its nascent stage. "According to Deacon, Parkin, and Schneider (2017, 137), –It is now widely accepted that universities have a direct responsibility to prepare students for employment and in the 21st century, this preparation needs to include digital literacy and Competencies". However, as technology continues to influence education, it becomes crucial to understand how this shift has shaped the perception and experience of learning in students.

PROBLEM STATEMENT AND RATIONALE

With, "The increasing use of digital tools in the educational landscape has opened new avenues for enhancing the quality of language instruction, particularly in ESP classrooms. ESP, a branch of English language education, is designed to meet the specific linguistic and communicative needs of learners in professional or academic contexts" Freeman (2015). Many universities across the state, however continue to rely on either traditional or blended mode of English language instruction, with limited sources to specific communicative and occupational needs of students. Talking about ESP courses in relation to digital integration, they are gradually being integrated into postgraduate programs especially within disciplines like nursing, business, tourism and academics. This gap often reflects a lack of awareness, resources and trained faculty especially in ESP pedagogy.

In a city like Dimapur, learners gather from varied cultural and linguistic backgrounds, ESP classrooms have automatically turned into multi-cultural and digital interaction. Although the use of technology in ESP teaching has increased, both teachers and students still struggle to fully integrate it as they often face challenges in balancing traditional and digitalized teaching practices. Classrooms are inherently multicultural in its setting and these differences become even more visible to the limited research which explores how students themselves view the pedagogical changes, especially in the context of technology-driven, cross-cultural learning environments. This leads us to rethink how shifts in the ESP pedagogical approaches are taught more effectively in the digital age.

The purpose of this study is to explore changes that have led to a pedagogical shift in ESP, influencing classroom practices - teaching methods, curriculum designing, teacher's role and learning goals and engagement. This paper aims to examine the influence of technology and societal globalization on teaching methodologies, and identify ways in which cross-cultural literacy contributes to language learning and communication. It evaluates the effectiveness of digital platforms in promoting intercultural collaboration and literacy. By exploring these aspects, the study hopes to provide insights into how teaching methods, curriculum design and classroom practices can evolve to meet current demanding needs. This research is imperative as it contributes to a broader understanding of how technology and culture intersect within education. These findings can help language instructors and many institutions design ESP pedagogy that are pertinent, inclusive and responsive to the real time situation.

Limitations of the study: This study is purely limited in scope, as it focuses solely on students and selective teachers enrolled in universities within the geographical areas of Nagaland. The perspectives of learners from affiliated colleges or other higher education institutions were not included, which answers the representatives of the findings. The findings and discussions are based on the questionnaire responses, which still remains valuable for preliminary insights, while, it may not be capable of fully representing the full diversity of experiences and expectations across the wider student-teacher population. Therefore, these limitations are considered when interpreting the results and generating its conclusions.

RESEARCH OBJECTIVES

- To examine the influence of technology and societal globalization on teaching methodologies.
- To identify the ways in which cross-cultural literacy contributes to language learning and communication
- To evaluate the effectiveness of digital platforms in promoting intercultural collaboration and literacy.

RESEARCH QUESTIONS

- How does technology and societal globalization influence contemporary ESP teaching methodologies?
- In what way does cross-cultural literacy contribute to effective language learning and communication in ESP contexts?
- How effective are digital platforms in promoting intercultural collaboration and literacy among ESP learners?

METHOD

The study adopts a qualitative research approach to explore the changes that have led to a pedagogical shift in ESP, influencing classroom practices - teaching methods, curriculum designing, teacher's role and learning goals and engagement. The primary aim of this study approach seeks to understand the current usage of digital tools in ESP classrooms, its Pedagogical shift and challenges and effectiveness of language communication in a cross-cultural setting. A qualitative research design is deemed appropriate as it allows for an in-depth exploration and understanding of the shift, perspectives and practices of the student participants. The study employed both close and open-ended numbers of questionnaires, which is a qualitative research design, that emphasized on seeking to look into the real-world situational context. In quantitative research design, it will be based on literature reviews and thematic analysis from the recently published research articles and journals along with respondents' data gathered through questionnaires and focus group discussions with university instructors.

PARTICIPANTS

The participants for this study include language instructors and students of both major and non-major students. The participants had some experiences in a blended mode of teaching and learning during their due course of learning by incorporating digital tools in their teaching strategies and practices. The number of participants were 7 instructors and 228 students.

DATA COLLECTION QUESTIONNAIRE

The questionnaires were drafted in alignment with the research objectives. The questionnaires were categorized into 6 different sections, with each section having grouped 5 questions together under one particular section. The students were asked to fill both the closed and open-ended type questions.

INTERVIEW/GROUP DISCUSSION

ESP Instructors discussed the topics which included integration of digital tools and resources in inter-cultural classroom settings, their challenges and benefits in ESP Implications blending with their teaching approaches and strategies in promoting effective language teaching and communication.

LITERATURE REVIEW AND RESEARCH GAP

The literature review comprises 14 scholarly works examining the digital transformation in ESP education, collectively addressing how technology reshapes language teaching materials, student practices, cultural contexts, and pedagogical approaches.

Recent research highlights the growing role of digital technologies in ESP classrooms, particularly in enhancing learner's speaking skills through immersive and learner-centered approaches [Gumartifa \(2025\)](#), [Nuryanti \(2025\)](#). Empirical evidence demonstrates that tools such as mobile applications, virtual reality environments, and learning management systems contribute significantly to improvements in pronunciation, fluency, and learner confidence, especially within discipline-specific contexts like healthcare and engineering [Pardayeva \(2025\)](#), [Freeman \(2015\)](#). Within this evolving landscape, the framework of Technology-Enhanced Speaking Development (TESD) has gained prominence for its emphasis on interactive platforms that replicate real-world communicative situations and encourage learner autonomy [Dewi \(2024\)](#), [Rachmawati and Irawan \(2024\)](#). Despite these advances, several pedagogical challenges remain, including digital inequality, insufficient teacher training, and issues of equitable access. These concerns highlight the need for context-sensitive interventions such as blended learning models and well-structured institutional support systems [Alvi \(2023\)](#), [Tan and Sining \(2023\)](#). [Zaman's \(2024\)](#) systematic review of 87 studies published between 2000 and 2003 revealed a marked shift toward the use of digital technologies for developing immersive ESP materials, while also drawing attention to the necessity of teacher training and robust evaluation frameworks to foster speaking engagement. Similarly, [Rachmawati and Irawan \(2024\)](#) review underscored the value of collaborative platforms such as Google Docs and Zoom in facilitating synchronous speaking practice, particularly within blended ESP learning environments where accessibility remains a concern. Additionally, [Dou \(2024\)](#) work on intercultural communication emphasized the importance of integrating culturally responsive strategies with digital tools to enhance cross-cultural speaking competence in ESP, drawing on constructivist learning principles. [Dewi \(2024\)](#) systematic review highlighted the importance of digital literacy in shaping speaking outcomes in ESP contexts and emphasized the need for rigorously designed, PRISMA-guided frameworks to evaluate technology-enhanced speaking proficiency. Similarly, [Farmati \(2023\)](#) analysis of 28 blended learning studies reported notable improvements in ESP learners' speaking performance through the use of flexible online tools, despite the persistence of technical and infrastructural challenges. Further insights were provided by [Tan and Sining \(2023\)](#) bibliometric analysis of 1,657 academic records, which identified speaking pedagogy as a central theme within ESP research and pointed to emerging trends in digitally mediated interaction. [Dou \(2023\)](#) review traced the evolution of ESP by linking needs analysis with technological integration, underscoring the growing emphasis on

speaking -oriented instruction in future ESP curricula. In the post COVID context, [Alvi \(2023\)](#) study proposed andragogically informed blended learning models for medical ESP speaking courses, demonstrating how customized digital platforms can effectively address online learning barriers and enhance professional communication skills. To extend this line of inquiry, [Pardayeva \(2025\)](#) proposed the framework of Technology-Enhanced Speaking Development (TESD), offering a comprehensive synthesis of how digital tools contribute to improvements in fluency while simultaneously addressing issues of equity in ESP speaking instruction. Similarly, Luh Putu et al.'s VR focused review, drawing on SCOPUS-indexed publications, highlighted the capacity of immersive technologies to support authentic, twenty-first-century speaking simulations aligned with real-world professional communication. From a sociocultural perspective, Lie's recent analysis (2024-2025) situated ESP speaking development within processes of cultural identity negotiation in multicultural contexts, thereby broadening the discourse beyond technological affordances to include identity construction in digitally mediated communication.

Key Findings Across Studies: The dominant pattern across all reviewed studies emphasizes a significant transition toward incorporating digital tools into ESP materials and instruction, prioritizing immersive and interactive learning experiences. Mobile applications, learning management systems (LMS), virtual reality (VR), and asynchronous communication tools have demonstrated positive impacts on learner engagement, vocabulary acquisition, and autonomous learning, particularly in fields like healthcare, engineering, and tourism.

Primary Advantages: Digital technologies enable flexible, student-centered learning that supports personalized learning pathways and real-world language use. Internet-based tools enhance both linguistic proficiency and technological fluency, with students predominantly using smartphones and laptops to access field-specific materials both inside and outside the classroom. Collaborative digital platforms foster teamwork and synchronous communication, while blended learning approaches effectively develop both language and professional skills.

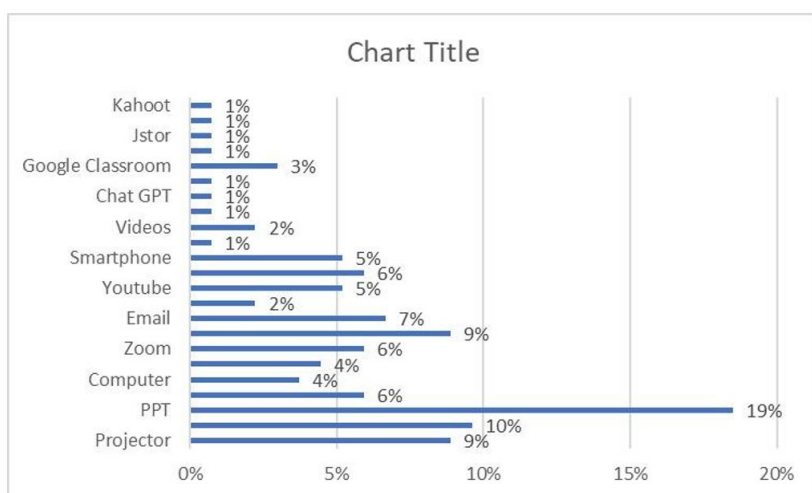
Critical Challenges: Despite widespread adoption, significant barriers persist, including inadequate infrastructure, limited teacher training, insufficient digital skills among learners, slow internet connectivity, and unequal device access. Additionally, standardized evaluation frameworks for assessing ESP materials remain lacking, and educators face challenges in integrating cultural education while implementing digital tools.

Cultural and Identity Implications: The increasing dominance of English through digital platforms raises concerns about language shift and cultural identity transformation, particularly among young learners in multilingual contexts like Indonesia. This creates a tension between acquiring English competence for international development and maintaining local language and cultural heritage.

Statement of Research Gap: The literature collectively demonstrates that digital shift in ESP education is inevitable and largely beneficial, yet requires systematic investment in infrastructure, teacher development, evaluation frameworks, and culturally inclusive pedagogical approaches to address emerging challenges and ensure equitable access across diverse learner populations.

RESULTS AND DISCUSSION

Figure 1



Most commonly used digital tools in ESP classrooms across cross-cultural contexts: The study shows that there are a number of digital tools employed in ESP classrooms to improve teaching-learning across cross-cultural contexts. It revealed that a number of digital tools were used by both ESP teachers and students. The majority of learners emphasized the use of Power point and Projector in the class, stating that visual representation enhances learners' understanding and retention. WhatsApp is another tool used by

ESP classroom for sharing information, providing materials, it also enhances collaborative group work. Data from the questionnaire shows implication for ESP teaching practice. Learners stated that the teachers should incorporate more digital tools, such as videos, gamification and PPT to enhance the teaching-learning process. It is also found that proper teacher training is necessary to optimize ESP learning. It is evident that basic digital tools are utilized in ESP classrooms, however, advanced digital technologies Jstor and Kahoot were still new in the ESP classroom in Nagaland. Therefore, incorporation of digital tools significantly improves ESP learning when integrated with properly selected tools to support the learning outcomes.

Teacher's perception on the impact of globalization on learners' ESP needs: The study explored teacher's perception on the impact of globalization on learners' ESP needs. Teachers were of the opinion that learners now require not only language competence but proficiency in language use to overcome language and cultural barriers in communication. The study found that globalization has increased the importance of digital skills and also cultural awareness to interact effectively with their peers from diverse cultural backgrounds. The results from teachers' discussion indicates that globalization has changed the needs of the learners in the ESP classroom. However, it also revealed that limited exposure to culturally authentic materials and curriculum hinder the globalized ESP teaching-learning environment.

CHALLENGES EDUCATORS FACED IN INTEGRATING TECHNOLOGY INTO ESP PEDAGOGY

Despite the positive outcomes, the study also found several challenges related to blending of digital technology in cross-cultural ESP classrooms from the discussion with the teachers and learners' perspective. It was revealed that lack of digital skills was a major challenge with the rapid growth of technology. Internet connectivity was another issue in incorporating technology into ESP classrooms, which became a barrier for some students to fully participate and collaborate with the rest of their classmates. Limited student attention spent on the content and distraction to other online entertainment platforms was another common issue. Insufficient infrastructure from the Universities creates another major challenge in the implementation or incorporation of technology. Insufficient or unavailability of culturally relevant digital content can also lead to absence of inclusivity on the part of the teacher, which can cause a major challenge in the use of digital technology integration.

Familiarization of ESP learners with cultural norms relevant to their field of study or profession: The results of this study indicate that students of ESP class demonstrated a moderate/ average level of familiarity with the cultural norms relevant to their field of study or profession. Responses from the open-ended and closed-ended questionnaire found that the learners displayed a strong awareness of written forms, such as formal email and application structure. However, there was average/moderate familiarity with the spoken cultural discourse, like expressing disagreement, and turn-taking. Hence, the moderate level of familiarity suggests learners' understanding of basic cultural disciplinary norms, but many learners still lack deeper pragmatic awareness required for interaction in a particular field of study.

The moderate familiarity to ESP environment may be due to the learners' limited exposure to authentic ESP material/environment and their cultural background, which focuses on indirectness and avoidance of confrontation. Thus, this study indicates that ESP class should incorporate explicit instruction on pragmatic norms, such as analyzing authentic interactions.

Influence of cross-cultural awareness in students' communicative competence: The results revealed that learners with higher cross-cultural awareness presented substantially stronger communicative competence, especially in turn-taking, nonverbal cues, politeness, and negotiation of meaning in communication. Whereas, learners with lower cultural awareness exhibit difficulties interpreting nonverbal or indirect communication and managing discourse flow in communication.

The findings indicate that cross-cultural awareness plays a pivotal role in influencing students' communicative competence. Learners who are exposed to diverse cultural perspectives can communicate with their peers effectively. For this reason, cross-cultural ESP classrooms would benefit from multicultural education to strengthen learners' communicative abilities.

Cross-cultural misunderstandings commonly occurring in ESP interactions: The findings of the study showed that learners in ESP class usually experience cross-cultural misunderstandings because of the following reasons:

- 1) **Pragmatic misunderstanding:** It is found that pragmatic misunderstandings often occur in ESP classroom. Due to the differences in the communicative styles, learners belonging to a more direct communicative culture value concise and direct expressions, whereas the other culture may emphasize or value indirect and polite expressions, i.e., differences in softeners and honorifics. Open-ended questionnaire analysis indicated that learners experienced pragmatic misunderstanding in their group activity and interaction with their peers. Respondents indicated that misunderstanding can occur and understanding the differences provides effective interaction, they stated, "...with classmates from different cultures I learned that some people talk more formally and others more directly which may be assumed as not friendly or rude. However, understanding this helped me talk clearly and work better with them."
- 2) **Speech acts:** The result showed differences in conversational speech acts. It is found that learners from cultures that tolerate overlapping speech frequently interrupt their peers during conversation, whereas, learners from a strict conversational turn-taking hesitate to contribute in the conversation, which might create an imbalance in conversational flow. A respondent mentioned, "...when I was working on a group project with a classmate. At first, I thought she was very ignorant and not interested, but later I learned that in her culture, people often show respect by listening more and speaking

less. This experience taught me that understanding cultural differences can make teamwork and communication more respectful and effective.”

- 3) **Non-verbal Cues:** Nonverbal cues, like gestures, eye contact, and body posture, contributed to misunderstandings in cross-cultural ESP classroom. Maintaining eye-contact may be a form of confidence in western culture. However, when we look at Asian cultures avoiding eye contact may seem as a sign of respect. These types of cultural mismatch may lead to disrespect and miscommunication among student-student or teacher-student relationships. Non-verbal miscommunication in cross-cultural classroom plays a very important role which is evident from the responses to the open-ended questions. Respondents mentioned, “In a diverse college seminar class, a student named Kenji, an international student from Japan, consistently avoided direct eye contact with the professor and often hesitated to speak up during a fast-paced group discussion. The professor, who was from the United States, initially perceived Kenji's behavior as a lack of interest, indifference, or a lack of confidence in his knowledge, as direct eye contact and eager participation are valued in typical American classroom communication styles.”
- 4) “In some cultures, pointing fingers at others is okay, however in another culture, it is seen as a rude and disrespectful behavior. These types of cultural differences can lead to distance and miscommunication among people.

“Understanding that direct eye contact is seen as disrespectful in some cultures improved my communication in a group project.”

Through the study we found that nonverbal cues like eye contact, finger pointing, turn-taking, etc., may bring a huge misunderstanding in a cross-cultural ESP classroom. This study also found that interpretation of silence is important in a diverse class as listening is considered more important and respectful rather than speaking. Hence, the knowledge of turn-taking in conversations may create misunderstanding in a diverse cultural classroom.

The result of the study indicates cross-cultural misunderstandings in ESP classrooms, especially on pragmatics, speech acts and nonverbal cues leading to communication imbalance among the learners.

IDENTIFYING THE USE OF DIGITAL PLATFORMS, WHICH ARE MOST EFFECTIVE FOR INTERCULTURAL COLLABORATIONS

The study found that digital platforms significantly helped in multicultural collaboration among ESP learners, providing a platform for the learners to communicate effectively anytime, anywhere through WhatsApp, video calls, and emails bridging diverse cultural backgrounds. Respondents express ease of exchanging ideas across time zones and cultures. About 19 % of learners used WhatsApp, video calls and emails to connect with their peers and share documents online. Learners responded that, “Technology has vastly improved communication with classmates from different cultures by bridging geographical gaps and providing diverse platforms for interaction.” The questionnaire indicated increased intercultural competence among the learners. Most learners as well as the teachers emphasized the use of appropriate digital platforms, fostering learner engagement and satisfaction on the course. They act as a scaffold in developing cross-cultural competence, through observation and discussion of different cultural norms.

CHALLENGES LEARNERS FACE WHEN COLLABORATING INTERCULTURALLY ONLINE

This study identified several challenges faced by learners in engaging in intercultural online collaboration:

- 1) **Communication Barriers:** Due to the differences in the language proficiency, learners often struggled to express their thoughts, ideas, and interpret communications accurately. The closed-ended and open-ended questionnaire revealed that approximately 60% of participants indicated difficulties understanding peers due to varying accent and levels of language fluency. Misperception of indirect language, tone, and accent may lead to slow completion of group activities, and continuous clarification in discussion.
- 2) **Technological issues:** There are technical problems found in this study through questionnaires and discussions from the students and teachers, which include unstable internet connectivity, unfamiliarity with digital platforms, and problems using collaborative tools.
- 3) **Collaboration Styles:** Learners show diverse approaches to participation level and time management in the class using technology. Some of the learners preferred structured classrooms, while some were in favor of independent and self-learning. Intercultural online collaboration seemed challenging for some learners. The study found intercultural online collaboration to be challenging because of the cultural misunderstanding, communication barriers, and technological issues. Respondents stated that, “Technology has greatly improved communication with classmates from different cultures by making interactions easier, faster, and more accessible, while also introducing some new challenges such as misunderstandings due to the lack of non-verbal cues and digital divides.”

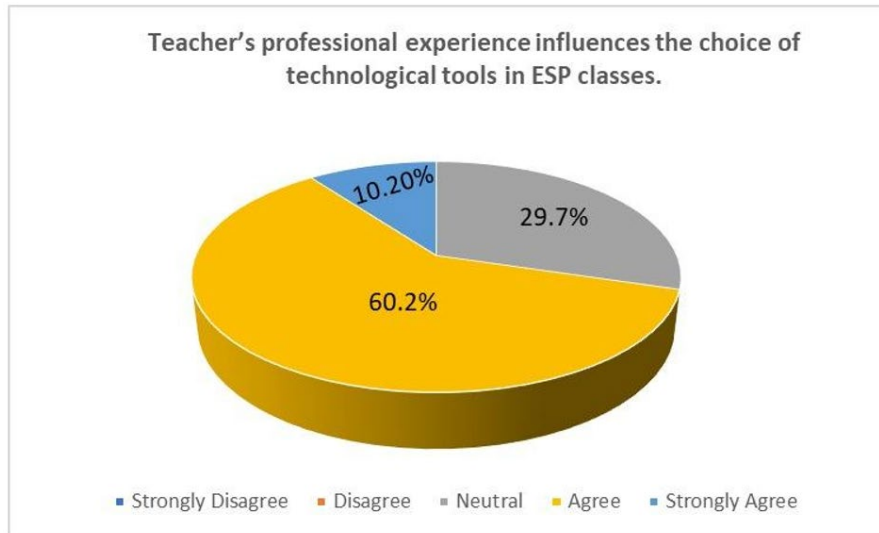
Teaching strategies currently adopted by ESP educators to address technological and cultural challenges: It is found that ESP teaching strategies that integrate digital technologies and awareness of cross-cultural education influence the learners' communicative competence. It helps in increased improvement of learner's language performance, digital competence, engagement and also reduced misunderstanding among peers. Discussion with the teachers also revealed that digital tools scaffold collaboration,

allowing learners to track their progress and communicate effectively in cross-cultural ESP classrooms. This combination of strategies helps learners to overcome technological and intercultural barriers.

Students' response to innovative and tech-enhanced pedagogical approaches: The students had a positive response to innovative, tech-enhanced pedagogical approaches, as it increases motivation, participation and improves collaboration among learners in comprehending the ESP content. About 57% of learners stated that online platforms create an inclusive environment that encourages participation from all learners regardless of their cultural or linguistic background. It also ensured timely feedback and discussion, enhancing understanding across culturally diverse groups of learners.

Teacher Identity:

Figure 2



Respondents reported that teaching using digital technologies in cross-cultural ESP classrooms made their identity more multi-layered. Teachers' roles shifted from decision-makers to facilitator, mediator, intercultural communicator. Teachers with higher digital confidence showed greater incorporation of technologies in their class. The majority of teachers reported that they have to regularly adjust their identity from authoritative to collaborator depending on learners and the situation.

CONCLUSION

Status of ESP in Nagaland: English is considered as the official language of Nagaland, where the medium of instruction is in English, making it favorable for the development of ESP pedagogy in the state. Universities in Nagaland follow a structured curriculum which focuses more on general English rather than towards specific field-based language. Learners in Nagaland display strong awareness of the written cultural norms but lack deeper pragmatic awareness to improve intercultural interaction. Hence, it is necessary to educate the learners and familiarize them on the cultural sensitivity in understanding their peers, which requires emotional intelligence.

Teacher's Training Development program: The teachers in Nagaland are aware of the ESP approaches, however, there is difficulty in implementation it into their classroom. Having said that, specialized training for implementation of ESP pedagogy into cross-cultural environments is needed in the education system of Nagaland.

Infrastructure and Content Resource: ESP implementation also requires administrative support to scaffold the teaching-learning process and outcome for university learners. Proper digital infrastructure and digital tools should be incorporated in ESP classrooms to promote inclusivity in diverse cultural settings. Universities in Nagaland should also incorporate culturally relevant specialized content in their syllabus for inclusive learner-agency.

Emerging Trends: Recent research identifies virtual reality as a promising tool for simulating authentic professional contexts, emphasizes the importance of digital literacy skills in ESP instruction, and highlights intercultural communication as essential to ESP pedagogy. Post-COVID adaptations have accelerated the development of customized blended learning models reflecting the shift from traditional pedagogy toward andragogical perspectives that prioritize student engagement.

ACKNOWLEDGMENTS

None.

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