Article 5

Technology Intervention in Teaching English for the Integrated Teacher Education Programme—A Minor Study

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Abstract

As per the guidelines of the National Education Policy (NEP)2020, efforts are underway to launch four year Under Graduate (UG) programmes replacing the three year UG programme. And recently as per the guidelines of NEP, the four year Integrated Teacher Education Programme (ITEP) is being launched in several institutions. It is common practice in many universities across the country to offer English as a compulsory subject of study during the first two semesters. Though not completely matching with existing patterns in university departments, the National Council for Teacher Education in the 'Suggested Curriculum for ITEP' for the newly launched BScBEd programme, proposed the teaching of the English language during the first semester of the eight semester course.

The investigator was assigned to teach English in the first batch of the ITEP. The newly joined students had cleared a national level test, and were found to be fairly competent in the use of English. So the investigator drawing on a decade long experience of Techno-pedagogy, adapted digital tools to create challenging tasks to ensure student attention and participation while transacting the content.

The paper commences with the background of the study, identifies the need for technology intervention and reports on the strategy employed for integrating social media like WhatsApp and email, and the use of digital tools like videos, visuals, infographics and animated gifs for transacting the content of the paper, 'English for Communication'. It is hoped that the study would sensitize participants to the scope and possibilities of technological intervention in the newly launched teacher education programme.

Keywords: Communication, Integrated Four Year Courses, NEP 2020, Speaking Skill, Technology Tools

> *Education has constantly evolved in the last decade. Many teachers have had to adapt to new teaching methods to ensure they have their students' undivided attention. Assisting them along the way are many digital learning innovations* and *new tools.*
>
> —Target Video

Introduction

The quote above by Brid.TV an international video ad solutions powerhouse, speaks volumes about the changing role of teacher and technology use in the classroom. Chapter 23 of the National Education Policy (NEP)(2020) deals with technology use and integration. The policy suggests the use of technology to improve multiple aspects of education. And recently, taking the cue from NEP 2020, several universities have started offering the four year integrated Under Graduate programme. (1) A perceived objective of the

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newly launched courses is to provide a flexible, multidisciplinary and holistic education model that aims to bridge the gap between the Indian academic system and global education systems.

Background to the study

In tune with the guidelines of NEP 2020, the new Integrated Teacher Education programme was launched in the prestigious National Institute of Technology, Calicut. A total of 38 students registered for the BSc.BEd programme. One the papers prescribed for study in the 'Eight Semester' course is 'English for Communication' offered during the first semester only. The students had cleared a national level selection test and had scored very high marks for the Plus Two examination. So a large majority of them were above average in terms of English language competence though the entire batch of students happened to be English as a Second Language (ESL) learners. The investigator, a teacher educator by profession had joined as adjunct faculty and is expected to transact the four module component in 39 sessions (2)

The problem

The students who had joined the new BSc BEd programme had prior to joining the course studied English for twelve years. But the 'English for Communication' paper prescribed for study during the first semester, matched the B2 (Independent user) level of the Common European Framework of Reference for Languages or the Cambridge English Scale. This was a threat for the teacher because a majority of the learners were found to possess an above average competence in English and the students knew that they would not have to put in serious study to pass the course. So there was every possibility of students displaying a lack of interest and motivation to participate in the classroom tasks. Hence the investigator-cum-teacher had to employ a novel strategy to capture the attention and interest of the learners.

Objectives of the study

The main objective of the study was to identify and use digital tools to motivate students who are above average learners to participate in the class room tasks in the 'English for Communication'(3) class. To make the pedagogical process effective and ensure whole class participation, the investigator focused on the following objectives:

- Identify and use digital images, to develop speaking skills.
- Identify and use digital images to provide practice in grammar use.
- Identify and use appropriate videos for illustrating concepts related to language.

Method

The population comprised students of the newly launched ITEP who have to complete a course in 'English for Communication'. The sample comprised 37 students who had cleared a highly competitive entrance examination and sought admission in the National Institute of Technology, Calicut, a top rated institution in India. This qualitative, empirical and analytical study was conducted in the participant observer study mode in which the investigator transacted the content, and also assessed the student-teacher performance

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both in the class room and also through online assignments. The data for the study was collected through observation, informal interviews and review of class room performance of the students.

The strategy primarily employed was the use of digital aids - images, videos, animated gifs etc as a prompt to trigger language use by the students. It was in the form of an explorative study aimed at employing digital aids with visual cues to prompt language use in the place of regular print based exercises normally provided in classrooms where communication skills are taught.

Brief Review of studies

On NEP emphasis on use of technology

Reviewing the reference to the use of technology in education in NEP 2020, Indu Kumar observed that achieving quality education in school and teacher education in the country is possible through a meticulous use of information and communication technologies. (ICTs)

On use of technology

Light, who works for the center for children and technology in a post on technology, teaching and learning posted on the UNICEF website opined that technology initiatives must be carefully designed so that it becomes possible for teachers to teach and students to learn in each educational context.

On use of social media

A systematic review of studies on the use of social media as a teaching and learning tool in Higher Education found that in many institutions it is an attractive and contemporary method of teaching and learning. (Perez etal., 2023) Studies conducted abroad have found that the use of social media tools can contribute significantly to academic performance and student satisfaction.(Zhu,2021)It has also been found that interaction with mentors, building of student communities are all possible when academic institutions utilize social media platforms. (Greenhow, 2011)

On use of videos

A study found that video offers contextual support and/or helps learners to visualize words as well as meanings. (Herron et.al,1995) A study by Çakir (2005) found that the use of audio visual materials stimulate and facilitate foreign language learning. Brame (2016) suggested three elements for effective use of video. These include managing cognitive load of the video, maximizing student engagement and promoting active learning from the video. Goodspeed (2022) while providing tips for showing videos in the classroom observed that movies and videos can be an excellent way to bring diverse stories and voices into the classroom. And Alber (2019) in a post on the use of video content for amplifying learning suggested that in order to keep the students accountable and attentive, commence by setting a goal for what students are about to watch.

On Speaking

Though students score well in written examination, when it comes to speaking many are found to falter. Lack of opportunity to practice English is one reason and practicing teachers of English have found speaking to be a difficult and challenging skill to be mastered.(Brown,2001)

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On learning Grammar

Teachers of English know that many learners find the study of Grammar a bit difficult. Hashemi & Daneshfar (2018) found in grammar teaching an issue that provokes strong feelings and attitudes. Ellis (2009) grouped the difficulties in learning foreign language grammar into three, namely ones associated with environmental factors of language, with linguistic factors and psychological factors.

Technology intervention attempted in the study–Use of different techno-based resources

Illustration : Use of social media tools : WhatsApp, Gmail and Blogs

Right from the initial days of the course, the investigator cum teacher formed a WhatsApp group exclusively for the students. This was then used for self introduction followed by answering of revision questions. Topics for which reference materials were not easily available were shared by the investigator cum teacher using Gmail. Following the answering of the revision questions the complete set of answers were posted in a specially created class Blog. From hindsight it became evident that the use of social media tools enabled transferring of resource materials and foster collaborative learning similar to the studies done in the field in India(Ansari & Khan, 2020).

Illustration : Use of digital images

While choosing photographs, clarity and richness of content vis-à-vis the topic being taught was the prime consideration. This often necessitated 'weeding out' or editing pictures downloaded from the Internet. This was consciously done because there was possibility of students focusing on unnecessary details resulting in their deviating from the learning goal. Ibrahim et al. (2012) employed such a strategy for deleting music and complex background from videos and found that such a treatment can improve retention and transfer of new information from video.

Illustration : Use of animated gifs

Animated gifs have the unique ability to focus on essential components to aid comprehension of certain concepts. The display of animated gifs were followed by guiding questions to focus on the concept being presented.

Illustration : Use of videos

Given the fact that videos are rich in content which includes audio, video, and graphics, segmenting or chunking of information was consciously done by the investigator. This was done to enable the learners to engage with small pieces of new information. Such a strategy was found to give control for the learners to process the flow of information. Incidentally a study by Zhang et al. (2006) found that chunking of information is essential for student engagement.

Further, to promote active learning, the videos were paused and questions were posed to ensure that students focus on the concept being taught. Senchina (2011) made use of 'guiding questions' when videos were being used to foster learning in a Physiology class and found the strategy to be effective. In fact, the Kaltura report on the state of video in education- 2017 pointed out that 99 percent of institutions have teachers who incorporate video for teaching.

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Illustration : Use of infographics

Topics such as 'Multilingualism', 'Language and Culture', prescribed for study are very broad and for the 'English for Communication' course signaling and cueing (deKoning et al., 2009) which involves the use of on-screen text or symbols to highlight important information became essential. This was discreetly done by the investigator to help direct learner attention on particular elements of the infographics displayed which is essential to make the processing of information in the working memory easy.

Discussion and Findings

- A majority of students during an informal assessment were found to be fairly confident in speaking in the class room without any inhibition. But nearly 30 percent of the students were found to show some inhibition in speaking fluently and confidently during the initial assessment. But once the investigator began employing visual tasks which are easy to comprehend which necessitates the student to recognize the visual, identify the relationship between people in the visual, come up with a plausible explanation, even those who tended to remain passive initially were found to provide answers to the questions posed.
- All the participants provided response in the WhatsApp based task and showed an interest in reading and attempting to answer the questions posed both to themselves and their peers. This many opined was something they have never done before during their schooling.
- The class room based tasks were initially a challenge as some of them feared that the errors they make in sentence construction is likely to lower their image before their peers. This was particularly so because they are adolescents and are deeply conscious about their self image.
- Some students were shy to speak, and showed no confidence to express ideas. They needed a class room climate which is stress free, and conducive to learn and use the language without fear of ridicule for making mistakes. The visual based tasks were mostly open ended and did not necessarily have one right answer only. This motivated many students to participate in the tasks provided.
- Many students who were reluctant to speak spontaneously began to follow the teacher's advice to interact with their peers in English to pick up the language in order to gain competence in language use.
- In schools, the grammar-based tasks which the students attempted was print based exercises. Having to incorporate the grammatical item (Conditionals, Relative clauses etc.) and frame a meaningful sentence was something they had never attempted before. Further when a minimum of five responses were invited for each visual or video displayed, the entire class got an opportunity to see how their own peers varied in terms of linguistic repertoire. This even prompted many to embrace the advice provided by the investigator cum teacher to make reading of texts in English and acquire vocabulary on a daily basis, a habit.
- Informal interviews with the participants found that they found the strategies employed by the investigator novel and while pursuing their schooling they have never had an opportunity to practice grammar in the manner it was taught during the study in NIT, Calicut.
- The students were found to actively participate in the teaching –learning process. Informal interviews revealed that the strategy employed in the classroom inviting open ended responses provided an opportunity for the smart students to provide creative language use. There were instances in which fairly competent

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learners provided humorous responses or combined more than one grammar item when asked to provide a response. This indirectly provided an opportunity for peer learning of the nuances of language use.

- One likely reason for active student participation could be that while undergoing schooling, almost all the students were familiar with their teachers of English teachers utilizing the prescribed course book and the student exercise books only for language practice. The digital images and videos which were employed were not only novel but also interesting and alluring.
- The results showed that there was increase in confidence levels to use English in the classroom without inhibition. The use of digital aids such as images and videos were found to invite the student's attention and increase the motivation to learn.

Implications of the study

- The investigator had for almost two decades compiled a series of visuals for language learning and for the study these were profusely utilized. Though the investigator found the strategy employed useful, teachers who intend to employ the same need to be cautious and choose visual aids with discretion. It worth noting the findings of a study on the use of audio visual aids, namely one has to learn from experience what works and will not work for a group of students.(Nurdin et al. , 2019)

Limitations of the study

- The study was conducted on a small sample and the duration of the study is less than 45 days. So it is difficult to fully generalize. More significantly, given the fact that profile and abilities of students who are now pursuing the newly launched ITEP in different institutions in the country widely vary, the advantages identified in the use of digital aids may not work equally well with all students.

Summing up

The study was conducted on prospective teachers of the newly launched four year Integrated Teacher Education Programme in our country. The study has attempted to show how the use of visual based tasks which involved an integration of digital aids motivated the learners to engage in the class room tasks in English even though they were into the thirteenth year of learning and using English. The novelty of the tasks ensured student participation and the strategy employed also instilled the confidence level of learners and helped improve own ability to trigger language use and foster fluency in language use. While summing up, it is worth recalling the 2017 recommendations of the US Department of Education in the National Education Technology Plan Update:

Provide pre-service and in-service educators with professional learning experiences powered by technology to increase their digital literacy and enable them to create compelling learning activities that improve learning and teaching, assessment, and instructional practices(p40).

Declaration of conflicting interests: The investigator cum author would like to declare that there are no potential conflicts of interest with respect to research or authorship for this paper.

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Notes

1. As per the new normal, the four year pogrammme will consist of eight semester following the credit-based system.

2. Being a degree awarding autonomous institution, the faculty of the BSc BEd course of NIT, Calicut has the liberty to make necessary changes in the suggested curriculum of the BSc BEd programme prepared by the National Council for Teacher Education. Further, the fact that no text books had been prescribed, the teachers who transact the content has the liberty to identify and use resource materials and even choose appropriate transactional strategies.

3. The four modules prescribed for study in the paper include : i. Language, society and learning ii. Grammar in communication iii. Speaking and pronunciation iv. Critical reading and writing.

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