RESEARCH ARTICLE

JOELL
Veda Publications

EMPLOYING AVANT-GARDE TECHNOLOGY IN INDIAN CLASSROOMS: A DISCUSSION ON RECENT TECHNOLOGICAL INNOVATIONS AND THEIR PRACTICAL APPLICATIONS

JOVEETA JUSTIN

(Assistant Professor, Dept of English,All Saints' College,Thiruvananthapuram – 695007,Kerala.)

ABSTRACT

In this digital era, the teaching strategy of English language must be equipped with E-learning. Casting aside the traditional 'chalk and talk' method the call of the time is the adherence of smart class methodology. To aid in the teaching process there is at hand a wide range of avant-garde equipment which has its base in innovative technology and versatile software developed to suit the demands of the new generation of instructors and learners alike. It is therefore imperative that teachers today avail the E-learning resources to get a sound feedback from the learners. For English language teachers, it is always better to adopt technology and equipment which will help the learners make the transition from L1 to L2 as hassle free as possible without the added disadvantages of confusion and fear. The paper addresses the advantages and disadvantages of several kinds of practical E-equipments that can be introduced in the English classroom in order to facilitate effectively the teaching-learning process.

**Keywords*: Classroom Teaching, Teaching Aid, E-learning, E-aids*

INTRODUCTION

A random glance at the changing universal scenario shows us that education today is indeed of paramount importance. Adopting the right methods to broaden the learning spectrum, reassessing abilities, revising old ideas and in short; gearing up for a revolutionary change is what a teacher or a learning instructor must do to achieve optimum results from the learners. To aid in the teaching process there is at hand a wide range of avant-garde equipment which has its base in innovative technology and versatile software developed to suit the demands of the new generation of instructors and learners alike. It is therefore imperative that teachers today seize the opportunities available to make the teaching-learning process more effective and pertinent to the Age. In order to have this change assimilated into the existing milieu, it is essential that teachers have an understanding of what means suit their strategy best.

For language teachers, especially for those who teach foreign languages like English, it is always better to adopt technology and equipment which will help the learners make the transition from L1 to L2 as hassle free as possible without the added disadvantages of confusion and fear. Using of radical methods while teaching will stimulate the learners' interest and also enhance the chances of incorporating adequate knowledge. Many teachers of English acknowledge that the main problem encountered during teaching English is the learner's inability to correlate between spelling and pronunciation. This indeed poses as a severe impediment to the learning process. The lack of time often forces the teacher to choose between the option of either completing the portions within the stipulated time frame or sacrificing hours to correcting the learner understands while leaving several vital portions of the syllabus untaught. Another major issue is the fear psychology which several learners experience while mastering English grammar. To many learners, grammar is a veritable hurdle which effectively nullifies all interest in the subject. Therefore it is the teacher's task to elucidate the principles of English grammar in such a manner

so as not to provoke emotions such as fear, revulsion or confusion. These problems however can be overcome with the help of new age technology which is making its presence felt not only in the field of trade and commerce but also in the field of education.

Today there is a wide range of gadgets and technology that Instructors and teachers may use to ensure that the students benefit from the classes taken on various subjects. While several educational institutions have already started using smart classes to aid in the teaching–learning process, there are many who are as of now unaware of these changes. A smart class incorporates a computer system or a laptop, a set of speakers and an overhead projector. Sometimes the systems are provided with internet connection or Wi-Fi. The advantages of a smart class are numerous. The teachers need to make Power Point presentations on relevant topics and store them either in CD-ROMs, DVDs' or in Flash Drives. They can insert or connect these to the system and present the matter to the learners. Films, video clippings and so on may also be screened likewise. However in the event of a power failure, the backup will not function for longer than an hour at the most. Besides the system and its attendant parts are bulky and require space.

This is where the micro projectors are of immense importance. These are used in combination with android phones, i-phones or windows phones. These as everyone knows are handy and can serve multiple purposes. They can be used today in situations that formerly would require much bulkier equipment. For a classroom presentation, the file has to be first uploaded to the phone. Depending on the mobile operating system, the file can be transferred by connecting the phone to either a laptop or a computer which contains the presentation via a USB cable or wirelessly over Bluetooth or via email or through a Web server. Android phones have micro SD cards and if the computer or laptop has an SD card reader, and then files can be transferred that way also. As most smartphones have either an Office Mobile App or a ThinkFree Office Mobile Viewer built in, opening and viewing presentations becomes quite

Joveeta Justin

VEDA'S

JOURNAL OF ENGLISH LANGUAGE AND LITERATURE (JOELL)

An International Peer Reviewed Journal

http://www.joell.in

Vol.2 Issue 1
2015

easy. In case the user has no access to a computer or laptop to prepare a presentation, then full featured mobile software such as Documents-to-Go or Quick-Office-Pro may be used for the job. Once the presentation or matter to be shown is uploaded onto the phone in a separate folder, the next challenge is ensuring that it is transferred to a monitor or projector. As most smartphones have HDMI ports that can be connected to a TV or projector with an HDMI input, it can be safely assumed that the transfer of data, files, videos or even presentations will be smooth and rapid. While the iPhone doesn't have an HDMI output, it can be connected to a TV or projector with composite AV inputs.

Another advantage of using smartphones as educational or teaching aids is that while showing the presentation from a laptop or a computer, the phone can be used as a remote control which will enable the teacher to move freely about in the class and not go back to the system to change slides, start, pause or stop the viewing of the files. The phone can be connected to the PC via Bluetooth or Wi-Fi (which can be installed via an application on the PC), and then the teacher can go to the next or previous slide by swiping a finger on the phone screen or pressing a button. The learning process thus becomes free of interruptions besides giving the teacher an opportunity to make the class interactive by pausing the presentation or video at only necessary intervals. This method ensures that the teacher does not get exhausted while the learners try to assimilate information through an unusual and therefore interesting medium. Using their own phones also ensure that the teachers or instructors feel at ease with the entire process. There are several applications which allow the user to jump to any slide, fasten a black screen to hide the presentation, and enable the phone to function like the remote control devices made for presenters. An example of a slideshow remote app for Android is the PPT Remote. Another example is the Power Point Open Office Remote app for controlling presentations with Android phones.

Yet another recent innovation is the G-Mote app which can be used it to turn an Android phone into a keyboard/mouse for the connected computer. It can also be used to browse the web on the computer which will display the web pages through the projector. This process can be controlled from the phone. The G-Mote app also works as a Media Center remote control which means that films or videos can be shown using the app to control the whole. Besides giving the teacher the unique opportunity to browse specific topics at will, it also sparks the learners' curiosity as regards the possibilities of a class taken in such a novel way. This also ensures that the teacher or instructor has ample time to cover several topics in quite a short stretch of time, without leaving the learners in a quandary. For example an English poem can be easily taught where word meanings and phrases can be easily observed by the learners on a big screen, leaving no room for doubt regarding either spelling or pronunciation. An audio recording of the poem will also kindle the learners' attention and inculcate an interest in the rhythm and beauty of the English language. Literary works from the different ages of English literature can be taught with the help of vivid paintings and portraits depicting the life, mannerisms, clothing and attitudes of the relevant Age. Even topics such as Phonetics can be taught effectively by recording speech sounds and saving them in a folder and playing them at the appropriate time. The sounds may then be picked up by either a microphone or the phone could be connected to portable speakers placed inside the classroom. It is quite a healthy and invigorating practice to have an interactive session at the end of each class as it benefits both the teachers and the learners. It encourages the learners to share the ideas gained during the class and helps the teacher reassess the effectiveness of the teaching methodology while conducting a quick quiz on the relevant topic. Having a question and answer period at the end of classes or study sessions can be beneficial for the future too as a recording of those questions asked by the learners maybe used for the preparation of a revised lesson plan by the teacher. Most smartphones have a voice recorder function built in. If not, then it's quite easy to download a recorder app such as Voice Recorder by Mamoru Tokashiki for the Android phones. Tape-

a-Talk from Markus Drosser is another application that's also easy to use. Another advantage of the Smartphone is that it serves as a medium for viewing speaker notes. This comes in handy when the class is on some lengthy topic which requires an occasional reference. This is however an advantage that favours the instructor more than the learners.

Other points to be taken into consideration while selecting viable equipments are cost-effectiveness, ease of use and maintenance. Easy-to-use technology like smart phones with HDMI ports which may be connected to either a Television or a projector for a classroom PowerPoint presentation are now easily available in the Indian market also and their manifold uses are being understood by many all over the country . The invention of the PICO projector devices is of great significance and if used properly can revolutionize the teaching-learning process. These projectors are portable, lightweight micro devices which are being produced by renowned companies such as HP, Acer, Samsung, Phillips and so on. As we step into the realms of the new globalized world, a departure from the more traditional methods of teaching becomes the need of the hour as the learners are no longer passive observers but active participants in the teaching – learning process.

Pico Projectors, also known as 'Handheld Projectors' or mobile projectors or mini beamers, are companion products for portable devices such as cameras, mobile phones and tablets. The creation of this device is a response to the recent improvements added to compact portable devices such as mobile phones, personal digital assistants, and digital cameras, which have sufficient storage capacity to handle presentation data but little space to accommodate an attached display screen. These Handheld projectors are incorporated with miniaturized hardware and software that can project digital images onto any nearby viewing surface. They provide a handy way to rapidly project the content of the devices onto any surface such as walls, notebooks, white boards, as well as, a new array of portable projection screens sized and designed for PICO projectors and for presenter mobility.

Using a PICO projector along with a webcam, a laser pointer, and image processing software allows the user full control of any computing system via the laser pointer. The term PICO is an abbreviation of the words 'portable', 'light-weight' and 'micro' which sum up the specifications of the device rather neatly. PICO projectors can radically change the way in which PowerPoint presentations are projected in classrooms as they are user-friendly and also budget friendly. New versions can even be connected to Internet Dongles and data storage devices such as iPods and smartphones. The cost of the projectors is indeed of a palatable range which can suit the infrastructure of even an ordinary educational institution with no secondary sources of funding. The devices themselves are easy to handle for those already familiar with the working of the normal LED projectors. First time users can use the detailed instruction that accompany the devices before proceeding to use them. These projectors can be carried from class-to-class with little or no effort and serve to make the learning process interesting and appealing to the learners.

The disadvantages of these elements of modern technology must also be scrutinized. One major disadvantage is the cost, which may not suit the infrastructure of all the educational institutions in the country. Another is that, not everyone will be comfortable while using unfamiliar technology. Sometimes teachers are more likely to go for tried and tested methods than adopt recent trends which may confuse them. The process of setting up the necessary software, learning to use the various applications and connecting the devices properly might prove to be quite a hurdle for many who are unused to the new technology. Learners might not appreciate the introduction of revolutionary technology into the classroom and are likely to be wary of the resultant changes in the teaching process. If the learners are disinterested in the new methods then the entire endeavour might turn out to be a financial as well as personal disaster.

CONCLUSION

However times have changed and the classroom scenario today is definitely not what it was

a few decades back so it is possible that a change in teaching methodology could be the proverbial spark that sets off a radical transformation in the field of education and thereby ultimately revolutionize the face of the nation.

BIBLIOGRAPHY

[1]   Dotenco, Sergiu, Timo Gotzelmann and Florian Gallwitz, eds. "Smartphone Input Using its Integrated Projector and Built in Camera". *Human–Computer Interaction Applications and Services*. Lecture Notes in Computer Science. Vol 8512, pp 124-133, 2014. Web.26September 2014.

[2]   Siriborvornratnakul,Thitirat. Multimodal Interface Towards Smartphones: The Use of Pico Projectors, Passive RGB Imaging and Active Infrared Imaging". Articulated Motion and Deformable Objects. Lecture Notes in Computer Science. Vol 8563, pp 41 -50, 2014. Web. 26 September 2014.