EXPLORING PODCASTS: A POTENTIAL EDUCATIONAL TOOL IN HIGHER EDUCATION

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Abstract

ICT and E-learning have completely restructured the traditional model of education and brought about significant changes in its pedagogical aspects by integrating technologically oriented methods of collecting, sharing and distributing information, thus, impacting the students' active involvement in the teaching-learning process and ultimately their academic performance.

This paper looks at one of these communication tools known as 'Podcasts' and its adaptation into the field of education as a pedagogical tool to improve and enhance the students' performance, especially in an inclusive setup. As an innovative educational tool, this paper explores the role of podcasts in the teaching-learning process, assessment, and other such areas.

The paper collates the research findings of various studies on the effectiveness of podcasts as an educational tool carried out in inclusive classrooms all over the world, a majority of which are based outside of India. The paper seeks to weigh the findings against the Indian context to gauge the effectiveness of Podcasts as an assistive technology in Indian inclusive classrooms.

The paper intends to focus at the three major aspects related to use of Podcasts in the Education sector: its advantages over the traditional methods of teaching, the feasibility of using podcasts in terms of availability of internet services and the popularity of podcasts in India. One of the most important questions that emerge, and that this paper seeks to address, therefore, is that if podcasts can replace actual teachers and the traditional methods or can they be used as just an additional tool to enhance learning outcomes. Tracing the journey of podcasts as an emerging and successful educational tool in the European and other countries around the world and its growing demand in India in the last few years, the paper concludes that Podcasts seem to have the potential of becoming a feasible and effective learning tool in the Indian classrooms.

Key Words: *ICT, podcasts, podcasting, E-learning, educational tools.*

INTRODUCTION

The introduction of computers and more importantly the internet in the field of education has made it technologically advanced. E-learning, Mobile learning, ICT and Educational Technology have revolutionized the traditional methods of teaching making it more learner-centered and flexible. It has led to innovation in both pedagogical strategies and content delivery in the classroom.

Various E-learning resources like Podcasts, Vodcasts, and virtual reality platforms are being incorporated into the traditional classroom setups to make them more innovative and effective. Traxler (as cited in Sutton Bradley et. al., 2009) sees mobile learning in higher education as a means to offer context-based, personal and informal aspects. A lecturer has access to a variety of digital and technological educational resources to enhance the learning experience (Sutton-Brady et. al., 2009). The ease of availability of educational aids and tools on the internet has shifted the attention away from the teacher as the reservoir of information and focused it on the student, seen as the constructor of her own knowledge with the internet being her oyster. According to Selwyn (2009), technological advancement could bring about innovation in teaching learning in the University system.

While introducing technology clearly impacts the teaching-learning process positively, it is equally challenging, perhaps the biggest challenge is determining its worth (Sutton-Brady et. al., 2009). This paper is an attempt to study the findings of various research and case studies to ascertain the effectiveness of podcasting as a learning tool and its role in enhancing/improving the learning outcomes of students and hence, to order to indicate its potential of becoming a useful learning aid in the Indian higher education system.

What Are Podcasts?

Podcasts are serialized audio files that can be downloaded from the internet. Epistemologically, the word Podcast is a portmanteau of iPod and broadcast (Chan, Lee & McLoughlin, 2006; Lim, 2006). The serialized podcasts are made available through manual downloading or by push technology which automatically downloads them in the subscribers' devices as soon as they connect to the internet. The podcasts are then available for offline use rather than online streaming.

Podcasts are generally used to record live TV shows, radio programs, debates, audio stories, standup comedy, and other serialized episodes. Podcasts could be used to transmit any TV or radio show, recorded lectures or any other event (Beamish & Brown 2008). In education, podcasts can be used for creating learning aids and tools to enhance

the learning outcomes and to make the lectures interesting. Universities like Duke and Washington have been using Podcasts in some broad scale projects as, are professors, around the world on an individual level.

Podcasts as a Learning Tool: Their Features and Pedagogical Implications

The omnipresent iPods and other digital devices have led to tremendous growth in the use of digital music along and Podcasting as a mainstream activity (Beamish & Brown 2008). In classrooms, digital audio resources have long been used by teachers to engage, motivate and enhance students' participation during the lectures. However, podcasts differ from mp3 audios in the versatility of their design and content depending upon the use. Podcasts can be used for recording live lectures, tutorials, short serialized episodes, etc.

Podcast content can vary according to its design and functionality. It may contain a short summary of the previous lecture or an introduction to the next one, a glossary of keywords, content background, important concepts in detail or content designed for quick revision.

There major kinds of podcasts are- Audio Podcasts, or digital audio files available on the internet through a syndication feed, Enhanced Podcasts including hyperlinks and meta-analysis and Video Podcasts also known as Vodcasts.

On the basis of time frame, podcasts could be in the form of Short format or Long format type ranging from 3-4 minutes to an hour's duration. This variety of podcasts in terms of their purpose, organization, and design makes them an extremely adaptable and flexible resource.

Podcasts can be created by the teachers as a resource or by the students for a project (Preston 2008). When students create podcasts, they inquire, research and present their ideas in a coherent manner. This process involves an in-depth engagement and critical reflection on the topic of enhancing their learning. The podcasts created by teachers may be an important aid during the examinations for quick revision or on the days one is absent from the class or even for revisiting the content covered during a lecture.

In a classroom, there are multiple factors which contribute to student learning including teacher's competence, use of effective teaching aids and strategies, the classroom environment, etc. What determines the effectiveness of a technology like podcasts in a classroom is the ways in which it is used to deliver quality learning experience (Beamish & Brown 2008). More than its design and content, the effective integration of podcasts in the classroom determines its worth.

Podcasting versus Traditional Teaching

A traditional or common classroom teaching here refers to the use of chalk and board for teaching with the teacher being the primary source of information and students as passive information receivers. Podcasts embedded curriculum, on the other hand, can cater to the achievement of a variety of learning objectives such as introduction, revision or even assessment of content in a more engaging/participative manner. It can help in students' active involvement in the classroom processes.

Unlike the traditional classroom setup with fixed time and place/venue, podcasts offer flexibility as they can be accessed anywhere and anytime. This is important especially for students who cannot attend regular classes by virtue of being working or for those who miss regular classes due to various other reasons. Podcasts provide course content in a shorter, condensed form making it easier to revise. The podcasts can be played and replayed multiple times as per the convenience of the learner.

Podcasting can also be used as a mediating agency in a pedagogical task where students are required to create podcasts. This could promote reflection and critical thinking skills in the students as they deal with concepts in depth to create a podcast.

Another point in favor of Podcasts is its ease of access. Through push technology, podcasts can automatically be downloaded therefore save time and efforts of searching manually. Unlike an online video, a podcast does not require a stable internet connection while streaming. It can be accessed offline. A podcast episode is small in size and does not occupy too much space on any device, thus making it easy to download and store.

According to Marc Prensky (2001), podcasting uses digital technology, a ubiquitous part of the lives of the digital natives to enhance the content delivery and to improve the learning outcomes of the students. The traditional lectures, however, do not keep the inclination of the modern technologically savvy students.

STUDIES ON THE RECEPTION, USAGE AND STUDENTS' ATTITUDE TOWARDS PODCASTS: AN ANALYSIS

The studies conducted with university level/higher education students across the world focusing on students' attitudes towards podcasts as an additional learning tool were collected and analyzed. The analysis is focused on two major themes: the reception of podcasts by the students and its success as an educational tool in terms of academic performance.

The study conducted by Lee and Chan (2007) on 39 students of a distance learning course in an Australian University with 9 short 3-5 minute podcasts covering supplementary course materials revealed that all of the 18 students who participated in the online survey post the study downloaded at least 8 out of 9 podcasts. Out of these, around 89% of them listened to at least three of the podcast multiple times.

Evans (2008) conducted another study on 196 undergraduate business and management students in a United Kingdom university. Three podcasts meant for revision were made available right before the examination. A post-study online survey asking them about their attitude towards podcasts revealed that around 80% of them downloaded the podcasts on their personal computers. Most of them indicated that they found podcasts a useful resource for revision of the course content.

Huntsberger and Stavitsky (2007) conducted a study on 249 students enrolled in a Journalism course in a United States university using five 15-20 minute podcasts for revision purpose. An online survey taken by 209 out of 249 students sought their opinions, comments, and suggestions about their use and attitude towards podcasts. The results revealed that around 87% of them listened to all the podcasts at least once. Around 40% of them reported using these podcasts as a replacement for their regular lectures.

Another study revealing the students' preference of real lectures over recorded podcasts was conducted by Copley (2007) with 283 undergraduate and postgraduate science students in the United Kingdom where the results of an online survey revealed that around 80% of the students downloaded the podcasts containing supplementary materials for the class. The online download pattern suggested that the students used these podcasts for revision rather than as a replacement for a real lecture. 93% of these participants indicated that they were enthusiastic about the future use of podcasts in education.

Bongey, Cizadlo, and Kalnbach (2006) conducted a study in a United States college on 246 Biology students with an aim to analyze the impact of podcasts on students' attendance and their usage pattern. It revealed that the availability of podcasts did not lead to a decrease in the students' attendance. Around 67% of the students responded to an online survey out of which, around 70% believed that podcasts helped improve their overall understanding of the course content. The authors further commented that all of these findings seemed to indicate that students perceive the podcasts as really useful additional resources available to help them succeed in their courses rather than as a substitute for more traditional methods of learning.

Almost all the studies conducted on the use of podcasts at the university/higher education level revealed that a majority of students considered podcasts as an important tool for revising and understanding the content in greater depth. They seemed to be motivated to use podcasts along with their classes.

From the above review, it has been found that majority of the students used the podcasts only for revision purposes. The studies indicated that effective use of podcasts as a supplement to the traditional lectures before or during the classes has not been fully explored yet. There are, however, contradictory evidence to suggest if podcasts could replace traditional lectures altogether. Most of the studies indicate otherwise. An effective strategy would be to integrate podcasts into the classroom teaching-learning situations so as to enhance and build upon the content covered in the class instead of generalizing traditional classes redundant. To increase the potential benefits of podcasting in higher education, there is a need to focus on the pedagogical design of podcasts, rather than just repeat lecture content (Sutton-Brady et al., 2009).

It is known that today most of the students have access to the podcasts on their personal computers rather than any other audio device, it suggests that the theoretical claims of podcasts being a mobile learning tool need to be further investigated. The educators/teachers could work upon the content and its delivery mechanisms to make it more appealing, attractive and engaging for the students to enhance their learning outcomes.

PODCASTS AS A POTENTIAL LEARNING TOOL IN THE INDIAN UNIVERSITIES

All the studies analyzed above are situated outside India; however, they could be helpful in pointing towards the potential challenges, strategies, and requirements for the implementation of podcasts successfully in the Indian education system.

The feasibility, ease of accessibility, and popularity are the main aspects that need to be focused while assessing the potential effectiveness of podcasts. The effective use of podcasts requires a digital audio device like a smartphone or a personal computer and an internet connection. The Indian University/higher education system is undergoing a tremendous change with most of the administrative processes becoming digitized. With the world's largest youth population and access to smartphones and computers, there is a growing possibility of ease of access when it comes to podcasts.

Every new technology faces the challenge of being rejected in the initial stages due to the change in the fixed pre-existing structures and processes. One of the major challenges to

this integration of podcasts is the possible lack of motivation and reluctance to put in efforts by the system. It also requires students to up-skill and integrates it into their study routines (Sutton-Brady et al., 2009). This issue could be tackled by creating awareness about the benefits of podcasts and organizing short duration training courses/workshops for teachers and students both on preparing podcasts so that they could be assimilated in the traditional classroom teaching-learning system.

The video lectures offered by distance learning programs in various Indian universities have not been utilized to a satisfactory level. Such courses are best suited for to try out podcasts for delivering condensed study materials and revision audios. If successful, they could be integrated into regular higher education classrooms.

In regular courses, podcasts could ~~first~~ be used on a pilot basis, to begin with, or in individual classrooms test its efficiency. This first step towards making the classrooms inclusive of the technological boom in the outside world can be the genesis of podcast integrated classes.

The market for podcasts in the European countries has been steadily increasing for over a decade now. In India, however, the trend has been emerging in recent years with companies like Audiomatic and Indus Vox Media emerging gradually. This trend hints towards the possibility of its success as an educational tool.

CONCLUSION

The uses of "ICT in teaching and learning have been rapidly increasing in the last two decades. Challenges in, and barriers to their effective implementation apart, uses of ICT have a positive impact on situations of teaching and learning." (Ahmad, Banday & Jan 2013)

As an effective, flexible and accessible learning tool, "podcasting has the potential to add real value to students' learning experiences beyond the traditional course notes and the common drill-and-practice online quiz." (Sutton-Brady et al., 2009) "it can build on the personalized experience of engaging with the lecturer and take it beyond the classroom, expanding the lecturer's presence in the students' learning experience." (Sutton-Brady et al., 2009)

The studies showed a positive reception of podcasts as an aid in the learning process by both the teachers and the students. However, the major areas of concern are lack of awareness and motivation of teachers and students to use podcasts and the accessibility of the internet and digital audio devices. However, these issues can be tackled by organizing workshops and creating awareness during teacher training programs. One

solution is to partner teachers with pre-service teachers with the requisite skills to implement podcasting activities in the classroom. (Beamish & Brown 2008)

Podcast integrated lectures could be taken up as a pilot program introducing it on a smaller/pilot scale first to judge/check its efficacy. If successful, it can be replicated all over the country.

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