

Live Captioning for Live Lectures – An Initiative to Enhance Language Acquisition in Second Language Learners, through Mobile Learning

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Abstract

World is networked through internet today. There are various mobile Applications, which help people in many different ways, based on the purpose of the application. Due to the pandemic lockdown, now-a-days, the classes are conducted online, through modes like, video lectures and video conferencing. Apart from the forced school environment, one can create their own environment to study through online classes. Apart from the established online courses that already have study material and subtitles, the live classes for under graduate students, who begin to explore online education, get the first blow in understanding and educating themselves. Many students find it difficult to listen to lectures through video conferencing because of a cluster of students with different proficiency levels. In a classroom scenario, with the use of blackboard method or power-point presentation, the students somehow get the idea of the subject. That way, if not by listening to the teacher, visual aids help the students to grasp in a better fashion. The purpose of this study is to propose the development of a mobile application, to reduce the difficulties in listening lectures online. The application might act as a caption provider in the video lecture that helps the students to comprehend the subject better. This study is based on a survey taken among 100 undergraduate students from a particular institution in India, to enquire the hardships and hurdles of learning through online lectures. The result of the analysis provided the preference of captioned videos in video lectures for enhancing the purpose of online lectures. This study tries to prove the hardships of non-native speakers of English, while attending video lectures and providing a solution to the aforementioned, based on the survey, by implementing the idea of a mobile application to provide captions, during the live lecture.

Keywords

Live Captions, Language Acquisition, Communication, Second Language Learning, Application, Lectures.

Introduction

Technology plays a prime role in day-to-day life. By the early '70s internet started emerging and marked its path in history and slowly everything started becoming online. Majority of the people are utilising the innumerable features of internet today. Within some years from now, there will be hardly anything without technology. With no exception in education, an enormous number of sources including electronic books, audio lectures, video lectures, e-certification courses, various mobile applications and software are available in the internet to make the learning process easier. To study through video conferencing and online classes became a recent trend due to the pandemic lockdown and is also an innovative endeavour. Most of the institutions started conducting their classes online, especially through video conferencing, starting from elementary schools, many universities are conducting their classes through this mode. Some students find it easier to listen to live lectures, because, they can create their own environment apart from the traditional method of being in a classroom. This study is for students, especially who have sub-standard proficiency level, find difficulties in listening lectures online. It is based on the survey taken from a multidisciplinary institution in India, where the domicile of students varies. These students, non-native speakers of English, fails to understand the lectures using technology. By using the traditional chalk and board method in classroom, they might able to get at least the broad idea of the subject. Based on the survey, some students chose they have no idea what the teacher teaches in an online class. Since some of them are from remote corners of India, it takes time for them to enhance their communication skills. It is a teacher's responsibility to educate and edify the students by providing handouts of the subject, and to make them learn using various methods. But when students are not efficient in the second language, it breaks the communication between student and teacher and also unable to get their doubts clarified. This study is an initiative to develop a mobile application, that might provide captions during live lectures to make online classes beneficial as well as to enhance second language. There are many videos related to education that have subtitles, through which students can utilise the opportunity and can learn their area of subject on their own. But in live lectures, students who are still acquiring their second language, could be able to understand only half of what the teachers teach. To overcome these kinds of hardships in live classes, the idea of developing a mobile application to provide captions is an essential one. This study tries to

prove the necessity to implement a mobile application for the better understanding of the subject, especially for non-native speakers of English.

Review of Literature

There are several studies available on video captions. According to a study “Video captions benefit everyone” in 2015, conducted by Morton Ann Gernsbacher, it has been found that captioned videos benefit people, almost everyone. The study has been divided into two parts based on the survey taken, each focuses on group of students who undergoes certain difficulties. The first group of students had difficulties in hearing. When the survey was conducted to both set of students with hearing disabilities and normal ones, the result was unsurprising that students with hearing disabilities benefits from subtitles/captions, but people with no difficulties also benefits. The next part is for students with no difficulties in hearing, but has difficulties in learning. Some students were given video and audio of a six and half hour TV show and others were given audio and video as well as captions. The result was children who have watched the program with captions tend to have a better learning skill. They were able to deliver what they watched and they pronounced words (were not shown on the video, but in the captions) better than that of students who watched only video and audio. Through this study we can conclude that not only students who have hearing difficulties benefit from captions, but also benefits hearing adults. There is another study, based on real-time captioning by Marcia Lyner Cleophas. In her article “Live captioning could transform deaf students’ university experience”, she talks about the difficulties faced by the students who have hearing disabilities, while conducting this survey. In this study, it is mentioned that the student of Stellenbosch University, Jody Bell, an honours student in genetics, approached the university’s disability unit to seek help for the deaf students. The unit members approached 121 captions, a British company, that eventually agreed to provide captions for Jody Bell’s lectures. It was the first trial for the company and eventually it was a success.

“Both the student and lecturer log on to the 121 Captions system via a programme like Skype. A microphone then picks up the lecturer’s voice and relays it to a captioner in the UK who transcribes it word for word at up to 300 words a minute using a phonetic keyboard.” (Cleophas)

When Jody Bell was conducting class, the captions appeared on the students’ screen immediately after 3 seconds, completely transcribed. It helped a lot of students in the university, whoever missed the lecture or whoever misunderstood had given a chance to

retrieve the information. These are the scholarly articles that are already available to provide the importance of captions for people with hearing disabilities. This study tries to bring out the hardships faced by second language learners, while attending online lectures.

Methodology

To analyse the hardships of students who acquire their second language, quantitative methodology has been incorporated in this research to find out the obstacles in online classes and to give a solution to it, a survey was conducted during this study. The survey was taken from the students of a multicultural institution in India. A class of 100 undergraduate 1st year students had undergone this survey to make this study effective.

Live Captions for Second Language Acquisition

Communication skills are the most essential in this technological world. Students from remote corners, since they have poor communication skills, initially face difficulties when they go to universities for higher education. Usually in universities, they have students from around the world, so the faculties have to teach in English, no matter what. Some students get the exact idea of what teachers teach. In a traditional classroom, the teachers always use chalk and board method. By using this method, students who have low proficiency, might be able to get the broad idea of the subject. Online classes are now a lifesaver for many institutions. Some students are comfortable attending lectures online, while some not. In an online class, students with good communication skills benefit easily than others. Students who are still acquiring their second language or the non-native speakers of English, find difficulties in listening the lectures. Some students might get distracted or even lose interest when they do not understand anything.

The survey was conducted from a class of 100 undergraduate students from a multicultural institution in India. The students were divided into 4 groups based on their proficiency level and communication skills. The first set of students have good communication skills, were assigned to watch a lecture for an hour. They were given only captions. The second set of students have moderate communication skills and were given only audio and made them to listen the same for an hour. The third set of students have basic communication skills and were given both video and audio. The last set have poor communication skills and are still acquiring their second language, were given video, audio and captions. All the four sets were given same video, audio and captions. All the four set of students were given a test simultaneously, in the end, students belonged to the fourth set, seemed to have better understanding of the video with captions. Students who have high proficiency level fails to pay attention while the captions appeared on the

screen. Students who were given only audio, drowned in their own imagination and couldn't able to listen to the audio. The third set of students, were given both video and audio, couldn't understand the lecture. The last set, who were still acquiring their second language, found it easier to watch the video with captions and most of the students in the class preferred captioned videos during live classes. The result of the survey is mentioned below:

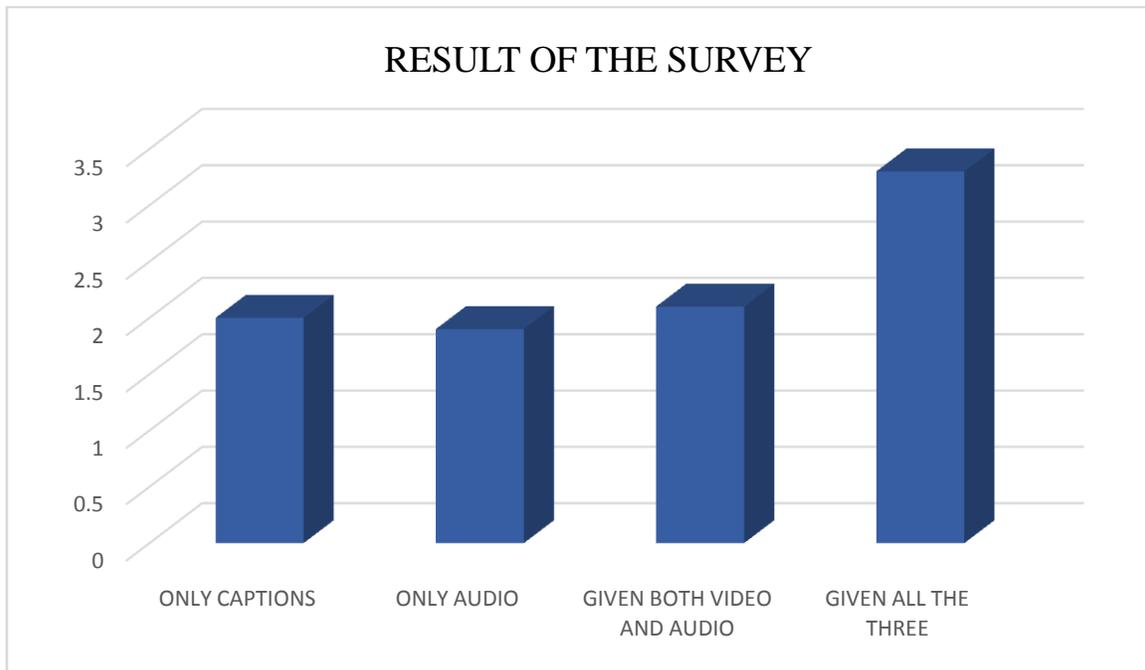


Figure 1 Result of the survey

Conclusion

Mobile learning or m-learning started lighting up its service many years ago. While conducting the survey, the concept of developing a mobile application to provide captioned videos during live lectures has engrossed students recently. The survey carried out in this study clearly explains the excellent impact of providing captions during live classes. Not only students, many teachers preferred to have captions in their live online classes for the students to have better understanding of the subject and also to enhance their communication skills. Though the online classes have its own disadvantages, the initiative of this mobile application would help students in such a way that they can easily acquire second language and can develop their vocabularies using this innovative idea. By implementing the idea of developing a mobile application, non-native speakers of English, while attending online classes, there will be no way to get distracted when they can actually learn through captions. Hence, this research proves the essentialness for

captioned videos during live lectures, as preferred by the second language learners as well as the efficient ones.

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