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# THE IMPACT OF VIRTUAL ZOOM AND PODCASTS IN STUDENTS LEARNING OUTCOMES AND CHALLENGES OF PANDEMIC

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## Abstract

Virtual zoom or podcast technologies have revolutionized the student-center learning approach by many instructors and students in many colleges and universities due to Covid-19 pandemic. In this 21st century, society needs people with proper education and employers also are interested in quality education from students. Hence, this is possible due to virtual zoom, blackboard or podcast technologies that are available to instructors to teach and engage the student's experience in order to provide the best possible avenue for learning. As new ideas and methods arise instructors must be able to grasp and utilize these changes to provide the best possible learning experience for their students. Although the traditional method of learning, which involves students going to classroom setting and listening to an instructor lecturing, is still, being used and there is still much improved methods which involves the use of virtual zoom, blackboard, and podcast. Through the research findings from journal articles, the paper addresses some concerns: (1) how does students' learning supported by virtual zoom or podcast differ from face-to-face learning? (2) What types of difficulties do students encountered using zoom or podcast technologies to engage in their learning? (3) What are the advantages and disadvantages of zoom or podcasts? (4) What types of training should the instructors have before using virtual zoom or podcast to enhance their teaching methodologies? This paper therefore, focused on the impact of virtual zoom and podcasts in students learning experiences.

## Keywords

Virtual Zoom and Podcasts Technologies –Online Classroom – Students Learning Outcomes

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## INTRODUCTION

Instructors in many colleges and universities are faced with continuous improvement and innovation in their everyday teaching. The paper defines Virtual Zoom as a web-based video conferencing tool with a desktop and a mobile app that allows users to meet online with or without video while podcasts are series of audio or video programs on the internet that can be downloaded to a laptop or desktop, iPad, tablets, and other technological devices. They are similar to streaming online but without having to be tied down to a computer. There are various types of podcasts that include audio, video, and enhanced podcasts. Out of these three, audio podcasts are the most familiar types and they are in MP3 format. Video podcasts are basically just movies with sound. Not all podcasts have images and this is evident with enhanced podcasts. Also with enhanced podcasts, one is able to skip through different sections within the podcast. On the other hand, podcasts are multi-digital media files that can be downloaded into a computer or a personal device such as a MP3 player. Podcasts can benefit, enhance, and facilitate the learning experience of students. Podcasts are easily accessible to students. It is very adaptable to the learning needs of students. Since podcasts can reach a broad audience, most colleges and universities use podcasts to upload lecture series and assignments for student's needs. Virtual zoom technology can also reach many students to adapt to their learning needs.

Podcast and virtual zoom are rapidly growing as a means to impact students learning and reaching an increasingly number of students in a user friendly way that allows access at any time, free of the constraints of a face-to-face classroom. Covid-19 pandemic has made it possible for students to have more choices than in the past due to virtual zoom and podcast technologies. Virtual zoom or podcasts offer students the opportunity to learn and attend educational institutions without some of the constraints often associated with the traditional students. The issues such as being limited to a class due to a set number of "seats" available in a classroom or the schedule of when classes take place is not feasible for a student to attend due to time conflicts can be addressed through the virtual zoom or podcast. Another interesting aspect is that students from far geography areas are no longer limited

to a certain institution, if podcasts and the use of other technologies such as virtual zoom, email, blackboard or other means of assigning “class-assignments” and conducting testing are available. This could allow students in other countries to attend classes anywhere at any anytime.

## **Review of Literature**

According to Dani McKinney [10], a psychologist at the State University of New York said that students who listen to their class lectures through podcast scored significantly higher marks on their tests than students who attended the lecture in person. He further stated that in a research project he conducted on a class lecture, college students who were present and physically attended the classroom achieved an average grade of 62.47 on a given assignment. But students that listened to a podcast in McKinney’s research obtained a 71.24 average compared with students who scored a 76.23 that listened to both a podcast and wrote additional notes. He also emphasized that the results indicated that students who listened to a podcast performed better than students who attended the classroom, even though they did not attend the lecture. McKinney [10] finally stated that podcasts proves to be beneficial to students with recall and retention difficulties, because podcasts allow students to listen and replay information at their own convenience. He concluded that each student has their own particular learning style and not all students are auditory learners. Edirisingha [10] also stated that the possibilities of podcasts are vast. This freedom for students to download and view podcasts off the web provides students an opportunity to further their education as well as have “showed that informal short audio clips help to address students’ anxieties and concerns about the course content and to increase the sense of belonging to a learning community for distance education” (Edirisingha, Palitha, et al., 2007). Thus by using podcasts versus independent distance learning the students can still feel connected to the courses taught and have the opportunity to be “taught” by an instructor who can perform lectures and teaching. If used in a format that allows two way communications, the students could also create podcasts back to the instructor regarding questions, answers, feedback and concerns of which virtual zoom allow students to ask questions and feedback. Chan and Lee’s [1] pilot study on Podcasts for 28 Australian undergraduates shows that informal, short audio clips may help address students’ anxieties and concerns about the course and assessment while offering a flexible medium, with portability and social acceptance of use in public settings. Levy emphasized that virtual provides a wider range of ways in which our students can engage in our classrooms. Chinnery [2] discusses bringing an authentic cultural experience to students learning foreign languages, but such studies are seldom evaluative. Providing the learner with flexibility and freedom to learn from any location as well as tools to engage in lifelong learning is good.

## **How Does Students’ Learning Supported By Virtual Zoom Meeting or Podcast Differ From Traditional Classroom Learning?**

Student’ learning supported by virtual zoom meeting or podcast differ from traditional classroom learning in the sense that virtual zoom or podcast provide learning experiences that are more adapted to individual students than the traditional classroom learning. It enables students to participate or listen to lectures or assignments as many times as learners wants, which many students find more engaging and useful. Virtual zoom meeting or podcast is more adaptable to students’ learning needs, because students can listen or access any lecture materials from anytime and anywhere that they needs, thereby reinforcing important concepts they might have missed in the traditional classroom lectures. Virtual zoom meeting or podcast offers an opportunity to many students that cannot be in the traditional classroom setting due to unanticipated circumstance like Covid-19. Virtual zoom meeting or podcast is a powerful tool that helps to complement the traditional classroom learning. It has the ability to increase students’ contact between instructors and students, in addition, its increases students’ motivation to listen, learn, and be able to participate in virtual zoom meeting or blog assignments related to the podcast episodes. With the use of virtual zoom meeting or podcast students and instructors can work conveniently at their own time rather than a time dictated by course schedule. To achieve an effective usage of virtual zoom meeting or podcast instructions and learning depends on the instructor’s teaching styles and methods. Due to different ways of students’ learning, instructors must be considerate in the learning styles of student learners during virtual zoom meeting of teaching or the designing process of the podcast episodes in order to achieve effective learning outcomes.

## **Advantages and Disadvantages of Virtual Zoom Meeting or Podcasts**

The advantages of virtual zoom meeting or podcast over the traditional classroom are varied according to many studies that emphasized that virtual zoom or podcasts are “good for recording lectures with little student involvement.” Virtual zoom or podcasts can be “useful for supplementary material or explanations.” Virtual zoom or podcasts offers a powerful means to share lecture series. With virtual zoom or podcasts an instructor can apply creativity and put his or her thoughts to use. Virtual zoom meeting or podcasts gives a sense of modality for students to express themselves after listen to a lecture, this absolutely help students to be more motivated in

learning. Virtual zoom meeting or podcasts serves a convenient way for students to participate or access course material and can also help students that were absent from online classroom lectures to get assignments or information that they missed while they were out. It enables instructors to reach students through a medium that is fascinating and a part of their daily lives. For a technology that only requires a computer, microphone, webcam, and internet connection, virtual zoom or podcasts has the capacity of advancing a student's education beyond the classroom. With virtual zoom meeting or podcasts students are not confined to a classroom or computer, they can easily download their preferred materials, and they can listen to it whenever and wherever they desired, students can also review their notes after listening to zoom or podcast. Virtual zoom clips or podcasts are also accessible to distance learning students, and it allows instructor to record his or her teaching instruction or teaching principles as needed and not devoting much time to multiple lectures to different classes. Virtual zoom meeting or podcasts are extremely important and as technology continues to change so will the use of zoom or podcasts in the enhancement of students' learning. The quality of the students' learning and performance can be improved due to zoom clips or podcast lecture series. The virtual zoom or podcasts also opens the classroom to everyone regardless of their locations. Virtual zoom or podcasts have limitations and are not ideal in all situations; there are technological barriers that still need to be overcome. Mark Frydenberg [5] stated that it can be very hard to record many voices in highly interactive courses with lots of discussion even the quality of the video. Time dedication to listen to a lecture via a podcast was another disadvantage of podcast according to Mark Frydenberg. This means that the instructors that utilize zoom or podcast tool must keep in mind the length of their lectures. Virtual zoom or podcasts can be troubling for instructors if the proper training is not met along with incapability and figuration of computer and applications, for example the use of virtual zoom background can be flicking or raining therefore, making the face of the instructor not to be visible or clear for students to see the instructor clearly. One of the challenges is the tech issue that comes with trying to get students to join the same call meeting. Sometimes this happens at students home or dormitory. Even taking attendance can be a ten-minute process as students join and leave the meeting for various reasons, some including technical difficulties. Some students dominate the conversation and not allowing others to participate. In order to equalize the contributions of all the classmates, guidelines for how often one student can talk out into the meeting should be provided. This allows the faculty to hear other students' opinions.

### **What Types of Training Should Instructors Have Before Using Virtual Zoom or Podcast to Enhance the Teaching Methodology?**

Use of any new technological devices requires adequate training by any instructors wanting to incorporate virtual zoom or podcast lecture series and assignments into his or her course, therefore, creation of zoom meeting/clips or podcast requires adequate hardware, software, webcam, easy to use RSS, and knowledge know-how to record and edit audio or video files. Training of the voice is a key to the success of the students understanding the instructor's course materials in any giving episode. On the order hand, successful implementation of virtual zoom or podcast requires the instructor to master the technical requirements because the execution and deployment of the zoom clips or podcasts are very important. The instructor must think about the type of audience that will download or upload the materials and the level of security needed.

### ***Methods of Analysis***

In spring semester 2020, students in Principles of Management, Human Resource Management, and Leadership & Teamwork were questioned after series of lectures and usage of virtual zoom or podcast. About 120 students answered few of the questions and the responses were tabulated and analyzed. Many questions focused especially on the attitude of students toward the use of virtual zoom or podcasts in course learning and the perceived effectiveness of teaching and learning outcomes. A simple statistical analysis was performed to determine the perception and the level of importance that should be placed in using virtual zoom or podcast in the effectiveness of teaching and learning performance.

### ***Paper Questions***

Eight questions below were to address the perception and importance placed on virtual zoom meeting or podcast usage in course delivery and the effectiveness of student's learning performance.

1. Do you have a laptop computer or ipad with webcam?
2. How often do you meet on virtual zoom for lecture series?
3. What is your attitude toward instructors using virtual zoom or podcast to convey lectures?
4. How important is virtual zoom meeting or podcast in enhancing students learning on and off the classroom?
5. Do you agree that students' learning supported by virtual zoom or podcast differ from traditional classroom learning?

6. How committed should the faculty considered to be in the usage of virtual zoom or podcast delivery in course learning?
7. Do instructors need any training before implementation of virtual zoom or podcast technology in course delivery?
8. Will the implementation of virtual zoom or podcast technologies in course learning improve the perceived effectiveness of teaching and learning outcomes?

Statistical analysis of the questionnaires responses in percentages was performed to evaluate the level of importance placed and the effectiveness of virtual zoom meeting or podcast in course delivery by faculty in student's learning performance.

### **Presentation of Data Questionnaires**

The first question was "Do you have a laptop computer or ipad with webcam?"

Description	# of Students	Percent
Yes	110	91.7%
No	10	8.3%
Total	120	100%

**Table 1: Do you have a laptop computer or ipad with webcam?**

Ninety one percent of the students and the instructor indicated that they have laptop/desktop computers or iPad, webcam for the teaching and learning productivity, eight percent responded no. This indicates that there are many students and faculty using laptop computers or iPad with webcam technologies in their everyday learning and teaching. It is an important tool to use in delivery course materials for students in and off campus due to Covid-19 pandemic.

Description	# of Students	Percent
Most Often	100	83.3%
Very Often	15	12.5%
Less Often	5	4.2%
Total	120	100%

**Table 2: How often do you meet on virtual zoom for lecture series?**

The students were asked how often they met in virtual zoom for lecture series. Table 2 indicates that about eighty three percent of the students stated most often, twelve percent and half says very often, and four percent says less often. Covid-19 pandemic changed the culture of teaching and learning, students and instructors has no choice than to learn and teach through the medium known as virtual zoom or podcast.

Description	# of Students	Percent
Yes	115	96%
No	5	4%
Total	120	100%

**Table 3: What is your attitude toward instructors using virtual zoom or podcast to convey lectures**

The students were asked about their feelings toward instructors using virtual zoom to convey course assignments and lecture notes. Ninety six percent of the students were absolutely comfortable with the use of virtual zoom or podcast in course delivery, while four percent were not comfortable with the use of virtual zoom. Few of the students expressed that they have no Internet or hotspot in their homes, meaning that these few students have to travel to the library to complete their assignments or listen to lecture series.

Description	# of Students	Percent
Very Much Important	110	92%
Less Important	10	8%
Total	120	100%

**Table 4: How important is virtual zoom meeting or podcast in enhancing students learning on and off the classroom?**

Table 4 measured the importance of virtual zoom meeting or podcast in course delivery to enhance students' learning on and off campus. About nine two percent indicated a very much important and eight percent also indicated less important. Under the Covid-19 pandemic, the ninety two percent of students that says the virtual zoom or podcast was very much important to their learning so that they can graduate in recorded manner

Description	# of Students	Percent
Strongly Agree	105	88%
Strongly Disagree	15	12%
Total	120	100%

**Table 5: Do you agree that students' learning supported by virtual zoom or podcast differ from traditional classroom learning?**

In table 5, students were asked if they agree that students' learning supported by virtual zoom meeting or podcast differ from traditional classroom learning. About eighty eight percent indicated strongly agree because of the advantages and the comfort of learning from home while twelve percent strongly disagree.

Description	# of Students	Percent
Very Committed	100	83%
Slightly Committed	15	12.5%
Not Committed	5	4.5%
Total	120	100%

**Table 6: How committed should the faculty considered to be in the usage of virtual zoom delivery in course learning?**

Table 6 shows eighty three percent of the students emphasized that faculty must be very committed in using virtual zoom technologies in course learning and twelve and half percent says faculty should be slightly committed while four and half percent indicated that faculty should not be committed since young and adult students are very much involved in other activities in their everyday classroom learning.

Description	# of Students	Percent
Yes	109	91%
No	11	9%
Total	120	100%

**Table 7: Do instructors need any training before implementation of virtual zoom technology in course delivery?**

In table 7: the students were further questioned on the need of training before implementation of virtual zoom or podcast technologies in course delivery by instructors. Ninety one percent of the students indicated yes, because adequate training is necessary in any technological applications or other tools. While nine percent of students indicated not really.

Description	# of Students	Percent
Yes	114	95%
No	6	5%
Total	120	100%

**Table 8: Will the implementation of zoom technology in course learning improve the perceived effectiveness of teaching and learning outcomes?**

It was interesting to note the high percentage of ninety five percent of students agreed and believe that implementation of virtual zoom technologies in classrooms can improve the perceived effectiveness of teaching and learning performance of students and faculty in this Covid-19.

## Conclusions

In conclusion, the benefits of virtual zoom or podcast technologies indeed outweigh the limitations. It is believed that incorporating virtual zoom or podcast technologies in conveying course materials not only improves teaching and learning but provides the accessibility of course resources to students. The participation and completion of assignments, course materials among students outside and inside of the classrooms will be greatly amazed. It can no longer be doubted that virtual zoom or podcast technologies offer a tremendous opportunities to both students and instructors. Overall, students and instructors were positive in the use of virtual zoom or podcast technologies in on and off classrooms as opposed to traditional way of teaching and learning. Finally, the conclusion is that virtual zoom or podcast technologies can be useful to any first time instructors that have a need to incorporate virtual zoom or podcast materials into his or her course.

### Works Citation

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