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A study on the alternative of traditional netball teaching by using multimedia online netball teaching

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Abstract: This study aims to demonstrate the advantages of teaching fundamental netball skills digitally. One of the high potential sports in Malaysia is netball, yet there are not enough young athletes to play this sport. In schools, netball instruction has historically been conducted in person. However, due to restrictions on mobility and outdoor activities during the Covid-19 epidemic to stop the virus's spread, all contact sports are outlawed. This approach is therefore suggested as a way out of the impasse and to guarantee that our society may live a healthy lifestyle at home during the Covid-19 epidemic season.

Keywords: computer assisted learning; multimedia online netball teaching

1. Introduction

In this day and age, information on almost everything is now accessible through smart phones, tabs, and computers. Schools closing now is not even stopping students and teacher to stop learning and teaching. Computer Assisted Learning (CAL) are being implemented nation-wide to prevent the spread of virus among students, teachers, and school staffs. From sending assignments and school works through emails to having an online conference meeting to substitute face to face classes, there is almost nothing now stopping the students from learning and expanding their knowledge. Online platforms are being used widely as the



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current situation has forced a lot of people to be familiar with electronics and technology. It is now time to utilize this platform to provide comprehensive, well-rounded teachings to students. Furthermore, CAL could include physical education due to the fact that without proper sports theory and physical knowledge, playing sports or engaging in any types of physical activities could lead to multiple scales of injuries.

Sport activities are very crucial in optimizing society's physical capacity which would be in line with the expression "healthy body leads to healthy mind". In this context, sports play an important role in bringing forth a healthy, active, and productive community in order to contribute to the social well-being and our country's economic development. Hence, this paper focuses on one of the highest potential sports in Malaysia which is netball, as one of the initiatives to promote healthy lifestyle in Malaysia.

2. Literature review

Malaysian former Minister of Youth and Sports, Khairy Jamaluddin in 2016 once reported that only forty percent of the country's population include sports activity and practice a healthy lifestyle [1]. That is more than half of the country's population that did not partake in cultivating sports activity in their lives. This shows that sportsmanship is not present in the Malaysian community, especially the younger generations. He also said that it would be hard to find the next in line after Datuk Lee Chong Wei, Datuk Nicol David, Azizulhasni Awang, and Pandalela Rinong if people are not interested in sports. Similarly, with netball, it is important to find athletes with excellent performances and talent such as the national netball player, An Najwa, Nur Fariha and Pow Mei Foong, to ensure Malaysian netball is on par with the international top teams such as Australia and New Zealand. Therefore, this project is carried out to provide basic knowledge virtually about the history and development, rules and laws as well as on how to play with proper techniques in netball. With the diversity of this project, it will cultivate the spirit of sportsmanship and healthy lifestyle among the participants and raise their interest towards netball.

At the end of 2019, a novel corona virus has been discovered in a seafood market in Wuhan [2]. The severity of this virus has affected the whole world and now everyone has to play their own role to protect each other by wearing face masks, reduce physical contact to prevent the transmission of Covid-19 as it is highly contagious [3]. And just like that, we are living differently and had to stay at home most of the time. People are working from home and students had to learn online including sports lesson.

Online teaching and learning can provide an active and creative session by involving role playing, simulations and even collaboration with other education institutes [4]. A study in [5] found that the learning outcomes for online learning were as good as or better than traditional learning. This shows that students are satisfied and accept online learning as the alternative to traditional learning. Study in [6] also provide strong evidence that online learning is as efficient as in the traditional method. Hence, teaching netball online could educate students and sport fans in a more fun and effective way with hope that it would excite them to learn and play netball.

3. Available platform for online teaching

3.1. Live session

Live teaching session involves teachers and student's direct interaction. Any misunderstanding that requires more explanation, clarification can be made on the spot and immediately. This is technically similar as in traditional teaching. However, instead of having the session face to face, the session can be held online, by using a different medium such as smart phones, tablet, or even a computer to communicate even though both the student and the teacher is at a different location. In another words, online teaching provides an alternative to traditional teaching which can achieve the same goal by utilizing interactive media which could further enhance student learning interest.

3.2. Recorded sessions and videos

One of the main benefits of live teaching sessions is that the sessions can be recorded and shared for future reference. Therefore, students can access the teaching material at any time. Students hit with emergency cases such as power cut off, natural disaster, or even the ones that missed class due to time constraint that make it difficult for them to attend classes could also access the recorded session. Plus, the videos could also serve as revision material for students. This could also benefit the teachers as they could focus better on the tasks at hand. The teachers could also share a pre-recorded session when they are hit with the same emergency cases. This application can better serve both the students and the teachers. Finally, aside from class sessions, teachers can also provide media or video as an additional information for specific or additional learning objectives.

4. Advantages of multimedia online teaching

Online teaching is more flexible in terms of time and place than traditional teaching. Students can easily access their classes and study materials from any location without having to worry about the geographical and weather barrier and at the same time can reduce the probability of skipping classes. Student attendance can be recorded by using an attendance system as it is time efficient because it can reduce time taken to record attendance and can improve the quality of learning process. Moreover, online classes can be recorded and allow students to re-access the classes at any time they prefer. This will greatly increase the students understanding as they can repeatedly replay the whole teaching session. Freeze frame and slow-motion features are available in multimedia teaching and this can help students learn difficult movement and skills as they can closely observe the video motion in their desired speed. Teachers can also turn written information into interactive multimedia to boost their interest and encourage them to learn about netball.

Multimedia online teaching offers better efficiency on delivering lessons to students compared to the traditional teaching method. Teachers can prepare e-module and videos based on lessons' requirements and well materials preparation can be done to make sure the

information shared is compact and efficient. Since online teaching is all computerised, an organized database can be created to record learning progress and students' feedback. Feedback from students can be collected by using self-administered survey that can be construct online. This will increase students-teachers interaction as well as improving the system to be better for efficient teaching medium.

5. Multimedia online teaching working principle

The methodology of multimedia teaching basically involves students and teachers to access available websites or applications through their personal computer or laptop which can regroup them into one shared platform. Once everyone is in the same online platform, they can learn and share netball knowledge, have two-way communication between teacher and students. Teachers can upload related netball materials on web application during teaching and use the screen sharing feature to efficiently ease the teaching process. Interactive question and answer can be conducted during live teaching session and teacher can visually answer and guide students to every question. Feedbacks are gathered at the end of the teaching and learning session for further improvement in the future.

5.1. Netball online teaching project methodology

A project has been carried out by a lecturer, an assistant lecturer and a few university students to assist a group of primary school students, university students and local community to learn about basic netball skills. This project was fully conducted in online platform and has received positive feedbacks from the participants. E-modules (Figure 1) and videos themed (Figure 2) 'Lets get to know netball' have been developed to provide virtual exposure to the participants involved. This video shows the proper techniques on performing netball basic skills. They also have include a warming up and cooling down video to ensure participants know the importance of performing correct methods of muscle stretching before and after sports activity. This is to ensure to increase our body performance and reduce the risk of injury [7].

A series of weekly meetings have been conducted through online application to organize this project. After several thorough discussions and improvements on the project, all the materials were broadcast and distributed online. A poster has been spread online through *Facebook*, *Instagram* and *Whatsapp* application to advertise this program. These medium are chosen as they are free and has huge virtual audience. Free medium such as *Youtube* is being utilised to upload both videos so that all participants can have easy access to these videos. At the end of this project, a survey form has been distributed to all participants to collect feedbacks regarding the project.

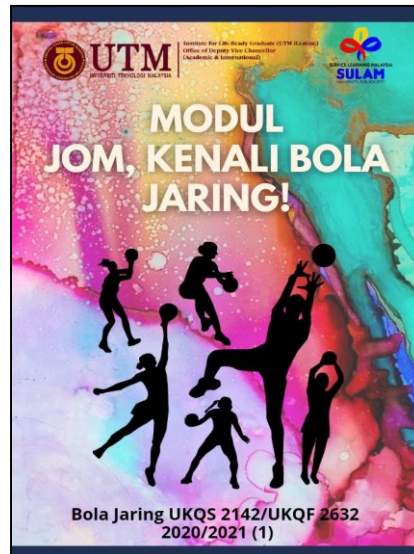


Figure 1. Front page of e-module.



Figure 2. Video thumbnail.

5.1.1 Google form analysis from ‘Lets get to know netball’ video

A total of 91.7% of female and 8.3% of male participants with age of minimum ten years old has responded in this survey. From this survey, 74% of the respondents agree that they can understand the information clearly conveyed through the video. A total of 75% of them believes that the video has increase their interest and their basic skills in netball. While 74% of the participants agree that after watching this video, they are able to share the knowledge of basic netball skills with their friends and colleagues.

5.1.2 Google form analysis from warming up and cooling down video

This analysis consist of 88.7% of male and 11.3% of female respondents which are in the age range of between twenty to forty-five years old. Most of the respondents understand the importants of warming up and cooling down after watching the video. 74% of the respondents can understand the information through the video. A total of 73% of respondents agree that they can practice and apply the warming up and cooling down techniques shown in the video well.

6. Conclusion

From the project and survey conducted, it is proven that almost 75% of the participants can benefit from the materials given which was fully conducted through online platform. Multimedia online netball teaching can provide a beneficial alternative to our traditional netball teaching in line with nowadays rapid technology development. Optimization of this learning method has the potential to reduce the limitation in traditional method. Multimedia online netball teaching can let students revisit the whole teaching session for them to re-analyse their understanding and expand their potential knowledge, which the traditional netball teaching is lacking. Thus, this can lead us to one common goal which is to deliver an efficient, interactive and beneficial knowledge sharing. Multimedia online netball teaching can also provide self-learning for self-improvement and satisfaction. Finally, with online learning-and-teaching for physical activity and sports club is integrated and moulded into student's life, perhaps a better future for other sports and healthy lifestyle for future generation could be realised.

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