### A Project entitled

### **Ball Games Activity Bank for Physical Education in Primary School**

Submitted by

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Supervised by

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submitted to The Education University of Hong Kong for the degree of Bachelor of Education (Honours) (Physical Education)

in April 2022



### Declaration

I, Lau Tsz Ching declare that this research report represents my own work under the supervision of Dr. Andy TSE Choi Yeung, the Acting Head and Associate Professor of the Department of Health and Physical Education, and that it has not been submitted previously for examination to any tertiary institution.

Signed\_\_\_\_\_\_
Lau Tsz Ching

20/4/2022

## Abstract of Capstone Project entitled "Ball Games Activity Bank for Physical Education in Primary School"

### Submitted by

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for the Bachelor Degree of Education (Physical Education) at The Education University of Hong Kong in April 2022.

Background: Due to the COVID-19 pandemic, face-to-face lessons are being suspended and teachers in Hong Kong have to bring their lessons online which leads to a rapid growth in Elearning. Videos demonstrations provide clear coordination sequences of a motor skill to students and research has shown that visual demonstration has a positive impact on the creation of cognitive structure of a skill in students (Al-abood et al., 2001). Although there are countless of videos on different physical activities and some online resources platforms being published on the Internet in the recent years, there is seemed to be lack of an structured online activity bank for Primary 4 to Primary 6 PE lessons aligning with "Physical Education Key Learning" Area Curriculum Guide" (Curriculum Development Institute, 2017) to as reference on lesson delivery for primary school PE teachers. Aim: To create a Ball Games Activity Bank online with skills and activities demonstrations of Basketball, Handball and Taspony for PE teachers as reference and teaching resources for their KS2 classes. Methods: This project was being divited into 3 stages: i)Video Production, ii)Website Construction and iii)Review and Amendment. A website with a total of 60 videos in Basketball, Handball and Taspony are being created and published to the public. Opinions have been received from the viewers and amendment on the website has been done. Conclusion: The systematic and well-organized Ball Games activity bank for Physical Education in primary school has been published publicly on to the Internet and has a positive impact on improving the effectiveness of PE lessons. Further development of the activity bank can be done by including more lesson ideas of tradition and new sports, and create an English version of the website for teachers in EMI primary schools.

(288 words)

## **Project Objectives**

 To Create a Ball Games activity bank in Basketball, Handball and Taspony for PE teachers in primary school as their references when planning and delivering their PE lessons for KS2 students.

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### **Background**

Due to the COVID-19 pandemic, face-to-face lessons are being suspended during the waves of outbreak and teachers in Hong Kong have to bring their lessons online which leads to a rapid growth in E-learning. E-learning refers to the concept of the use of information technology and digital devices for educational purposes including delivery of learning resources and online teaching (Suzianti & Paramadini, 2021). In order to conduct an effective lesson, teachers have to combine their knowledge in teaching together with diverse instructional design and content in order to provide opportunity to students in gaining knowledge and skills (Panasuk & Todd, 2005). With the change in the mode of teaching, Physical Education (PE) teachers have to reconstruct with lessons plans in order to deliver knowledge and skills effectively during online lessons due to the limitation of interaction between students and moving space at home. Online resources such as videos are acting as important utensils for online teaching in the digital era where teachers make use of various online resource platforms including Youtube, Facebook, shared Hub as references for lesson planning. Moreover, videos can be used as demonstration visually during lessons to provide clear coordination sequences of a motor skill to students and research has shown that visual demonstration has a positive impact on the creation of cognitive structure of a skill in students (Al-abood et al., 2001). Fundamental Movement Learning Community (FMLC) has established in 2013 by the Education Bureau focusing on providing support and references to teachers in teaching fundamental movement skills in primary schools (Education Bureau, 2014). To encourage the building of habit in regular exercising, the Education University of Hong Kong has also published an online teaching and learning resources platform in 2018 with the authorisation by the Education Bureau to provide videos of different physical fitness activities including dancing, fitness activities and fitness training exercises demonstrations (Department of Health and Physical Education, 2018).

Although there are countless of videos on different physical activities and some online resources platforms including FMLC being published on the Internet in the recent years, there is seemed to be lack of an online activity bank for Primary 4 to Primary 6 PE lessons aligning with "Physical Education Key Learning Area Curriculum Guide" (Curriculum Development Institute, 2017) to as reference on lesson delivery for primary school PE teachers. Physical Education Curriculum in Hong Kong are categorised into different key learning stages (i.e. KS1 to KS4). In KS2 (i.e. Primary 4 to Primary 6), basic movement skills in at least eight sports in no less than four areas of sports should be taught to students. Ball Games is one of the popular areas of sports to be included in primary schools' curriculum. Besides of tradition ball games such as Basketball, Volleyball, Soccer and Handball, PE teacher would also introduced new sports to students in order to allow students to explore more variety of sports and nurture their interest in regular exercising. Taspony is one of the new sports being promoted in Hong Kong in the recent years (Emerging Sports Federation of Hong Kong, 2020). Due to the soft texture of the ball and easy rules to play with, it is favourable for children to play. Moreover, it only required a small area with a net which players will do volley with their hands, it is suitable for most of the school to implement the sports into PE lessons. As well-structured and mature online activity bank in Ball Games was not found in Hong Kong for primary school PE teacher as lesson plan referencing, the aim of this Capstone Project is to fill this gap by creating a Ball Games Activity Bank online with skills and activities demonstrations of Basketball, Handball and Taspony for PE teachers as reference and teaching resources for their KS2 classes.

### Methodology

The project was being divided into 3 stages: i) Video Production, ii) Website Construction and iii) Review and Amendment.

### Video Production

With reference to the movement skills and topic suggestions in "An Overview of the Learning Topics in the Six Strands: Physical Education Key Learning Area" (Education Bureau, 2013), lesson plans on movement skills and activities of Basketball, Handball and Taspony were being constructed before the production of videos for the online activity bank to have a better outline for the production. Topics of different sports included in the online activity bank are being listed in Table 1. Visual motor skills demonstrations and Activities were designed with progression to cultivate different needs and level of students and to allow variations for lesson planning. Videos were filmed at the Sports Complex of The Education University of Hong Kong. Numbers of people were involved as the students in the videos to resemble the situation of PE lessons in primary schools. Video editing using iMovie by Apple Inc. has been done after video taking. Subtitles in Chinese have been added into the videos for better verbal explanations of the content of a skill or activity. Title page and background music were also being added into the video to improve the enjoyment of viewers. A total of 60 videos in Basketball, Handball and Taspony are being created.

Table 1. Topics of different sports included in the online activity bank

Sports	Торіс
	Warm Up
Basketball	• Dribbling
	Two-Handed Shooting
	Two-Handed Passing and Catching
	Application Activity
Handball	Warm Up
	• Defence
	• Dribbling
	Shoulder Passing
	• Shooting
	Application Activity
Taspony	Ball Sense
	• Serving
	• Volley
	Application Activity

### **Website Construction**

After the production of Videos, a well-structured website of the online Ball Games activity bank was being created in Chinese version with Google Sites by Google. The home page of the Ball Games activity bank contains an introduction of the website (Figure 1).



Figure 1. Home page of the activity bank

Videos in Basketball, Handball and Taspony have been uploaded on Youtube and embedded into the online Ball Games activity bank and are being categorized by sports. Brief descriptions on each video were added for easier searching by the viewers for the suitable video (Figure 2).



Figure 2. Menu bar of the activity bank

Opinion page contains a questionnaire form to collect feedbacks from views for further improvement of the website. The questionnaire contains 4 scale questions related to the usage, effectiveness, relevancy and level of integration of the website, and 1 open-ended question for other opinions from the viewer (Figure 3).



Figure 3. Opinion page of the activity bank

The high-quality online Ball Games activity bank is then published and is accessible to the public with the link: <a href="https://sites.google.com/view/ballgame/%E4%B8%BB%E9%A0%81">https://sites.google.com/view/ballgame/%E4%B8%BB%E9%A0%81</a>

### **Review and Amendments**

A total of 13 questionnaire responses are being received after the publication of the activity bank.



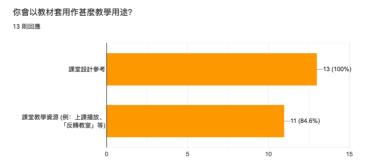


Figure 4. Response of question 1 "What purposes will you use the activity bank for?"

In Figure 4, all of the respondents reported that they used the activity bank as references for lesson planning, while 11 of them also stated that they have used the activity bank as teaching resources during lessons.

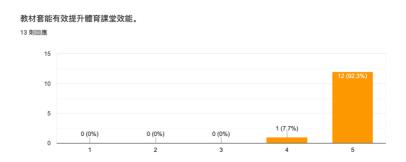


Figure 5. Response of question 2 "To what extent do you agree that the activity bank can improve the effectiveness of Physical Education lessons?"

In Figure 5, all of the respondents agreed that the activity bank can improve the effectiveness of PE lessons.

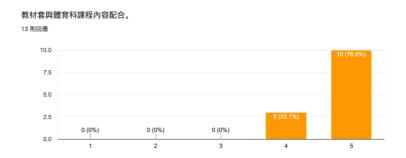


Figure 6. Response of question 3 "To what extent do you agree that the activity bank aligned with the Physical Education curriculum?"



In Figure 6, all of the respondents agreed that the activity bank aligned with the PE curriculum guide by the Education Bureau.

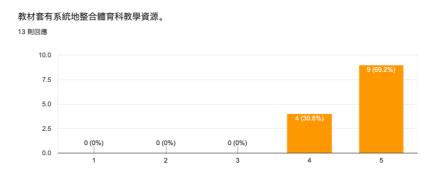


Figure 7. Response of question 4 "To what extent do you agree that the activity bank has systematically integrates teaching resources for Physical Education?"

In Figure 7, all of the respondents agreed that the activity bank has systematically integrates teaching resources for PE. Suggestions on the improvement of the website have been received in the open-ended question and amendment has been done to provide a more user-friendly experience to viewers. Videos of different kind of sports are being further categorized into different skills and topic, where viewers can explore the videos on a particular topic easily (Figure 8).



Figure 8. Amendment on the categorisation of the videos in the activity bank

**Discussion** 

A high-quality and well-structured online activity bank for Ball Games in Primary schools has

been published to the public with 60 video demonstrations on motor skills and different topics

in Basketball, Handball and Taspony. It is reported that the activity back has a positive impact

on the lessons planning of primary school PE teachers for KS2 students on their skills and

knowledge development in different ball games. The content of the videos are aligned with the

PE curriculum in Hong Kong and has integrated teaching resources to facilitate the searching

of lesson ideas on content and instructional designs of PE lesson by primary PE teachers.

Further improvements of the activity bank can be made by including videos of other areas of

traditional sports such as Athletics and Dancing to make the activity bank fully aligned with the

PE curriculum where teachers are allowed have a more variety of choice when constructing

their annual plan for the school PE syllabus. Collaboration with associations in providing more

professional ideas in introducing new sports such as Spikeball and Dodgebee to primary school

students can also be done in the future. It is also suggested that an English version of the activity

bank can be created to allow teachers in primary schools that uses English as medium of

instruction (EMI) to be able to apply the videos or ideas into their lessons.

Conclusion

The systematic and well-organized Ball Games activity bank for Physical Education in primary

school has been published publicly on to the Internet for primary school PE teachers in order

to provide professional lesson ideas and structured demonstration on movement skills in

Basketball, Handball and Taspony to the teachers for effective lesson planning. Collected

opinions from views of the website have reflected that the activity bank is well integrated and

has a positive impact on improving the effectiveness of PE lessons which aligned with the PE

curriculum in Hong Kong. Amendments have been done based on the opinion received. Further

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development of the activity bank can be done by including more lesson ideas of tradition and new sports, and create an English version of the website for teachers in EMI primary schools.

(1570 words)

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