

The background features a dark blue gradient with a starry space pattern. Overlaid on this are several technical diagrams, including circular gauges with numerical scales (e.g., 40, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) and various circular arrows indicating motion or flow. The main title is centered in a large, white, sans-serif font.

THE EFFECTIVENESS OF FLIPPED LEARNING TO ENHANCE STUDENT'S PHYSICAL ACTIVITY IN PE LESSON

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BACKGROUND STORY

- What is a good PE lesson?
- What are the objectives of the lesson?
- What are the expectation of the student in the lesson?
- How to assess a good PE lesson?

RECALL morning session

- Dr.LI : 有選擇，可以讓培養價值觀及態度
- MVPA 60, 8.3% 青少年 8.4% (LCSD, 2012) 運動量不足，高強度體育運動 IMPLICATION

- CATER for learner diversity

Physical inactivity

Lungs
Produce less oxygen

Skin
Lack of nutrients leads to unhealthy skin and hair, exhaustion, headaches, low moods and difficulties in concentrating

Muscles and joints
When you do not use your muscles, you lose muscle mass. You gain weight easily and become weaker

Heart
Your heart muscles grow weak and it becomes a strain to do basic activities

Stomach and intestines
Can cause constipation

Bones
Can weaken bones and cause osteoporosis

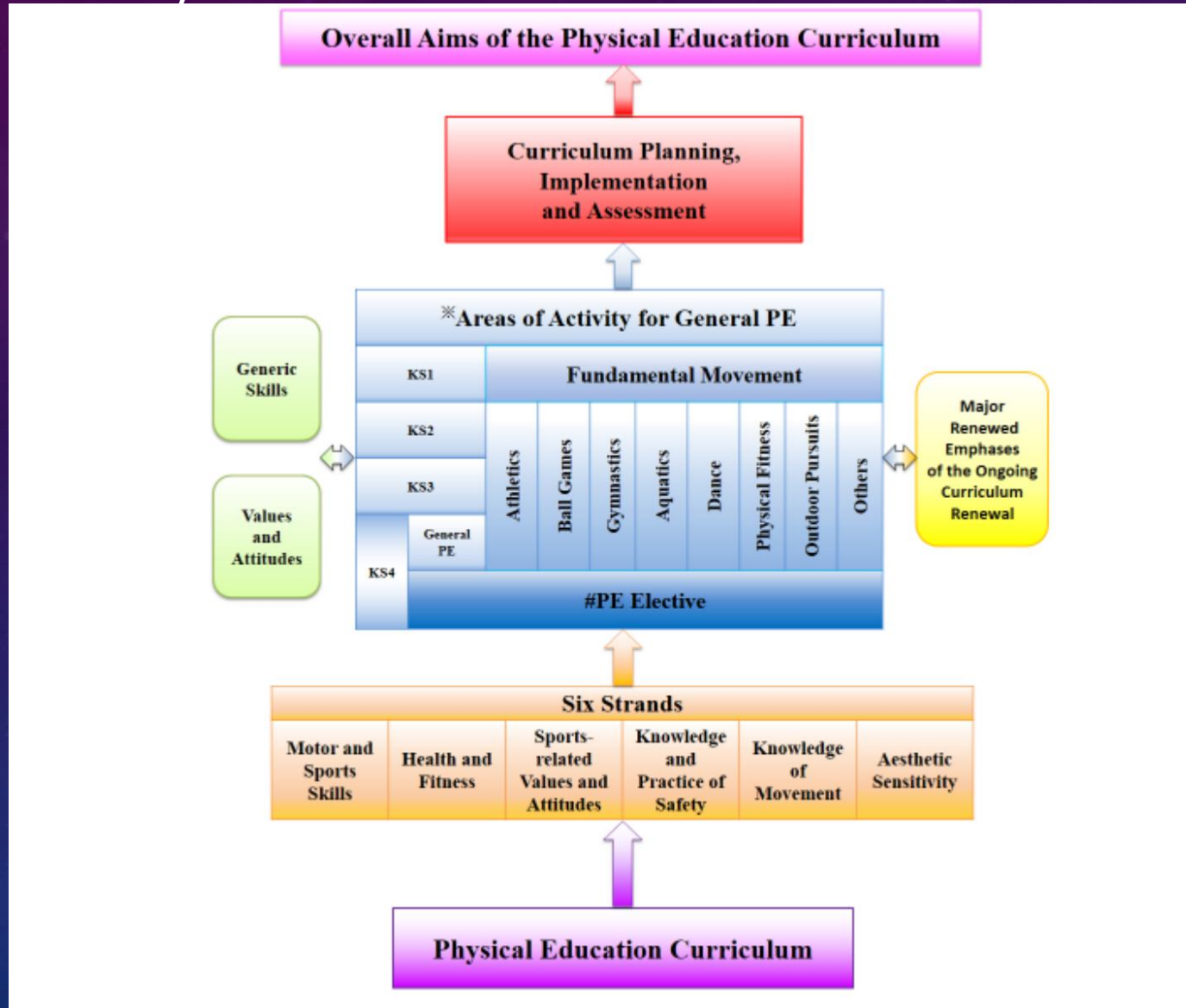
Other organs
Your body becomes weak and more likely to become sick

International Federation of Red Cross and Red Crescent Societies
www.ifrc.org

Tool 2.1

THE CURRICULUM FRAMEWORK

DRAFT (MAY 2017)



WHAT IS A GOOD PE LESSON?

A) Physical activity level

B) Learning through PE

1) Technical skills (direct teaching)

2) Tactical skills (TGUFU)

3) Generic skills (9 generic skills)

4) Positive values and attitudes

C) FUN

D) SAFETY

WHAT ARE THE OBJECTIVES OF THE LESSON? “ASK”

- E.g. (Lesson Plan/ Unit Plan)
- 學生能說出 _____(knowledge)
- 學生能做出 _____(skills)
- 透過本課堂學生能夠學懂尊重、溝通。(attitude)

• ANY MORE?

WHAT ARE THE EXPECTATION OF THE STUDENT IN THE LESSON?

- FUN
- FUN
- FUN
- FUN
- ANY MORE?

WHAT ARE THE EXPECTATION OF THE STUDENT?

- 1) FUN – FREE STYLE
 - 2) FUN – RELAXATION
 - 3) FUN – Communication
 - 4) FUN – training/ Workout
- ANY MORE?

HOW TO ASSESS A GOOD PE LESSON?

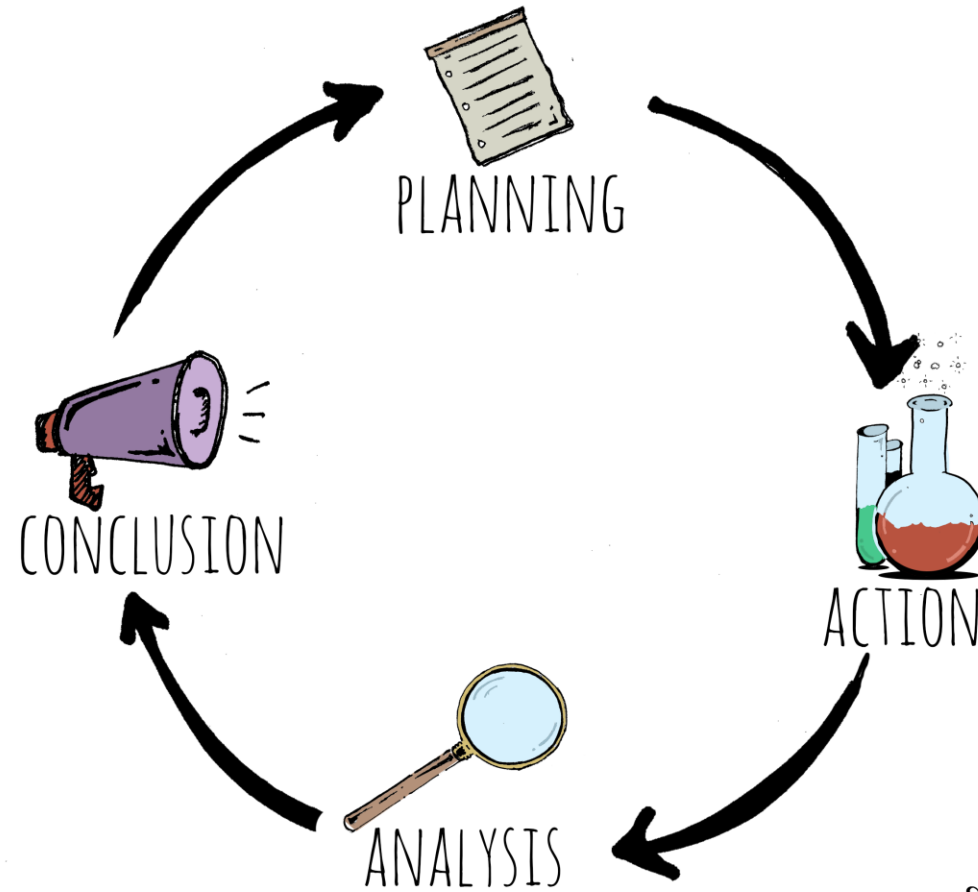
- According to slide "What is a good PE lesson"
- PA level
- Skills
- FUN (enjoyment)
- Warm up
- Any more?

FLIPPED TEACHING METHOD IN PE

- Students gain first exposure to new material outside of class (Expectation)
- Teachers can allocate more active lesson content (SKILLS)
- Involving students in higher physical activity participation (PA Level)

ACTION RESEARCH CYCLE

VISUAL BY JOHN SPENCER



SPENCERAUTHOR.COM

METHOD

- 58 F.2 students
- 80 mins class time
- 2 Groups- 2AD (Experimental)and 2BC (control)
- 3 lessons Flipped vs Direct teaching
- The class with flipped learning were required to watch a 5-minute video on the teaching subject before the PE class, and the respective PE lesson included a recap highlight of the video content.
- The students' physical activity level was measured using an accelerometer.
- The collected data were extracted into minutes of 1) Moderate Vigorous Physical Activity (MVPA) and 2) sedentary activity time frame for analysis.

PE lesson teaching plans:

Lesson 1 Theme: Backhand Passing skills

Lesson 2 Theme: Forehand Passing skills

Lesson 3 Theme: Dodgebee training and test

duration : 80mins

Learning outcomes : (should be measurable)

PA level

Passing Skills

	Class activity		
	Lesson 1	Lesson 2	Lesson 3
Video Length	5mins	5mins	5mins
Video content:	Backhand passing skills and catching skills	Forehand Passing skills	Drills and training
Video activity	3MC on the subject knowledge	2MC 10Q on the subject knowledge	10Q Observation
Approximate time to complete the Flipped learning	<10mins	<10mins	3mins
During the class (Flipped Learning component)	<ul style="list-style-type: none">● Begin with a review of the reflection question from the assigned video, with the aims to refresh the lesson and clear up some simple concept(5mins)● Allow students to participate in activities to further advance them in the learning process		

	Class activity		
Time	Experimental group (with Flipped learning)	Time	Control group (without flipped learning)
Pre-lesson :	students need to watch the video	Pre-lesson	N?A
30 minutes before class	Each students put on actigraph to measure PA level		
Teaching plan			
15 mins	Warm up 4-laps run Stretching	15mins	Warm up 4-laps run Stretching
15 mins	Pre-test <ul style="list-style-type: none"> ● 9grid, ● 6m distance ● stand and 5 serves ● points are given 	15mins	Pre-test <ul style="list-style-type: none"> ● 9grid, ● 6m distance ● stand and 5 serves, ● points are given
		10mins	Demonstrate and introduction
5 mins	Recap the highlight from home video		
10mins	Practice 1 Dodgebee backhand	10mins	Practice 1 Dodgebee backhand
5mins	Short brief and water break	5mins	Short debrief and water break
		5mins	Demonstrate and introduction
10mins	Practice 2 Catching the disc	10mins	Practice 2 Catching the disc
20mins	Practice Game (half court)	10mins	Practice Game (half court)
15 minutes after lesson	Each students return the actigraph and complete the questionnaire		

PRE LESSON

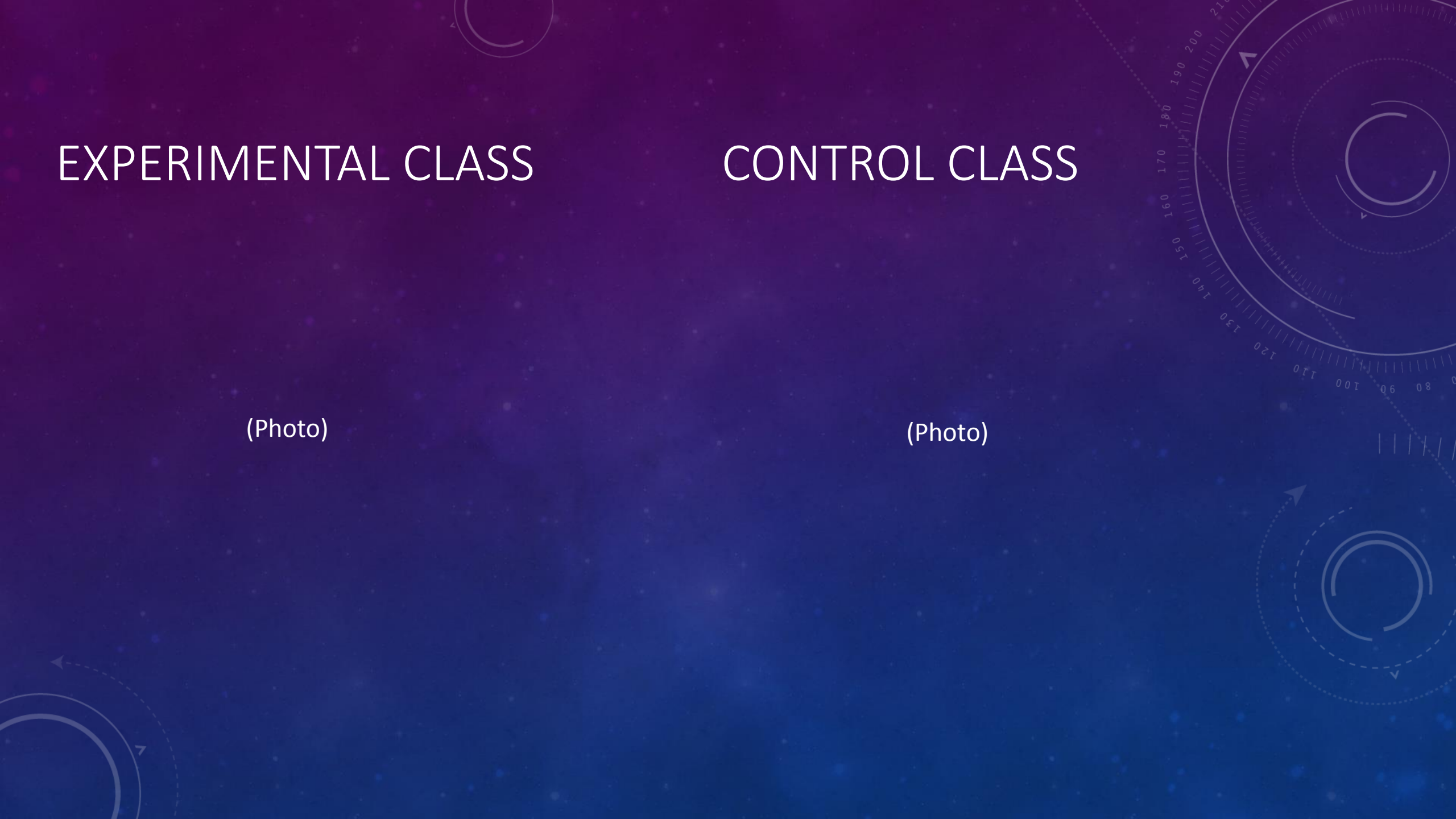


EXPERIMENTAL CLASS

(Photo)

CONTROL CLASS

(Photo)



PRE LESSON



TEACHER PREPARATION

1) WHAT?

- Video camera (cell phone)
- Video editing software (i-movie)
- app (Technique)
- Debut Video Capture and Screen Recorder Software
- Playposit website <https://www.playposit.com>
- Google account or others

2) When ?

- 2nd semister, PE lesson
- 3 doubele lesson

3) Who?

- F.2boys

STUDENT PREPARATION

- Use 1 lesson learn to use playposit
- Sign up and log in
- Choose class
- Finish a demo lesson
- Before the lesson: Watch the video

TEACHER'S VERSION

The screenshot displays the PlayPosit dashboard for a teacher. At the top, the browser shows the URL <https://www.playposit.com/dash>. The PlayPosit logo is on the left, and navigation tabs for DASH, BULBS, MONITOR, and DESIGN are on the right. The dashboard features four main cards: a profile card for 'Lai Kong Ip' with search code 'c3d3ad' and a 'FILL OUT PROFILE' button; a '5 VIDEO BULBS' card with a 'DESIGN VIDEO BULB' button; a '59 ACTIVE STUDENTS' card with an 'ADD STUDENTS' button; and a 'Go Premium' card with an 'UPGRADE ACCOUNT' button. Below these is a 'Recent Video Bulbs' section with a 'View More' link. It lists four lessons: 'wtsmc dodgebee lesson3 a', 'Dodgebee lesson 2 forehand', 'Dodgebee F.2 Lesson 1b', and 'Dodgebee F.2 Lesson 1'. Each lesson card has 'ASSIGN' and 'SHARE' buttons.

Lesson Title	Actions
wtsmc dodgebee lesson3 a	ASSIGN SHARE
Dodgebee lesson 2 forehand	ASSIGN SHARE
Dodgebee F.2 Lesson 1b	ASSIGN SHARE
Dodgebee F.2 Lesson 1	ASSIGN SHARE

STUDENT VERSION

PlayPosit



My Classes

Broadcast

bp lai

1 Completed

0 Due Soon

2 Overdue

WTSMC DODGEBEE Class for F.2

Hide Completed

Sort by Due Date

Dodgebee lesson 2 forehand



Mr.Black Flipped PE Lesson.

Past Due

Thursday, May 25, 2017

PLAYPOSIT 影片

- <https://www.youtube.com/watch?v=RsXKsYi34fc&t=2s>

TABLE 1. MEASUREMENT OF PHYSICAL ACTIVITY LEVEL FOR FORM 2 STUDENTS IN INTERVENTION AND CONTROL GROUP, IN THREE CONSECUTIVE PE LESSONS

Table 1. Measurement of Physical Activity level for Form 2 Students in Intervention and Control Group, in three consecutive PE lessons						
	PE1		PE2		PE3	
	Intervention Group (N= 19)	Control Group (N= 32)	Intervention Group (N= 25)	Control Group (N= 33)	Intervention Group (N= 25)	Control Group (N= 33)
Time in MVPA (80 mins in total)	39.21 (7.85)	36.21 (4.31)	51.27 (10.79)	43.71 (8.33)	41.39 (7.05)	41.38 (7.46)
Percentage in MVPA	54.68% (9.97%)	45.38% (5.34%)	64.16% (13.49%)	54.70% (10.34%)	51.80% (8.76%)	51.73% (9.33%)
Time in Sedentary (80 mins in total)	25.49 (7.42)	33.52 (4.58)	19.41 (11.57)	24.88 (7.48)	26.89 (6.97)	26.40 (6.58)
Percentage in Sedentary	31.84% (9.21%)	41.81% (5.72%)	24.24% (14.52%)	31.15% (9.31%)	33.68% (8.68%)	33.12% (8.25%)

Note. MVPA = Moderate to Vigorous Physical Activity (≥ 500 CPM (= Counts Per Minute)); Sedentary (0-149 CPM).

REFLECTION

Constrants :

Lesson 1 no. of student (hkssf competition)

Lesson 2 student haven't completed the video assignment > Follow up

Lesson 3 apparatus constraints (preparation-ear phone in school, wifi network, I pad apps)

REFLECTION

- STEM in PE?
- PE outside the lesson time ? > LIFE LONG PE
- SKILLS ANALYSIS > STEM?
- Technology > \$\$\$\$?