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中國香港體適能總會

編者的話

聯合國教科文組織（UNESCO）於2015年提出的17項可持續發展目標（Sustainable Development Goals; SDGs）已推行近十年，其中多項目標與健康及教育領域密切相關。值得留意的是，UNESCO同期發布的《優質學校體育政策指引》中，明確將「身體素養」（Physical Literacy）列為全球學校體育的核心發展方向。本期專題透過概念剖析與實踐經驗分享，深化教師、教練、家長及政策制定者對身體素養的理解，促進其在教育環境中的實際應用，以實現大眾終身參與身體活動的願景。

本期榮幸邀得中國香港體適能總會專責成員及本地大學體育研究學者共同撰文。蔡紹明博士將剖析如何運用身體素養概念解讀體適能測試結果；何偉強先生將探討體育類電子遊戲如何透過策略性設計，提升青少年參與動機與身體活動量的關聯性；吳兆權博士、甘偉強博士及林伏波博士則從課程設計與教學法角度，論證身體素養在學校體育中的教學價值。

希望本期內容能為讀者帶來新啟發，共同推動香港學校體適能及體育的發展，並促進身體素養的普及！

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專題文章

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練好體能就夠？身體素養才是終身運動的關鍵

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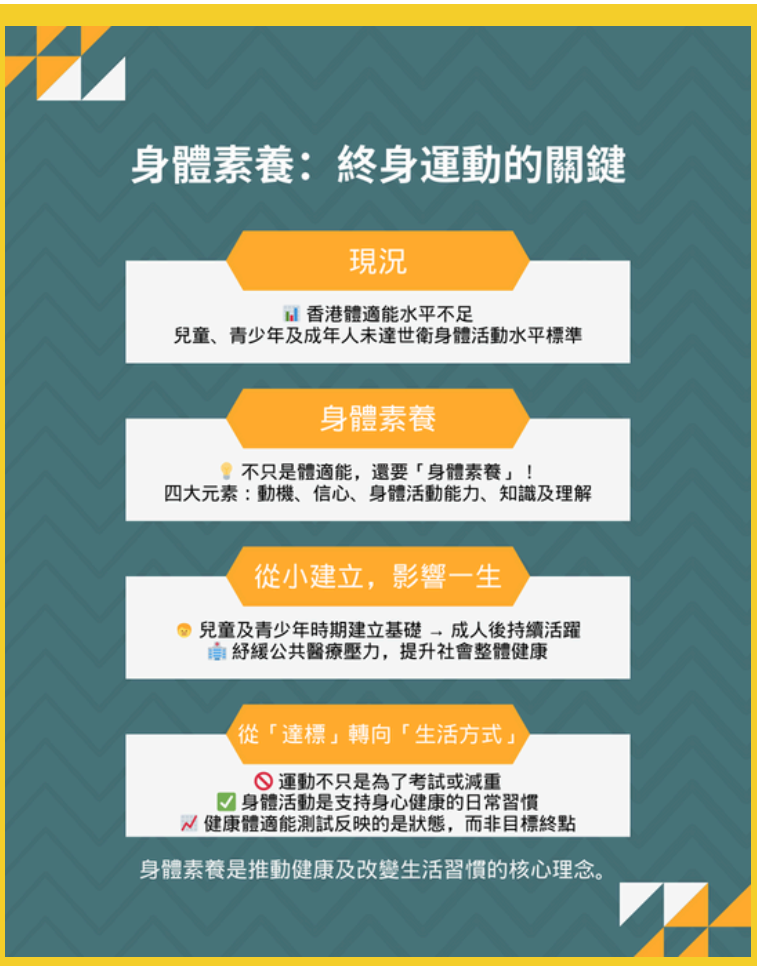
要點：

- 僅提升體適能不足以建立長期參與身體活動習慣
- 從價值觀轉化推動生活方式改變
- 身體素養是終身參與身體活動的關鍵

體適能是指個人在進行身體活動時擁有或達到一系列特質的能力[1]，其中一種大眾較常關注的是健康體適能。健康體適能已逐漸發展成為評估個人健康狀況的重要指標，其核心要素包括心肺耐力、肌力、肌耐力、柔軟度以及身體肥瘦組合等維度，對發病率和死亡率均有顯著影響 [2,3]。研究亦指出，透過恆常的中等至高強度身體活動（MVPA），這些體適能要素可以得到有效改善，並與預防多種慢性疾病存有明確關連。然而，最新的《全港社區體質調查》數據顯示，香港各年齡層居民的實際體適能水平與身體活動水平仍普遍不足。高達66.3%的兒童及50.7%的青少年未能達到世界衛生組織建議的每日60分鐘MVPA標準；他們同時面臨肌力下降與肥胖率上升的雙重挑戰。而在成年人口中，亦有超過一半（53.8%）未能達到每週150分鐘MVPA的基本建議，儘管部分指標如心肺耐力及肌力呈現改善趨勢，但平衡能力下降及中央肥胖等問題依然普遍，對公共健康構成持續威脅 [4]。這些現象反映，即使大眾已普遍認知恆常身體活動對健康體適能的正面影響，真正能長期維持習慣的人卻仍屬少數。因此，我們有必要重新審視目前的健康促進模式，從更根本的角度探索，除了練好體適能，是否還需要培養其他能力，才能讓身體活動成為終身習慣？

為了解釋為何部分健康體適雖有改善，但仍不足以在身體活動水平中達標，近年聯合國教育、科學及文化組織及公共衛生領域日益重視身體素養（Physical literacy）的概念 [5,6]。根據每個人的特質與成長背景，身體素養可被描述為個人具備動機、信心、身體活動能力、以及知識與理解，從而重視並主動承擔終身參與身體活動的責任 [7]。這些要素之間能互相促進，幫助個人建立積極的身體活動經驗，更能在多變的環境中主動及持續地將身體活動融入日常生活 [7]。此概念已被多國納入教育及健康政策中 [8-11]，身體素養被視為推動大眾恆常參與運動、提升整體健康水平、預防慢性疾病的關鍵策略之一 [6]。在公共衛生層面，身體素養具備作為長遠健康促進策略的潛力，有助提升整體社會的身體活動參與率，並紓緩公共醫療系統壓力。尤其在兒童及青少年階段建立良好基礎，不僅能促進其身心健康，更有利於在成年後持續維持活躍的生活模式，實現終身運動的理想。

身體素養並非只是一個政策或術語，它更與每一個人的日常生活息息相關。理解如何體現身體素養，有助我們反思自身對身體活動的態度、行為與習慣，不但有助建立正向經驗，更能促使運動融入生活，邁向健康而自主的生活方式。在動機層面，若能透過愉快的體驗與正面感受培養內在動機，比單純依賴以減肥為目標或社交媒體影響等外在動機，更有助於行為的穩定與長遠維持 [12]。 同時，透過設定可達成的小目標（如「每日5分鐘活動」或「每週一種新嘗試」），可逐步累積成功經驗，強化信心與自我效能感 [13]。



在身體活動能力方面，雖然健康體適能是重要的指標，但身體素養更強調動作協調性與控制能力，包括平衡、靈敏度與節奏感等 [13]。這些能力有助我們在多變環境中靈活應對，亦能提升運動的安全性與參與意願 [7]。了解運動的益處、訓練原則、恢復等基本知識，能協助我們更理性和持久的參與身體活動 [14]。當身體活動逐漸成為日常生活的一部分，將不再只是目標導向的任務，而是支持我們身心健康的生活方式。

身體素養的核心，最終關乎於價值觀的轉化。身體活動不應只被視為為達成某些目標（如減重或應付測試）而短暫進行的任務，每一個人應將身體活動逐步融入日常生活，成為一種長遠可持續的習慣。在這個脈絡下，健康體適能測試所反映的，應是受試者當下身體活動參與的情況與生活模式（state），而非達成某個標準的最終結果（outcome）[15]。當個體不再將運動視為達標即止的階段性任務，而是為了促進身心健康、建立社交連結與實現個人價值的日常習慣時，終身運動的可能性才得以真正落實。這種價值觀的轉化，不僅有助於提升自我主動性與持續性，也有助於從評估做得夠不夠的外在標準，轉向關注是否持續地在活動的生活質素。身體素養才能真正成為推動健康及實現改變生活習慣的核心理念。

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靜態體育類電子遊戲：促進青少年運動的潛力

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要點:

- 電子遊戲的普及引發的全球健康問題，例如身體不活躍和久坐生活方式。
- 靜態運動電子遊戲有潛在益處，可能促進玩家對運動的興趣和參與，增加對比賽的理解，並提升溝通和合作能力。
- 家長及教育工作者宜平衡虛擬活動及真實運動。

全球的健康問題與電子遊戲的普及

身體不活躍（physical inactive）和久坐的生活方式（sedentary lifestyle）是全球的一個重大健康問題。根據世界衛生組織，目前有81% 的青少年和27.5%的成年人未能達到全球身體活動量的建議 [1]。減少身體活動量和增加久坐行為對健康產生超重和肥胖等負面影響，亦是多種慢性疾病的重要風險因素[2]。然而，電子遊戲已成為全球兒童及青少年中最普遍的久坐活動 [3]。在美國，有76%的18歲以下的兒童及青少年經常進行電子遊戲 [4]。傳統的電子遊戲通過手或手指動作來移動遊戲控制器的按鈕，通常是以靜止長時間坐著的姿勢進行，其能量消耗是1.5 MET值 ，屬於久坐行為的一種[5]。過去對電子遊戲的研究，大多數集中在其久坐特性及過度使用的潛在風險，如暴力行為、抑鬱、成癮及其他負面的身體健康問題 [6,7]，包括大量的屏幕時間與不活躍和肥胖的發展有關 [8]。

運動類電子遊戲： 動態VS 靜態

在各種遊戲類型中，模擬真實運動的運動電子遊戲（sports video games）是最早和最暢銷的遊戲類型之一，而當中又可再分為動態和靜態兩種類型。動態的體感遊戲（active video games / exergames）在近年大行其道，尤其是疫情期間。遊戲主要透過動作感應器或攝影鏡頭來追蹤玩家的身體動作，並將數據傳送到遊戲系統中，映射在遊戲的角色上。不少研究已指出這類遊戲能增強玩家的各種體適能及身體活動能力，如肌力、肌耐力、平衡度、操控物件技能等 [9]...

sports video games
Virtual Tennis

不少家長及教育工作者認為，對於一些對參與身體活動缺乏興趣的青少年來說，參與體感遊戲除了可以提升他們的身體活動量，亦能給予他們一種有趣味的運動體驗。靜態的運動電子遊戲方面，玩家則手持控制器操控屏幕上的角色，模仿傳統競技運動，通常是坐著進行的[10]。相對於體感遊戲，運動電子遊戲更著重當中的策略性與操作技巧，例如當中的NBA 2K、Madden NFL、Virtual Tennis和FIFA系列的遊戲在青少年中都非常受歡迎，其中 FIFA Online 4更被納入2023年杭州亞運會電子競技比賽的獎牌項目，可見運動電子遊戲在業界中的重要性與普及性。

sports video games
FIFA

靜態運動電子遊戲的潛在益處

相對於體感遊戲，運動電子遊戲較少受到研究者關注，基於其久坐特性，形象在學校及家長層面中亦較為負面。無疑參與電子遊戲是久坐行為的一種，但這並不等同於身體不活躍。試想像如果青少年每天進行遊戲機30分鐘，同時他亦在同一天進行中等至劇烈程度的運動30分鐘，這樣他算得上是不活躍嗎？在討論電子遊戲時，一個常見的情況是將所有遊戲種類歸納為同一類別進行研究 [11]，玩家對不同的遊戲類型有著不同的遊玩動機。當研究者檢視玩特定類型電子遊戲的關聯時，他們發現玩靜態運動電子遊戲的頻率與運動頻率和劇烈身體活動天數呈正相關；相反，玩大型多人在線角色扮演遊戲（massively multiplayer online role-playing game; MMORPG）的時間長度與運動頻率則呈負相關 [12]。研究者推測，參與競技運動電子遊戲的參與者可能比玩MMORPG的參與者對身體活動有更大的內在動機。另一研究指出，參與運動電子遊戲可能令玩家親身體驗該運動，發展與運動相關的知識、技能和策略，從而積極增強現實生活中的身體活動參與 [13]。不過，究竟是喜歡參與真實身體活動的青少年，會偏向花更多時間進行運動電子遊戲？還是喜愛遊進行運動類電子遊戲的青少年，會令他們花更多時間參與真實身體活動？這個因果關係的方向還需要更多研究證明，以提供建議讓學界及家長參考。除此之外，運動的本質是比賽，運動電子遊戲可以透過線上或線下的多人模式比賽，玩家需要在遊戲中進行戰術討論和協作，這亦有助提升溝通和合作能力。

結語

雖然體感遊戲能增加玩家在遊玩時的活動量，對於家長及老師較容易接受及推廣，認為以有趣的形式鼓勵小朋友提升活動量。但畢竟電子遊戲才是主流，尤其在男性及較年長的青少年上 [14]。筆者認爲要禁止青少年進行電子遊戲是不可能及不切實際的，進行電子遊戲已成為他們生活及社交的一部份。作為家長及教育工作者，我們應了解不同類型遊戲的潛在影響，從而為青少年選擇合適的遊戲，強調虛擬活動與現實身體活動之間的平衡，在享受遊戲的同時，亦應保持適當的鍛鍊及社交活動。

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Connecting Physical Literacy and (Quality) PE in Hong Kong

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Key Points to note:

- Physical literacy is the foundation of physical education (PE) and an outcome of structured PE. Through a range of age- and stage-appropriate opportunities, learners will achieve physical literacy more readily.
- Physically literate people have a combination of motivation, confidence and competence to be active, along with their knowledge and understanding of how being active contributes to their life.
- Provision of quality PE (QPE) and supportive school environments can impart physical and health literacy for lifelong healthy, active lifestyles, prevention of non-communicable diseases and mental health disorders as well as strengthen academic outcomes.
- PE Teacher Education (PETE) plays a crucial role in fostering physical literacy, which can be achieved by integrating model-based practices, such as Teaching Games for Understanding (TGFU), Sport Education model (SEM), and Mosston's Spectrum of Teaching Styles, in curriculum planning and physical activities execution.

What is "literacy

"Literacy is the ability to identify, understand, interpret, create, communicate … using … materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society….".
--the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2004)

The term "literacy" is not new to us nor to the education field. When you are reading the above UNESCO (2004)'s definition on "literacy", have you ever wondered how far you have gone from identifying the alphabets ABC, to understanding the words, and interpreting the sentences? Besides "literacy" on written/printed texts, do you possess other skills such as "digital literacy", "health literacy", and the like that are essential for our daily life?

Literacy empowers and liberates people. In this era, literacy skills themselves are expanding and evolving as people engage more and more with information and learning through digital technology. Health educators embrace people with sound "health literacy", which is defined as "the cognitive and social skills which determine the motivation and ability of individuals to gain access to understand and use information and to act upon in ways which promote and maintain good health." (WHO, 2018). We will not hesitate to agree that "health literacy" is important for everyone when we are able to find, understand, and use health information and services at some point in our lives. "Health literacy" enables us in preventing health problems, protecting our health, and better managing health problems when they arise.

The subject of "PE" provides an opportunity to develop children's "physical literacy". The connection between "PE" and "physical literacy" may appear crystal clear to some educators and foggy to others. While the notion that "physical literacy" is also important to every individual may be supported by many education practitioners (Sum et al., 2020), some may not even know the ABC of "physical literacy", let alone being supportive of promoting "physical literacy" in different education settings.

In this article, we will elaborate the concepts of "physical literacy", which may implicitly exist in the "PE" curriculum, or explicitly operated in the different levels of Hong Kong education system: primary, secondary, and tertiary education. We will then introduce certain model-based practices in PE Teacher Education (PETE), such as Teaching Games for Understanding (TGfU), Sport Education model (SEM), and Mosston's Spectrum of Teaching Styles, which have been practiced by many physical educators in curriculum planning and physical activities execution.

How are "physical literacy" and "PE" connected?

There are many interpretations of "physical literacy" in the education field. Indisputably, the most commonly quoted is Whitehead (2001)'s definition with five components: "the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity throughout life". It refers to the skills needed to obtain, understand and use the information to make good decisions for health. (UNESCO, 2015)

In Hong Kong, the Education Bureau (2017a, 2023) defines "PE" in the school curriculum as "education through the physical". It aims for students' whole-person development through providing a wide range of physical activities that help educate students to be responsible citizens. By developing the physical competence, cognitive domain and generic skills, the PE curriculum enhances students' health and fitness, and nurtures their positive values and attitudes. Students who are physically literate are motivated to move with confidence and competence in a variety of physical activities. However, we cannot expect all "physically educated" students to be "physically literate", if it is not "quality PE (QPE)". This may explain why physical inactivity is still one of the major global public health issues including Hong Kong, as the Population Health Survey 2020-22 revealed that about 25% of persons aged 18 or above had insufficient physical activity (Department of Health, 2023).

Participation in QPE is one of the entry points necessary for students' lifelong participation in physical activity, sport and in society at large (UNESCO, 2015) as highlighted by the Education Bureau (2017a). According to UNESCO (2024), QPE's core factors, such as frequency, variety, inclusivity and value content, differ from traditional "PE", QPE promotes peer-led learning and well-rounded skill development which can enhance educational and employability outcomes. The outcome of QPE is a physically literate young person, possessing both the skills and confidence to bridge the transition between adolescence and adulthood while maintaining an active lifestyle throughout their life.

Which age- and stage-appropriate opportunities have QPE provided to nurture "physical literacy" in Hong Kong?

Answering how young shall we develop "physical literacy" is as difficult as answering how young shall kids learn to read and write. In WHO (2018)'s latest global action plan to promote more active people for a healthier world, one of the actions is to "strengthen provision of good-quality PE and more positive experiences and opportunities for active recreation, sports and play for girls and boys, applying the principles of the whole-of-school approach in all pre-primary, primary, secondary and tertiary educational institutions, to establish and reinforce lifelong health and physical literacy, and promote the enjoyment of, and participation in, physical activity, according to capacity and ability.

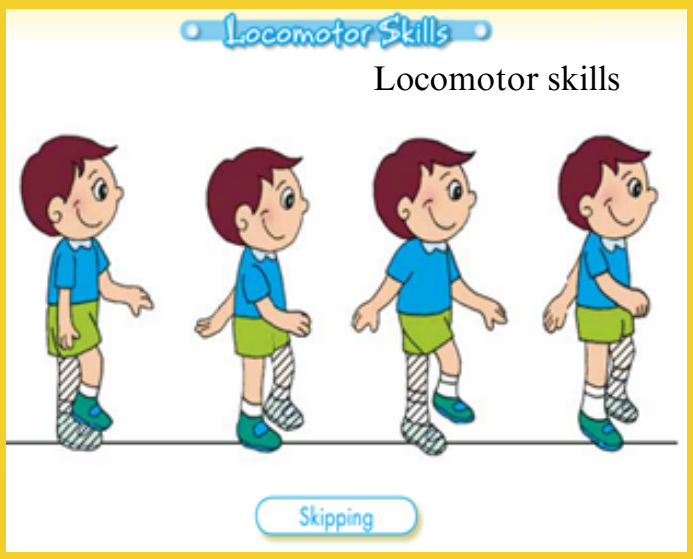
"Physical literacy" was first introduced in 2015 to PE teachers in Hong Kong through a Continuing Professional Development programme. Since then, limited operationalising physical literacy have been developed in university, community, and primary and secondary school settings (Sum et al., 2020). In this article, the discussion of nurturing "physical literacy" via QPE excludes the pre-primary group (i.e., kindergarten), which has no specific PE curriculum (Education Bureau, 2017b). This article however, includes tertiary educational institutions because PETE takes place here, and PETE plays a crucial role in fostering physical literacy.

PE is one of the eight Key Learning Areas of the Hong Kong school curriculum. From primary 1 to secondary 6, the PE curriculum contributes greatly to enabling students to lead a healthy lifestyle with an interest and active participation in physical and aesthetic activities. Its implementation is not confined to PE lessons, but to various physical activities arranged for them to develop a habit of active participation in physical activities and enhance their lifelong interest in sports (Education Bureau, 2017a). To ensure students achieve the ultimate aim of whole-person development and encourage them to participate in physical activities regularly, schools have to allocate a certain percentage of total lesson time to general PE in different key stages (i.e., KS1 to KS4).

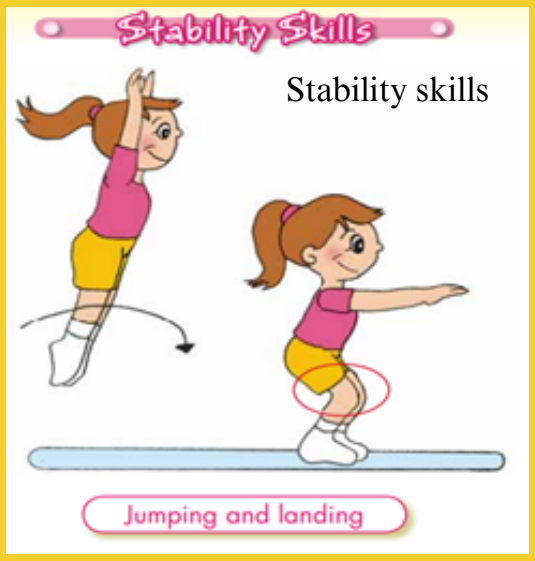
In KS1 (covers Primary 1 to 3), students start learning the ABC's of movement in "physical literacy". At the completion of KS1, they shall be able to develop fundamental movement (FM) skills through FM activities and physical play, display positive attitudes towards participation in physical activities, describe health benefits of physical activities, and express oneself and show creative thinking in physical activities. No parents will accept their child leaving primary school lack of numeracy and literacy skills (i.e., unable to read, write, add and subtract). So why would they accept the child unable to perform basic FM skills when left school?

The teaching of FM skills is an old wine in new bottle to the local PE curriculum dated back to 1995 (Education Bureau, 2007). Physical educators have been encouraged to teach skills and movements for application in dance, games and gymnastics activities at lower primary. FM skills include locomotor skills, stability skills and manipulative skills (see Table 1). Education Bureau (2007) has defined "movements" as the act of maintaining or changing the position(s) of body part(s), which range from simple (e.g., walking) to complex (e.g., turning a somersault). Thus, FM is a movement that children develop as they grow, and it is simple and basic for participating in or performing different types of physical activities (e.g., walking, running, jumping, catching). On the other hand, FM skills are refined FM for efficiency or expressive purposes, which need to be learned. As such, FM activities are conducive to the development of FM skills.

Table 1: FM skills include locomotor skills, stability skills and manipulative skills.



- Travelling from one place to another
e.g. walk, run, jump, hop, leap



- Maintaining balance on spot
or when movingr
e.g. stretch, bend, stop, twist/rotate

- Controlling small objects
e.g. catch, underhand throw, kick

(Graphics credit to Education Bureau, 2007)

We might have adult friends who cannot swim or cycle as they lack of the opportunities to learn these skills at a younger age. A common misconception is that FM skills are naturally acquired from birth and developed through physical activity or PE lessons. Although many children will develop rudimentary forms of movement patterns, without appropriate practice, instruction and opportunity, they will struggle to achieve a mature form of FM skills. Since FM skills have to be learnt, children who have not mastered the pre-requisite FM skills will be unable to participate competently in many activities. For example, those who cannot throw and catch will be limited in participation of sports and activities that require their proficiency (e.g., badminton, cricket, and other ball games). In contrast, children with high levels of FM proficiency in primary school age show little decline in physical activity participation throughout crucial periods (e.g., from secondary school into adulthood).

The problems of developing and nurturing physical literacy in primary and secondary settings are insufficient or no lesson time allocated for PE classes, despite the specific guidelines promulgated by the Education Bureau. Offering PE homework (similar practice as other subjects such as Chinese or mathematics) may be one way to nurturing physical literacy. Ng and his colleagues (2016) examined the implementation of PE homework in primary schools. They found that applying new initiatives in the school needs the support of parents, schools and senior management. Moreover, a more practical summer training course about the effectiveness of applying physical literacy in classes can be offered to PE teachers.

In Hong Kong, only some colleges and universities offer compulsory, or at best elective, cognitive-affective or activity-based health and PE courses for their students. A good example is the required PE courses offered in The Chinese University of Hong Kong (CUHK) for all students, which adopt SEM. At the tertiary level, required PE courses reach all segments of the college population, including sedentary, special needs, and active students. Before entering the workforce, these courses provide the last platform to promote and maintain physical activities motivation and exercise habits (Barney & McGaha, 2006). The value of required PEhas been confirmed (Ermler, Kovar, & Reinders, 1993). The long-term value of required PE is of special importance, as it provides a means for maintaining regular exercise habits (Trudeau & Shephard, 2008).

To Teach OR To Be Taught? Who needs physical literacy?

Physical literacy is the cornerstone of lifelong physical activity, and the PE curriculum is its most powerful vehicle. By embracing game- or model-based practices such as TGfU, SEM, and Mosston's Spectrum of Teaching Styles, in curriculum planning and physical activities execution, PE teachers can create a learning environment that nurtures the cognitive, affective, and social dimensions of physical literacy. However, the success of this endeavour depends on the quality of PETE, which must equip teachers with the knowledge, skills, and mindset to inspire and empower the next generation of physically literate individuals. Together, through thoughtful curriculum design and effective teacher education, we can build a healthier, more active future for all.

Integrating Model-Based Practices

Model-based practice in PE is the suggestion to transform PE in schools and challenge the conventional approaches by reorienting the focal point of PE away from sport-specific content towards pedagogy and student learning in which pedagogy is positioned as the dynamic interplay of teaching, learning, curriculum and assessment as shown in the figure below (Casey & Kirk, 2024). These models provide a structured framework for teaching and learning, enabling teachers to address the educational intention with multiple dimensions of physical literacy. The late professor Li Chung from the Education University of Hong Kong (EdUHK) led his colleagues (Cruz et al., 2012; Li et al., 2013; Kam et al., 2014) to promote the paradigm shift of the pedagogy in PE. Their work on the three prominent models, TGfU, SEM, and Mosston's Spectrum of Teaching Styles aim to cultivate PE teachers' educational decision concerning the PE curriculum which can be promoted with a better organisation and emphasis on those that appear to be more important in shaping student learning. It offers valuable insights into how physical literacy can be nurtured indeed.

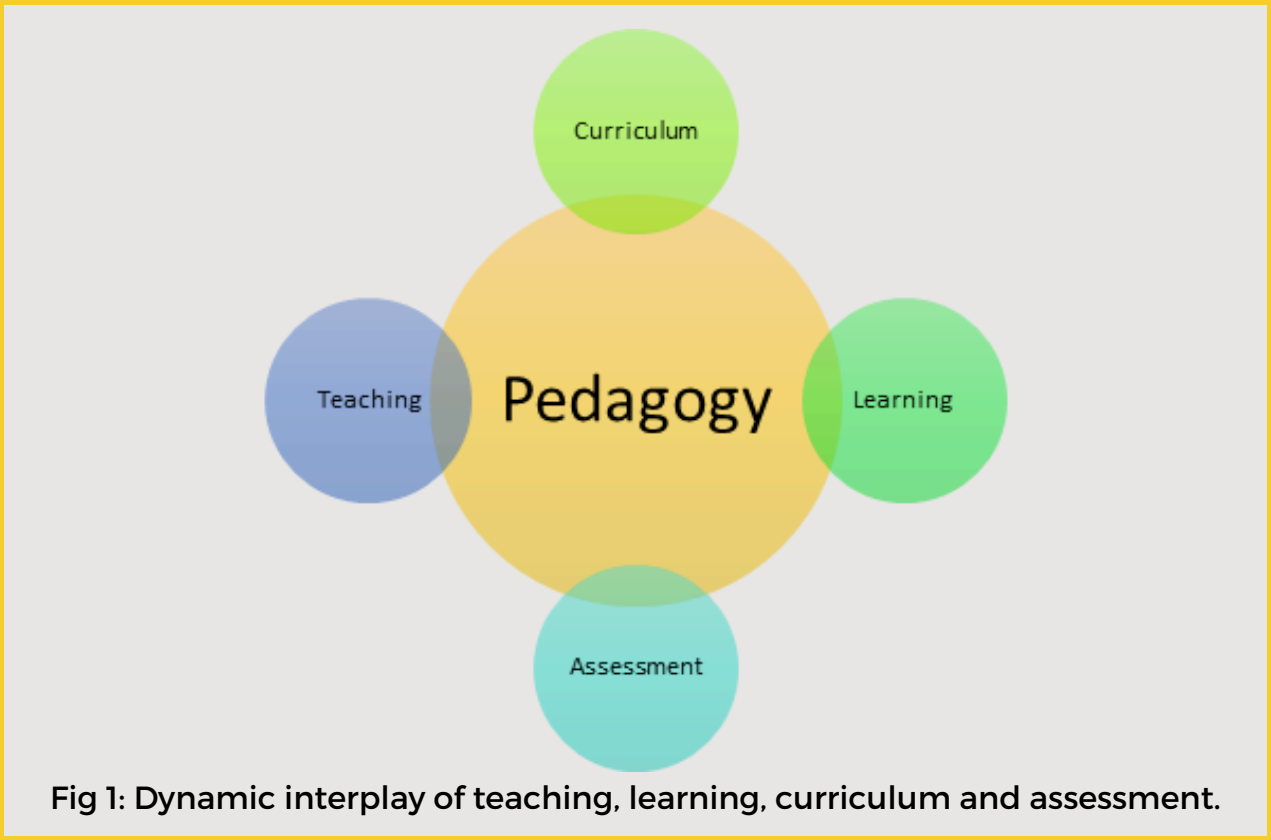


Fig 1: Dynamic interplay of teaching, learning, curriculum and assessment.

Teaching Games for Understanding (TGfU)

TGfU is a pedagogical approach that enhances students' understanding and strategic thinking in games rather than focusing solely on technical skills (Cruz et al., 2012). By engaging students in modified games that encourage problem-solving, decision-making, and tactical awareness, TGfU fosters a deeper understanding of game dynamics. This approach aligns with the principles of physical literacy by promoting cognitive engagement and helping students develop a sense of competence and confidence in various game scenarios.

TGfU nurtures physical literacy by enabling students to:

a) Develop tactical awareness and decision-making skills, enhancing their ability to adapt and respond to diverse physical challenges.

b) Experience success and enjoyment through meaningful gameplay, fostering motivation and a positive attitude towards physical activity.

c) Build social skills through collaboration and communication in team settings, contributing to emotional and social aspects of physical literacy.

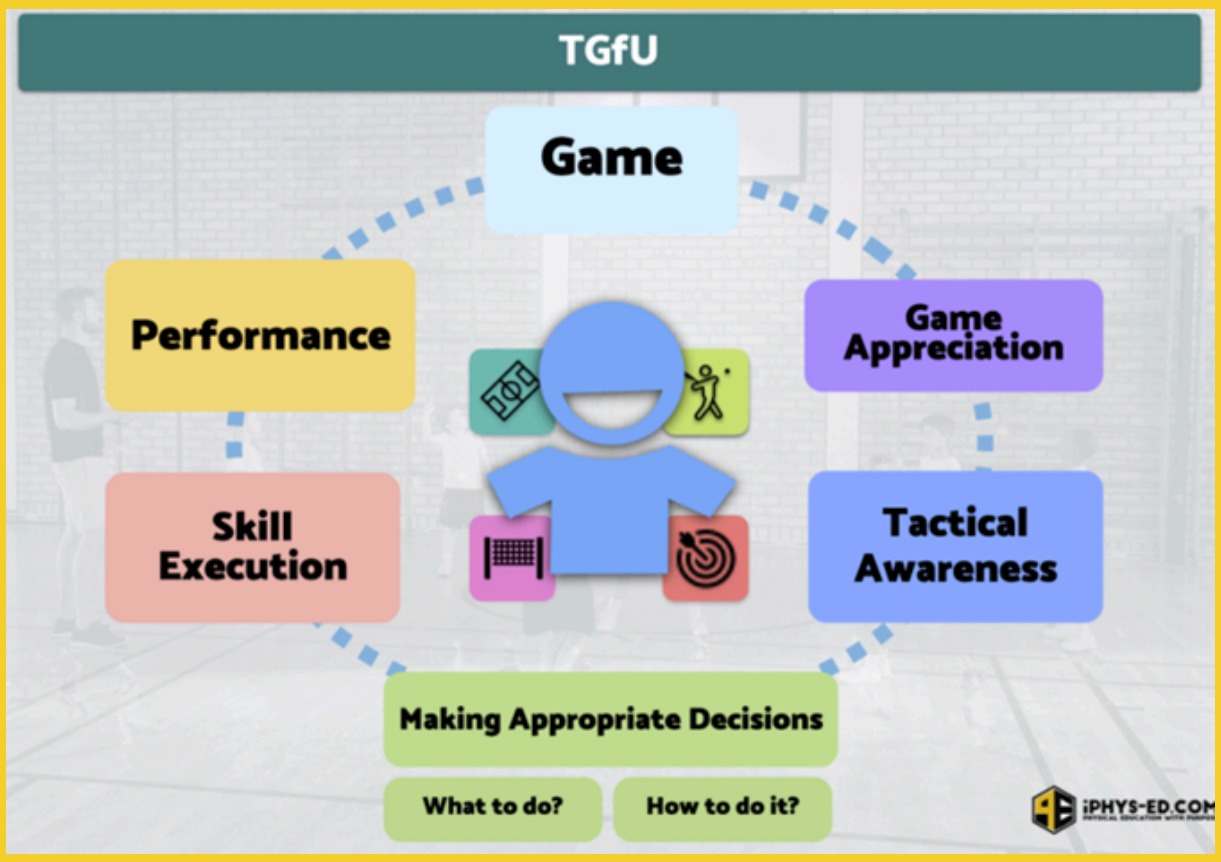


Fig 2: The TGfU cycle incorporates 6 key stages: Game focused; Game appreciation; Tactical awareness; Decision making; Skills execution and Performance.
(Graphics credit to https://www.iphys-ed.com/blog/what-is-teaching-games-for-understanding/)

Sport Education Model (SEM)

SEM is a pedagogical model that strongly emphasises providing students with authentic and developmentally appropriate experiences. The teacher actively guiding the gradual shift from traditional guided practice to supervising independent practice as the students take on more ownership and responsibility. SEM's primary objectives revolve around fostering students' competence, literacy, and enthusiasm for active participation while instilling a lifelong desire to remain physically active (Siedentop, Hastie, & Mars, 2019). SEM addresses the limitations of traditional PE by promoting active engagement, teamwork, and personal growth.

SEM places the greatest emphasis on the establishment of a student-centred learning environment, where students actively engage in different roles such as players, coaches, officials, scorekeeper, and equipment management, within the consistent same group. The unit is presented to the class as a mini-season whereby students are placed in to teams which they stay in until the end of the unit. Within their teams, students have to adopt a role (e.g., warm-up/cool-down specialist, skills coach, tactical coach, fitness trainer, and referee) and will take responsibility for planning and leading that component of the sessions which will be interspersed with games. As a result, this immersive approach empowers students to appreciate the intricacies of sport while nurturing motivation, confidence, competence, and knowledge in physical literacy, fostering a lifelong commitment to physical activity.

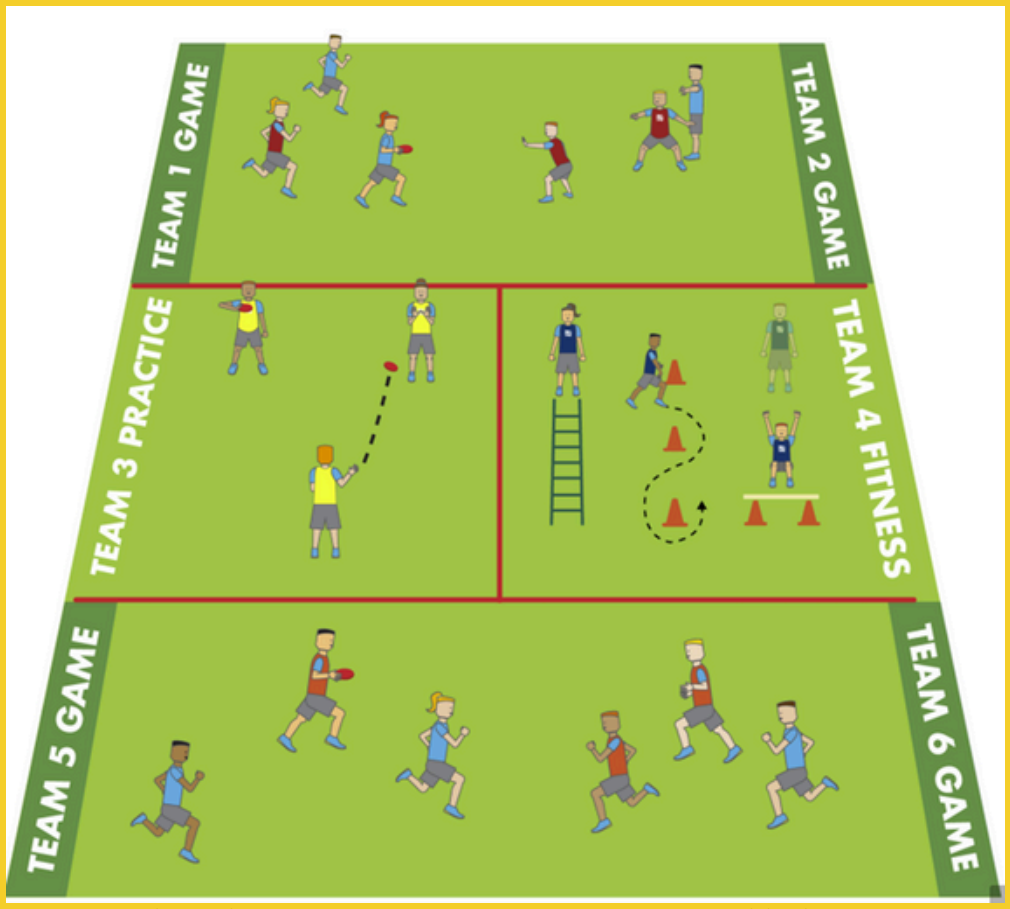


Fig 3: The SEM comprises six key structural features: season, affiliation, formal competition, culminating events, record-keeping, and festivity. (Graphics credit to https://www.thepeproject.com/teaching-models.html#sported)

Mosston's Spectrum of Teaching Styles

Mosston's Spectrum outlines a continuum of 11 teaching styles, ranging from teacher-directed (e.g. Style A: Command) to student-centred (e.g. Style K: Self-teaching) approaches (Li et al., 2013). This flexibility allows PE teachers to tailor their instruction to the needs of their students, promoting autonomy and self-regulation—key aspects of physical literacy.

For example, a teacher might use the command style (teacher-directed) to introduce a new skill, then transition to the discovery style (student-centred) to encourage exploration and creativity. By varying their teaching styles, teachers can create a dynamic and inclusive learning environment that supports the development of physical literacy.

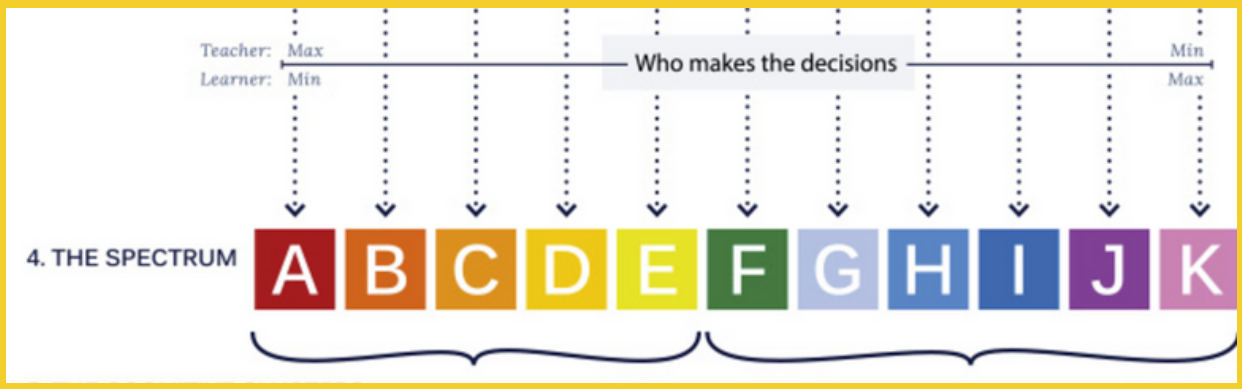


Fig 4: The Mosston's Spectrum from teacher-directed to student-centred. The 11 styles are A: Command, B: Practice; C: Reciprocal; D: Self-check; E: Inclusion; F: Guided discovery; G: Convergent discovery; H: Divergent discovery; I: Learner designed; J: Learner initiated; K: Self-teaching (Graphics credit to https://spectrumofteachingstyles.org/index.php?id=20)

The role of PE Teacher Education (PETE)

The majority of Hong Kong PE teachers are trained in EdUHK (including the few colleges of education such as Northcote College of Education) and CUHK. The remaining PE teachers come from other local or foreign universities, where they gain an additional postgraduate diploma majoring in PE. However, the PETE programmes in both universities do not have formal specific courses on physical literacy. To effectively implement model-based practices and nurture physical literacy, PETE programmes must prioritise the development of educators who understand and value physical literacy. PE teachers play a pivotal role in shaping the experiences and attitudes of their students towards physical activity. Therefore, PETE programmes should focus on:

A.TGfU nurtures physical literacy by enabling students to:

- PETE programmes must ensure that future educators comprehensively understand physical literacy, including its components and significance. Teachers should be equipped with the knowledge to integrate physical literacy principles into their teaching practices, fostering a holistic approach to PE.

B.Pedagogical Skills and Model-Based Practices

- Effective PETE programmes should emphasise the importance of pedagogical skills that align with model-based practices like TGfU, SEM and Mosston's Spectrum. Educators should be trained to design lessons that prioritise cognitive engagement, strategic thinking, and authentic experiences, nurturing physical literacy.

C.Reflective Practice and Continuous Professional Development

- PETE programmes should encourage reflective practice, enabling educators to critically assess their teaching approaches and adapt them to meet the diverse needs of their students. Continuous professional development opportunities should be provided to keep teachers updated with the latest research and innovations in physical literacy and model-based practices.

D.Creating Inclusive and Supportive Learning Environments

- Educators must be equipped to create inclusive and supportive learning environments that accommodate students of all abilities and backgrounds. PETE programs should emphasise the importance of differentiated instruction and strategies to engage and motivate every student, fostering a positive attitude towards physical activity.

Conclusion

Physical literacy encompasses the skills, knowledge, and behaviours that enable individuals to engage in a wide range of physical activities confidently and competently throughout their lives. As societies grapple with sedentary lifestyles and declining physical activity levels, the development of physical literacy through quality PE has become a global priority.

For physical educators already in the field and future educators, it is important to bring physical literacy into your teaching practice and to develop each child's physical literacy. By promoting the ABC of physical literacy (i.e., motivation, confidence, physical competence, knowledge and understanding) into the learning process, we can promote lifelong commitment to physical activity starting from the young age.

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