

HEALTH-BASED PHYSICAL EDUCATION

A FRAMEWORK FOR PROMOTING ACTIVE LIFESTYLES IN CHILDREN AND YOUNG PEOPLE

Paul Sammon and Mark Bowler [afPE members]

Part 2: Health-Based Physical Education in practice

Building on part 1, where we introduced a new pedagogical model for Health-Based Physical Education (HBPE), the primary aim of this article is to illustrate how the model may be implemented in the PE curriculum to help support all children and young people to develop positive physical activity behaviours. Specifically, we consider the model’s critical features for teaching and learning, followed by some key planning considerations, including learning intentions, assessment strategies and how the model can potentially be modified to reflect specific contexts during implementation.

CRITICAL FEATURES

According to Metzler (2011), to ensure the effective implementation of a pedagogical model, specific critical features for teacher and student behaviour must be designed. The critical features indicate the patterns of expected teacher and student behaviour and maximise the potential of a model’s learning goals being achieved. Thus, critical features should be observed during the teaching and learning process. The critical features for HBPE (Table 1) highlight the most important elements of the model

from our perspective, in order to support teachers to focus on the major theme of valuing a physically active life and the key learning goals, i.e. developing habitual, motivated, informed and critical movers. It is important to note, however, that not all of the critical features are expected to be observed in every single lesson, but rather should be viewed holistically over the course of employing the HBPE model in the curriculum. Drawing on key words and phrases from each of the critical features, namely *promotes*, *informed movers*, *needs-supportive* and *critical movers*, we created the acronym PINC as a guide for practitioners.

TEACHER PROMOTES MEANINGFUL PHYSICAL ACTIVITY

When employing the HBPE model, it is recommended that teachers act as positive role models, demonstrating a real passion and energy for physical activity. Specifically, students should be taught how to identify and meet personal targets in relation to being active. Secondly, in line with the Association for Physical Education’s (afPE) recently revised Health Position Paper (Harris, 2020), which recommends that students should be active for 50-80 per

cent of the available lesson time, it is expected that teachers will adopt *active pedagogies* (Harris & Cale, 2018), where learning is embedded through meaningful movement contexts. It is important to stress that the pursuit of high intensity physical activity levels should not be at the expense of educating students with the necessary attitudes, knowledge and skills to lead active lifestyles. Indeed, Quarmby *et al.* (2018) caution that prioritising time spent on high intensity activity during lessons may negatively impact on students’ enjoyment and their subsequent motivation to be physically active. Clearly, if PE is to be effective in promoting life-long physical activity, children and young people must be motivated and taught how to be active out of class, especially as many schools in England have reduced the curriculum time available for PE (Youth Sport Trust, 2018). This worrying trend leads us to argue that, during the teaching of HBPE, there must be a strong commitment to provide students with out-of-class learning activities or activity challenges. Examples of these activity challenges could involve encouraging students to attend extra-curricular clubs, being active with a friend or family member, doing housework, actively commuting to school and keeping an activity diary.

TEACHER SUPPORTS STUDENTS TO BE INFORMED MOVERS

The second critical feature for HBPE involves teachers supporting students to be informed movers, which involves developing their knowledge about how, why and where to be physically active. Again,

Table 1: HBPE critical features

P	Teacher promotes meaningful physical activity
I	Teacher supports students to be informed movers
N	Teacher creates a needs-supportive learning environment
C	Teacher encourages students to become critical movers

this critical feature can be highlighted in a number of ways, such as teachers discussing both the current physical activity guidelines for children and young people and subsequent levels of activity. For example, the UK guidelines for Children and Young People (aged 5 to 18 years) published by the Chief Medical Officers (2019) recommend that:

1. Children and young people should engage in moderate-to-vigorous-intensity physical activity for an average of at least 60 minutes per day across the week.
2. Children and young people should engage in a variety of types and intensities of physical activity across the week to develop movement skills, muscular fitness and bone strength.
3. Children and young people should aim to minimise the amount of time spent being sedentary, and when physically possible should break up long periods of not moving with at least light physical activity.

Students should also gain knowledge of how to participate safely and effectively in different physical activity pursuits, which could include the development of muscular strength, and need to know some of the risks associated with physical activity engagement, such as burnout and overuse injuries. Furthermore, it is important that students learn the health benefits of engaging in an active lifestyle, and we argue there should be a particular emphasis on the short-term social and affective benefits. Finally, teachers must help students to identify where there are opportunities to be physically active in their local community to support out-of-class participation.

TEACHER CREATES A NEEDS-SUPPORTIVE LEARNING ENVIRONMENT

In part 1, we discussed Self-Determination Theory, which proposes that an individual will develop more autonomous forms of motivation when their needs for autonomy, competence and relatedness are satisfied (Ryan & Deci, 2017). Drawing on research evidence (Standage & Ryan, 2012; Ntoumanis, 2012), we propose a number of strategies to help create a needs-supportive environment when employing the HBPE model. These include offering choice in response to the needs and interests of

students in order to foster autonomy support. Specific examples could involve consulting students on the content of HBPE programmes and encouraging them to engage in activities of interest out of class. There should be a focus on empowering students to manage their own learning and developing our role as facilitators or promoters of active lifestyles. It is envisaged that support for competence will be generated when teachers plan activities that optimally challenge all students and provide constructive, personalised feedback that develops self-confidence and perceptions of self-competence. To promote relatedness support, or a sense of belonging, we should encourage students to support their peers sensitively through the creation of a collaborative learning environment. This may involve teaching students how to provide positive feedback and treating each other with empathy and respect.

TEACHER ENCOURAGES STUDENTS TO BECOME CRITICAL MOVERS

The fourth critical feature for HBPE expects teachers to support their students to become critical movers. This may involve setting movement promoter challenges, where students are encouraged to help others, such as family and friends, to participate in physical activity. For example, students could be set an out-of-class challenge to discuss or demonstrate their learning to a family member. It is also important for students to be taught the most common barriers to participation in physical activity and consider how these barriers may be overcome. Sport England (2019) recently highlighted that there are significant inequalities in the areas of disability, family affluence and gender. Specifically, children and young people with a disability or long-term health condition are less likely to be as active as their non-disabled peers, those from low income families are the least likely to be active, and boys are more likely to be active than girls. However, there are multiple barriers to participation which we encourage teachers to discuss with their students, along with any strategies for reducing these.

Figure 1: HBPE learning intentions

- Demonstrate a positive attitude to physical activity through regular participation and effort within and beyond the school.
- Monitor and make progress against personal activity goals.
- Explain the physical activity guidelines and current levels for children and young people.
- Identify how and where to participate in interested physical activities in the local community.
- Recognise common barriers to physical activity participation and how to overcome them.
- Support and encourage others to lead an active lifestyle.

KEY PLANNING CONSIDERATIONS

In the next part of this article, we consider some key questions in relation to planning HBPE curricula and implementing the model in practice. It is important to clarify that we have framed HBPE as a pedagogical model to be taught as an explicit area of the curriculum for sustained periods of time (such as a term) and be revisited and built on throughout a young person's PE journey. In a models-based curriculum, HBPE might be used with other pedagogical models that have other goals. However, we also believe that the HBPE model could inform PE curriculum planning across all phases of education, as it aligns very closely with both the key aims of the National Curriculum in England (DfE, 2013) and the concept of physical literacy, as defined by the International Physical Literacy Association (2017). Indeed, if physical literacy is adopted as the key goal for PE curricula, we propose that the HBPE model could, and should, be a central vehicle to help achieve this.

LEARNING INTENTIONS

When planning learning intentions, or outcomes, for HBPE curricula, it is important to begin by working back from both the major theme and the key learning goals of the model. Thus, the focus of learning must be about teaching students to value and lead active lifestyles, rather than an emphasis on developing fitness and training for sport performance (see part 1). Figure 1 provides some examples of suitable learning intentions for HBPE programmes.

ASSESSING STUDENTS' LEARNING

The second key planning question concerns how to assess students' progress across the multiple learning domains in PE. As valuing a physically active life is the major theme of the HBPE model, we advocate, along with Haerens *et al.* (2011), that teachers prioritise the affective domain when planning curricula. Consequently, teachers may decide to focus assessment on students' social and personal behaviours, such as their motivation, commitment and enthusiasm for physical activity which could

potentially be assessed through attitudinal scales, participation surveys or journals. McKenzie *et al.* (2018), however, warn that characteristics such as attitudes, emotions and feelings often associated with the affective domain present conceptual issues and are difficult to assess in PE.

Together with the affective domain, teachers should also provide opportunities for assessing learning through the cognitive, physical and social domains. To assess the cognitive domain, we might specifically question our students on their understanding of the benefits of an active lifestyle and how to participate safely and effectively in different activities. Furthermore, we could assess their self-reflective skills, peer-feedback and engagement with home-learning tasks, such as researching local opportunities for physical activity. In terms of assessing learning in the physical domain, we may employ activity diaries for students to record their own participation in physical activity, both during and out of class. Whilst the social domain was not originally included in the vision for HBPE proposed by Haerens *et al.* (2011), we argue that there must be an important emphasis placed on developing students' social skills during HBPE programmes. Together with supporting students' psychological need for relatedness, or their sense of belonging, we believe that positive interactions with their peers can build confidence and motivate them to be active. This may be observed in class through students working well as activity buddies and out of class when supporting friends or family members to be active.

CONTEXTUAL REQUIREMENTS AND MODIFICATIONS

The contextual requirements for HBPE are crucial for alignment with the major theme, the four learning goals and the assumptions for learning and teaching. These requirements include students' needs, teachers' own knowledge of the HBPE model, lesson content, duration of units and facilities, equipment and resources. We believe that, when planning HBPE curricula, there should be a strong emphasis on lifestyle activities that promote health and wellbeing. These could include activities such as walking, running, cycling, skipping and swimming, which are often informal or unstructured recreational pursuits, as opposed to organised sport. During our PhD research, the schools we worked with selected running games, boxercise, skipping and student-designed circuits as some of the activities for their HBPE units (see Bowler, 2019 and Sammon, 2019 for more details). There will always be a dilemma in choosing activities, but a balance is important, which will depend on what other activities you include in your PE curriculum. If planning a

focused HBPE unit, for example, we strongly recommend that this is for a minimum of 12 weeks to allow sufficient time for knowledge and skills to be embedded. This is in line with inclusion criteria for school-based physical activity interventions requiring a minimum of 12 weeks (Dobbins *et al.*, 2013) and pedagogical calls for longer units in PE (Kirk, 2010) to develop deeper learning and higher levels of competence.

We are fully aware, however, that it may not always be possible to implement the HBPE model as it was designed 'on paper'. Therefore, HBPE has space for what Professor David Kirk has termed "local adaptation" (Kirk, 2013) and teacher "manoeuvre" (Kirk *et al.*, 2018). For example, modifications could be made in a number of ways, including the specific teacher and student roles, learning activities, assessment strategies, subject content and time allocated for HBPE in the curriculum. Any modifications should be systematically planned and there should be no adaptations to the model's foundations, i.e. the major theme, the learning goals, the assumptions and the underlying theories, as explained in part 1. Furthermore, the critical features, which we discussed earlier, are important in order to remain true to the HBPE model's underpinning principles.

CONCLUSION

In this article, we have discussed the HBPE model's four critical features for teaching and learning to maximise the potential for the learning goals to be achieved. Specifically, these critical features request that teachers promote meaningful physical activity, support students to be informed movers, create a needs-supportive learning environment and encourage students to become critical movers (remember think PINC!). We have also considered some key questions when planning HBPE curricula in relation to suitable learning intentions and assessing students' progress, together with some of the contextual requirements and modifications that can legitimately be made to the HBPE model.

Following the two webinars, there was some really useful Twitter discussion, which can be discovered using #HBPEwebinar1 and #HBPEwebinar2. Consequently, we have created a HBPE network to help inform practitioners' use of the model. Ultimately, we plan to share case studies of good practice, with a view to establishing HBPE as a key pedagogical model for PE, supporting all children and young people to value a physically active life. If you are interested in being involved in this exciting network, please contact us. Finally, we pose a number of key questions for practitioners to consider:

1. How important is the promotion of healthy, active lifestyles for all students in your PE department's aims and curriculum?
2. How does your current approach to health-related learning align with the theme of valuing a physically active life?
3. How might the HBPE pedagogical model support your future practice? ■

REFERENCES

- Bowler, M. (2019). Developing a pedagogical model for Health-Based Physical Education. PhD thesis. Loughborough University. Available at: <https://dspace.lboro.ac.uk/2134/3/7704>.
- Chief Medical Officers (2019). UK Chief Medical Officers' Physical Activity Guidelines. Available at: <https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officers-report> (Accessed 7 September 2020).
- Department for Education (2013). National curriculum in England: physical education programmes of study. Available at: <https://www.gov.uk/government/publications/national-curriculum-in-england-physical-education-programmes-of-study/national-curriculum-in-england-physical-education-programmes-of-study> (Accessed 7 September 2020).
- Dobbins, M., Husson, H., DeCorby, K. & LaRocca, R. (2013). 'School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18', *Cochrane Database of Systematic Reviews*, Issue 2. DOI:10.1002/14651858.CD007651.pub2
- Haerens, L., Kirk, D., Cardon, G. & De Bourdeaudhuij, I. (2011). 'Toward the development of a pedagogical model for health-based physical education', *Quest*, 63, pp.321–338.
- Harris, J. (2020). Association for Physical Education Health Position Paper. Available at: <https://www.afpe.org.uk/afpe-2020-health-position-paper/> (Accessed 7 September 2020).
- Harris, J. & Cale, L. (2018). *Promoting active lifestyles in schools*. Champaign, IL: Human Kinetics.
- International Physical Literacy Association (2017). Definition of Physical Literacy. Available at: <https://www.physical-literacy.org.uk/> (Accessed 7 September 2020).
- Metzler, M.W. (2011). *Instructional models for physical education*. 3rd edn. Scottsdale, Arizona: Holcomb Hathaway.
- McKenzie, E., Tappin, T., Fink, K. & Symonds, M.L. (2018). 'Challenge Activities for the Physical Education Classroom: Considerations', *Strategies*, 31(1), pp.13–17.
- Ntoumanis, N. (2012). 'A self-determination theory perspective on motivation in sport and physical education: Current trends and possible future research directions', *Motivation in Sport and Exercise*, 3(1), pp.91–128.
- Quarmby, T., McKenna, J. & Hobbs, M. (2018). 'Rebalancing Physical Activity in Physical Education', *Physical Education Matters*, 13(1), pp.18–19.
- Ryan, R. & Deci, E. (2017). *Self-determination theory: Basic psychological needs in motivation, development and wellness*. London: The Guilford Press.
- Sammon, P. (2019). Adopting a new model for Health-Based Physical Education: The impact of a professional development programme on teachers' pedagogical practice. PhD thesis. Loughborough University. Available at: <https://doi.org/10.26174/thesis.lboro.8299685>.
- Sport England (2019). Active Lives Children and Young People Survey. Academic year 2018/19. Available at: <https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/active-lives-children-survey-academic-year-18-19.pdf> (Accessed 7 September 2020).
- Standage, M. & Ryan, R. (2012). 'Self-Determination Theory and Exercise Motivation: Facilitating Self-Regulatory Processes to Support and Maintain Health and Well-being', in Roberts, G. & Treasure, D. (eds.) *Advances in Motivation in Sport and Exercise*. 3rd edn. Champaign, IL: Human Kinetics, pp.233–270.
- Youth Sport Trust (2018). Research finds whistle being blown on secondary PE. Available at: <https://www.youthsporttrust.org/news/research-finds-whistle-being-blown-secondary-pe> (Accessed 7 September 2020).

Dr Paul Sammon and Dr Mark Bowler are Senior Lecturers in Physical Education within the School of Teacher Education at the University of Bedfordshire. They can be contacted on Twitter @paulsammonPE and @Health_Based_PE