

Research Review Series: PE

Introduction and background

This is the latest in a series of subject reviews which Ofsted began publishing last summer. It explores the literature relating to the field of PE to identify factors which can contribute to high-quality school PE curricula, assessment, pedagogy, and systems. It is primarily concerned with the school PE curriculum considered through the lens of the quality of education judgement, and Ofsted's focus on pupils 'knowing more and doing more' in PE. This understanding of subject quality will be used to examine how PE is taught in England's schools. Later in the year, Ofsted will publish a subject report to share what has been learned through inspections.

Key points

Context

- Although schools often notionally allocate the recommended 2 hours a week to PE, this time is often reduced through extended 'setting up' time, or through the exam pressures of Progress 8 and the EBacc.
- Between 2018 and 2021, the number of GCSE entries in PE decreased by 17 per cent. This may be due to the increased academic rigour in the specification content, the increased emphasis on written examinations, and the reduced percentage of the overall grade derived from the practical element of the course.
- PE has a key role to play in reducing social inequalities. Some groups of pupils, including those from ethnic minority backgrounds and those with special educational needs and/or disabilities (SEND), report lower levels of physical activity. They are also less likely to participate in certain sports.

The curriculum: 3 pillars of progression

- Developing competence in PE is important. Higher levels of competence are linked to higher levels of self-efficacy and motivation, and to increased participation.
- The research review outlines 3 pillars of progression – motor competence (knowledge of the range of movements that become increasingly sport- and physical activity-specific), rules, strategies, and tactics, (knowledge of the conventions of participation in different sports and physical activities), and healthy participation (knowledge of safe and effective participation).
- Carefully planning how motor competence will be developed is an important focus of the PE curriculum because a confident and competent mover is more likely to be an active mover.
- To become competent, pupils need to develop adequate levels of fundamental movement skills (FMS) in the early years. Longitudinal data-tracking of pupils' FMS competence through childhood into adolescence suggests that FMS are an important predictor of adolescent physical activity. If pupils progress through the primary curriculum without a strong foundation of FMS, they will struggle with the increasingly specialised skills being presented in a range of more specific activity contexts.
- There are 3 sets of skills which require high-quality instruction, practice, and feedback. These are locomotor skills such as running and jumping, stability skills such as twisting and balancing, and manipulation skills such as throwing and catching.
- Research points to low levels of FMS amongst English pupils. For example, Lawson and others found that when exploring a wider range of FMS, fewer than 40 per cent of pupils aged between 7 and 10 in England achieved mastery in each skill, and 27 per cent had not achieved mastery in any of the skills.
- Carefully designed instruction, practice, and feedback can develop FMS. For example, a teacher may correct a pupil so that they land softly on the balls of their feet when skipping. They will then be better prepared to change direction quickly in games such as netball and rugby.
- The second pillar of competence is rules strategies and tactics. Grehaigne and others define tactics as decisions about how to move, when to move, and where to move. It cannot be separated from competence, as a tactic is only successful if the player can execute the movements involved.
- The third pillar of progression is healthy participation. Knowledge of healthy participation includes important knowledge of key concepts pertaining to health, participation, and physical activity.
- PE can play an active role in challenging misconceptions and restricted understandings of how to participate in sport and physical activity that might have been established outside of school. Examples include children being taught to swim breaststroke with their head always above the water or misunderstanding how to best train for long-distance running.
- Similarly, PE can challenge inaccurate knowledge that might be unsafe or cause injury, for example, trying to improve long-distance running without understanding the importance of training intensity and duration and rest periods. As with the other pillars, there are key concepts (for example, 'aerobic' and 'anaerobic') which



help pupils to develop an understanding of healthy participation.

Other aspects of the curriculum

- It is important that PE leaders and staff carefully consider the most appropriate vocabulary and definitions to use when teaching. They should consider where and when pupils will be taught these so that they develop a shared common language.
- Pupils need to develop both declarative knowledge (the 'what'), and procedural knowledge (the 'how'). Although these types of knowledge complement each other they are not the same. For example, the declarative knowledge of how to outwit an opponent in rugby is not the same as successfully outwitting them on the field.
- Learning is domain specific. It is beneficial to spend time practising and rehearsing the knowledge, for example, a throwing-and-catching action, in one domain. Moving pupils too quickly into new contexts can reduce their fluency as they attempt to meet the new contextual demands without having acquired the necessary competence.
- In selecting curriculum content, the 3 pillars are a useful filter. This means selecting sports and physical activities that develop a range of motor competencies, a range of rules, strategies and tactics that are important for pupils to understand, and a range of knowledge to enable healthy participation.
- A high-quality PE curriculum meets the needs of all pupils. All feel included and able to succeed. The domination of team sports within a curriculum can reduce opportunities for positive learning experiences for pupils with SEND.
- Learning takes time. In a high-quality curriculum, teachers and leaders ensure that pupils have enough time to revisit and develop their knowledge within one context before moving too quickly on to a new sport or physical activity.

Pedagogy

- The instruction, practise, and feedback that pupils receive in PE should enable all to develop their competency, reinforcing the important message that everyone can improve.
- Expert teachers with high levels of subject expertise can identify and predict pupils' common misconceptions and plan instructions, explanations and tasks which reduce the likelihood of new misconceptions.
- Most pupils in PE are novices. Therefore, direct and explicit teaching approaches, following a detailed curriculum plan, can enable pupils to demonstrate more proficient movement skills and knowledge and become increasingly competent.
- Specifically modelling what success looks like and providing concrete examples of how knowledge is applied in context is an important part of teaching in PE. Observing and imitating a demonstration is complex. Teachers should select a small number of the most important cues to signpost pupils' attention. This will avoid overloading working memory.
- Practice should be sequential. Practice episodes should be clearly structured, from simple to complex, and allow enough time for pupils to practise precisely and with increasing independence.

- Pupils will benefit from clear and precise feedback which highlights what they are doing well and how to further develop, and which limits any negative comments.
- Hollis and others found in their study, which includes data from the UK, that pupils were involved in moderate to vigorous physical activity for an average of just 40.5 per cent of a lesson. This suggests that, in some cases, more PE time could be dedicated to developing procedural knowledge that engages pupils in purposeful physical activity.
- Teachers should consider when to introduce competition. It can be beneficial in developing fair-play behaviours and respect. However, if it is introduced too early before pupils have the requisite knowledge and skills, it can be unsafe, lack purpose, and contribute to pupils' low self-efficacy and task avoidance.
- In a high-quality curriculum, pedagogical adaptations for pupils with SEND to access and achieve success are specific to the needs of the pupil and also meet the aims of the national curriculum.

Assessment

- As a result of assessment, pupils must know specifically what they are doing well and how they can further develop their competence.
- Competitions are not the most appropriate way of isolating the smaller building blocks that might need to be retaught, revisited or refined. They can, however, be a useful way of assessing pupils' application of tactics, for example, their knowledge of the roles that different positions have in a team activity.
- Assessment that is based on generic skill progression, for example, teamwork or resilience, does not provide pupils with the component knowledge they need to know more and do more. It is likely to lead to over-vague feedback.
- It is not enough to measure outcomes alone - physical advantages, such as height or maturation need to be taken into account.
- Peer and self-assessment can be valuable. However, pupils need to be explicitly taught how to do this effectively and there need to be clear success criteria.
- Teachers using technology such as video to support assessment should consider the role it plays in providing accurate assessment information that directly relates to improving competence. Any use of technology should support assessing what is valued.

Subject and whole-school policies

- Subject leaders need the time to actively engage in curriculum design, monitoring, and staff training and support in PE. In a school with a high-quality curriculum, teachers have high levels of subject and pedagogical knowledge. Teachers and relevant support staff benefit from subject-specific specialist training.
- If outsourcing to external providers, schools must maintain careful monitoring of the intended and enacted curriculum. If teachers are to benefit from an external provider, they need to be actively involved in providing instruction, supporting practice, and feeding back to pupils.
- Trainee teachers need to be given opportunities to develop and apply their knowledge of planning and delivering inclusive PE lessons.

The full document can be downloaded from:

<https://www.gov.uk/government/publications/research-review-series-pe/research-review-series-pe>