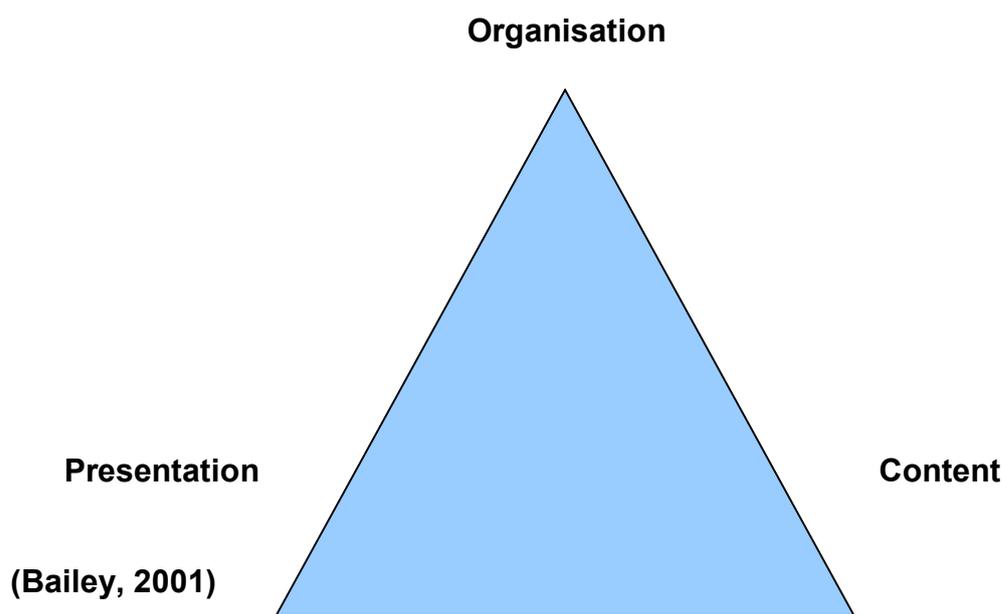


Differentiation: methods and considerations when providing for talented pupils in Physical Education

In this section, a variety of differentiated practices are considered with the aim to provide a challenging and stimulating physical education experience for talented pupils.

Differentiation is not only at the heart of inclusive and effective teaching but it is also a central feature of provision for talented pupils in PE. The following diagram explains a model of differentiation that has been refined and developed to advance the traditional ‘outcome’ and ‘task’ based differentiation approach, and in doing so presents an excellent vehicle for explaining the potential for differentiated talent development practices:

Fig. 1 A model of differentiation for enriching provision



Through this model we can begin to map out some of the underlying principles of provision for talented pupils in PE and sport.

Differentiation by organisation

Grouping

Talented pupils like working with pupils of similar abilities; it gives them opportunities to operate at a high levels and extends their boundaries and expectations of themselves and others. In mixed ability groups this causes problems when attempting to establish differentiated practices that challenge every individual within the group according to their needs. When teaching mixed ability groups there may be a tendency to pitch the level of the lesson at the mean, the middle and the mass in order to fulfil expectations of the national curriculum and this has obvious implications for the talented pupil who remains unchallenged.

As to the proven benefits of different approaches to grouping - national and international research is mixed. Some researchers suggest that average ability pupils benefited most from mixed ability grouping and talented pupils from ability specific grouping, whilst others report that benefits gained from within a streamed group for the highly able are more significant than indicators of self-esteem for being part of the group (Freeman, 1998).

Within mixed ability groups there may be a tendency to use talented pupils to coach their less able peers. In this role it is likely that the talented pupil will inevitably improve their social and personal ability but there is a danger if overused that such an approach may be detrimental to their own personal knowledge, skills and understanding. Mixed ability groups are actually in decline in education per se but Physical Education is one of a few subjects that retains this grouping mechanism (Benn & Chitty, 1996). The debate on mixing, setting (using ability in a specific subject) and streaming (using overall ability) pupils into groups has been in existence practically since education began and is outside the scope of this book. What is relevant to the teacher here is to understand the reasons for grouping in certain ways in terms of how organisational systems can effectively enhance provision for talented pupils.

The following table is split into *year* and *class* based grouping systems and represents an understanding of some of the key when grouping pupils:

Year grouping systems	Advantages	Disadvantages
Mixed ability	Talented pupils can be used to demonstrate and coach less able pupils	Employing a range of practices to suit a wide range of needs is difficult Level of delivery is often aimed at children with average ability
Streaming (most commonly with an emphasis on ability in English, Maths, Science)	Lessons can concentrate on the cognitive dimensions of the subject area and prepare for examination PE more effectively	Although PE provides for pupils with high academic ability, abilities other than those recognised within academic subjects will not be used as primary indicators of talent.
Setting by subject area	Assessing level of appropriate tasks and challenge is easier and pupils work at an appropriate pace for their own needs	<ul style="list-style-type: none"> • Generally based on current performance and therefore limited in recognising potential • Some baseline indicators of talent may only cover certain activity areas • Potential for negative 'labelling' effect on talented group and lower sets
Setting by a single or limited number of specific activity areas (e.g. games activities)	Within the specified activity area talented pupils have the opportunity to work with other pupils of similar ability	When the curriculum changes to other activity areas, than the one used to initially group pupils, the levels of ability within the group are wide ranging
Class grouping systems	Advantages	Disadvantages
Friendship groups	Pupils are more likely to understand the strengths and weaknesses of others within their group	Potential for talented pupils to become distracted and stray from the task
Randomly selected groups	Allows opportunities for talented pupils to develop as effective communicators and readily adopt roles in unfamiliar environments	Does not allow for selection by ability and therefore raises issues related to appropriate challenge for all pupils within the group

Ability groups	<ul style="list-style-type: none"> • Differentiated practices and tasks can be targeted more specifically at certain groups • Certain aspects of the same task can be emphasised to provide more effectively for certain abilities (e.g those with high levels of creativity) 	There is potential for lower ability groups to be 'left behind' and this may have implications if re-integration is to be considered
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Space

The use of space within physical activity environments is often driven by consideration of the factors of time and pressure. For example, in games activities, it is generally recognised that a decrease in the amount of space a child has to operate within would normally be associated with an increase in pressure on the performance of the skill or movement. Therefore, to create the right level of challenge, space is a critical factor in regulating the opportunities for success at an appropriate level for the child. In some instances the use of more or less space may stimulate innovative thought and would therefore be suitable for children with high levels of creativity.

Roles

In effect, just because a pupil can perform outstandingly well in a specific area this may not provide grounds suggesting they are competent at, or comfortable with, coaching their peers. However, the use of a variety of roles does have a place within talent development in PE and the talented pupils with high levels of social ability in particular will thrive in the role of evaluator, leader, coach, and manager.

Presentation

Teaching style

The use of a particular teaching style will have an enormous impact on the potential for children with a wide range of abilities to access high quality learning experiences. Mosston & Ashworth (1986) developed a teaching

spectrum which maps out teaching styles ranging from command style to discovery. The teaching styles section of the CD explores the impact of teaching styles on ability area and suggests teaching style methods for developing specific abilities.

Response

As well as confirming pupils' understanding of key aspects of the lesson related to knowledge understanding and application, children's responses should also determine subsequent content and teaching styles. Crucial to the ongoing development of provision, the key to success here is to elicit response in a variety of ways to ensure the preferred learning and thinking styles of each child is catered for. In PE this can take the form of an ongoing dialogue of questions and answers, demonstration, group discussion and verbal feedback within analysis of performance.

In general educational terms, Gardner's theory of (1993) Multiple Intelligences (linguistic, kinaesthetic etc.) has been used to classify a range of intelligences pupils may possess that would then begin to signify the ways in which they would prefer to be challenged. Although this may begin the process of identifying *learning styles*, one way to being more specific about the ways in which we present information to pupils, and we expect them to present information to us, is in terms of their *thinking styles*. One approach to thinking about thinking originates from the psychological system known as Neuro-Linguistic Programming (or NLP, for short). NLP speaks about thinking - or information processing - as reproducing in the mind the sensory components of what we see, hear, smell, taste, and touch with our senses (O'Connor and Seymour, 2003). This is known as the Representational Systems, or the VAK systems, and these stand for the way by which we represent information: Visual (Eyes) - for the pictures, sights, images; Auditory (Ears) - for the sounds, noises, tones; Kinaesthetic (Body) - for the sensations, feelings, touch. When we think about something, anything, we encode our thoughts using our senses. This approach has the great virtue of making our talk about students' thinking much more specific, and it also offers an exciting way to be much more focused in the way we present information to our pupils. The VAK

approach to recognising thinking styles enhances the opportunities for pupils to excel in their preferred domain and also stimulates curiosity and engagement in the subject matter. Some examples of how responses can be elicited using the VAK approach are mentioned below.

'Visual' thinker responses

- Using a photograph or diagram of the 'perfect model', observe demonstrations and feedback in comparison to the picture
- Demonstrate acquisition of key technical points through repeating a specific movement or skill as presented by the teacher
- Within the planning of a sequence, draw a diagram or picture representing the movements associated with the sequence as an overview of the whole sequence or moves performed by individuals in isolation

'Auditory' thinker responses

- Describe the sound of the correct movement, e.g. the 'thwack' of the racquet for an overhead clear in badminton or the 'silence' of the push pass in hockey
- Verbally explain the reason why teams perform well in certain situations and why certain members of the group play important individual roles in achieving a common goal
- Use auditory stimulus (music, instruments, clapping, noises) to create responses through movement (not confined to dance activities here, this works equally well within most activities e.g. teaching the patterns of movement for the lay-up in basketball or the steps in the triple jump).

'Kinaesthetic' thinker responses

- Use metaphors and analogies to describe the movement e.g. the preparation for the overhead clear feels like 'scrubbing your back with a brush in the shower', or 'look through the window' in preparation for the bowling action in cricket or perhaps performing a dance in unison feels like 'dominoes falling over'

- Improve somebody else's performance by describing the 'feeling' of performing a particular movement
- Explain correct movement whilst performing the action in a 'walk through, talk through' approach

Questioning

Many of the above responses may require some form of subsequent questioning to allow pupils the opportunity to elaborate on their initial thoughts or movements and also to gauge their depth of learning. Open ended questions that stimulate thinking and concentrate on process as much as product are particularly useful here, as are those that arouse curiosity through the use of probing questions; using 'why?' as a precursor to a question is as important as the question of 'how?' So, in general:

1. Questioning of pupils should form an integral part of the planning, teaching and evaluative processes involved in an activity
2. Ask the pupils for their understanding of specific terminology and acronyms. As an example, it is amazing how many pupils there are that don't understand what the initials PE actually stand for!
3. Ask questions which allow pupils to justify their actions or summary of events
4. Ask the question to the whole group, and then:
 - a. select an individual to respond
 - b. ask the group to get into pairs and formulate the possibilities of an answer within a set time, self-nominate one of the pair to respond
 - c. allow them the opportunity to verbalise, demonstrate, draw, mind map, brainstorm, discuss, and experiment with, their response
5. Give the group the answer(s) and get them to think of the question
6. Don't always allow pupils to raise their hands. At times this is simply showing us that the pupil knows the answer and simultaneously allows the rest of the group to 'switch off'. Whilst eliciting their response is important it may be more prudent to engage other members of the group in offering an answer

7. Accept all responses; they may not be wholly correct and appropriate for the direction you have chosen but allow the pupils' learning needs to direct the focus rather than the content
8. When questioning in a large group pay attention to the 'polar points'; those pupils located at the extreme ends of the group and those stood at the back.
9. Some talented pupils may not always want to be the centre of attention. Ascertain which pupils are more comfortable at providing responses in whole group, small group and individual situations.

Resources

Provision for talent development in Physical Education can be significantly enhanced through the use of appropriate resources. Whilst the availability of ICT resources have allowed some teachers the opportunity to experiment with a range of delivery tools there still remains a need for teachers to assess the educational virtues of selecting certain resources to support teaching and learning.

Resource implications

Is the resource appropriate for the developmental ability of the group/ talented pupil?

How will the learning of pupils be enhanced through the use of the resource?

Do the pupils need preparing for the effective use of the resource?

Is the amount of time spent in familiarising the children with the resource in proportion to the educational benefits gained?

Are there alternative resources that will produce a similar outcome?

Where video footage and/or stills is used are pupils given the opportunity to analyse through observation of the footage?

Differentiation by content

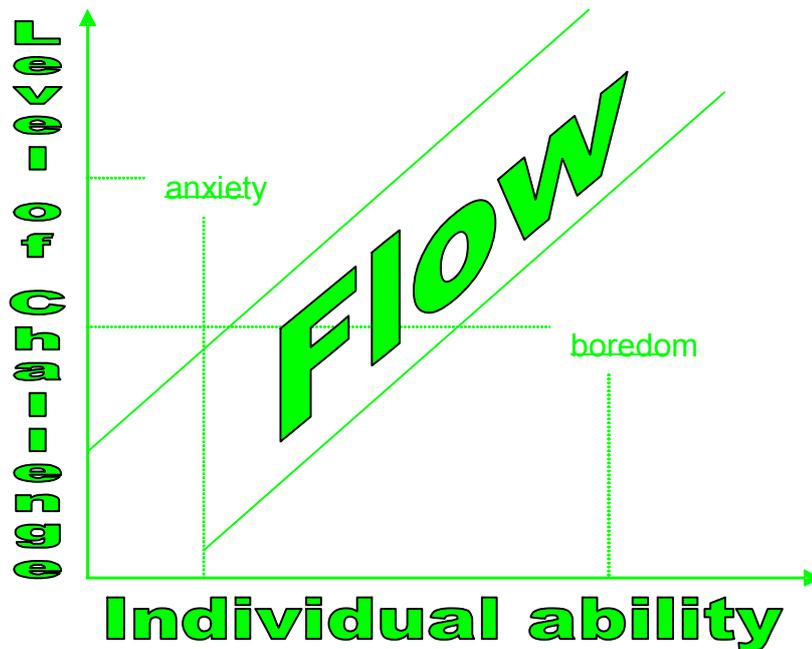
Pace and acceleration

As talented pupils will more often than not progress through a series of tasks at a faster rate than their peers it may be appropriate to consider the most suitable level and amount of content necessary to challenge them effectively.

When considering the notion of suitable content to match the individual's needs 'more' may not always be better. In this regard it may seem appropriate to accelerate talented pupils learning by using material from later key stages of the national curriculum or indeed by allowing them to access the different levels of examination PE early. Whilst this may be appropriate for some pupils, the increase in the pace of delivery in this way presents a danger that provision will lack depth leaving higher order thinking skills underdeveloped (Eyre, 2001). This sort of 'content acceleration' has been viewed sceptically in other quarters, in so far as it is considered that the quality of learning experiences through enrichment should always be used as the primary vehicle of delivery (Hymer & Michel, 2002).

The pace of delivery is another important aspect of ensuring quality provision for talented pupils; if the pace is too fast and pupils experience limited success, pupils may become frustrated and anxious about their lack of progression. Conversely, if the pace is too slow pupils may become bored and restless and it is this type of environment which could cause talented pupils to become disaffected from the subject area. The following model represents the relationship between the level of challenge set and the possible implications for pupils with different levels of ability. The target zone in this particular example is where pupils are in their 'flow'.

Fig 2 Matching Abilities and Challenges (Csikszentmihalyi, 1975)



Level

The ability of talented pupils to complete tasks at more refined levels consistently means that consideration of desirable outcomes is essential in ensuring they reach a productivity level appropriate to their ability. In some cases this may mean that lesson objectives presented to the group at the start of the lesson make explicit reference to expectations of pupils operating at high levels of competency across a range of abilities. Examples of possible learning outcomes for talented pupils are given below.

Learning outcomes for talented pupils in PE

- Express the same answer to a question in as many different ways as possible
- Understand the use of periodisation in a training programme across a range of sports
- Use movements acquired in previous lessons in an unfamiliar environment
- Select other pupil's interpretations of a tactic or compositional idea to enhance your own individual or team's performance
- Use information gleaned from consulting a range of sources to lead a team effectively
- Co-operate effectively in group situations whilst adopting a variety of roles
- Understand and apply concepts of precision, control and fluency in increasingly demanding situations as determined by the pupil
- Explore methods of communication in a range of situations and measure the effectiveness of the methods observed or adopted
- Provide a number of alternatives to a single solution and assess the
Create a game where principles of depth, width and mobility can be used to assess its success
- Analyse the most effective method of giving feedback to a performer
- Recognise own strengths and areas for development and formulate an action plan for progression
- Formulate methods of assessing your peers effectively in a range of activities
- Create a game where principles of depth, width and mobility can be used to assess its success
- Analyse the most effective method of giving feedback to a performer
- Recognise own strengths and areas for development and formulate an action plan for progression
- Formulate methods of assessing your peers effectively in a range of activities
- Suitability of each alternative in the production of a task
- Demonstrate leadership skills in a range of situations displaying appropriate flexibility of approach

