Towards a framework for health-related fitness
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For some people, physical activity inspires a sensation of ‘feeling good’ and ‘looking great’. For others, it is associated with feelings of inadequacy, discomfort, smelly changing-rooms, and enforced showers. Now that increasing evidence is accumulating to suggest that regular physical activity at school age can have benefits for adult health, secondary-school staff face the daunting challenge of trying to promote a ‘health and fitness’ focus within an area of the curriculum that is threatening to a substantial percentage of pupils.

There is increasing evidence to suggest that regular participation in physical activity can enhance the individual’s physical and social well-being (1, 2, 3). There is also increasing evidence to suggest that young people in this country are unaware of these benefits, and do not take part in sufficient activity to enhance their health status. Dickinson (4) discovered, in a recent survey of 11-16 year olds, that about 83% of a sample of 500 did less than 5 minutes’ vigorous activity on any one school day during a single week.* (‘Vigorous’ was defined as becoming sweaty or breathless during the exercise.)

Although the definition of ‘sufficient activity’ may be open to discussion [but see the analysis in Neil Armstrong’s article, page 31 – Ed.], and perhaps varies even between similar individuals, these different pieces of research were felt to indicate a lack of awareness of the value of physical activity, and suggested a need to promote a ‘health focus’ in PE in secondary schools. As a result, the HEC and the Physical Education Association of Great Britain and Northern Ireland agreed to fund jointly the Health and Physical Education Project (1985).

Promoting physical activity

Naturally, the PE teacher is forced to question why many young people seem to have low levels of physical activity. Evidently they are not sufficiently motivated to exercise; is this because they derive little satisfaction from current curriculum activities, or because they are unaware of the health benefits of exercise, for example? There have been recent studies into motivation (5) which suggest that the public awards associated with PE programmes can deter many would-be participants. Similarly, Sparks (6) has drawn attention to some of the misconceptions in the role of competitive games in the curriculum, such as the 19th-century public-school notion of rugger as a character-builder.

Certainly, competitive team games have a part to play in any school programme (they are a cultural inheritance, and some pupils can derive a great deal of enjoyment from them); on the other hand, for pupils who are constantly made to feel a failure on the games field, the imbalance in curriculum activities can result in their being turned off physical pursuits of any kind. If we wish children to enjoy such activities, to participate regularly for the sake of both mind and body, then perhaps PE teachers should reassess the content of this area of the curriculum to cater for everyone’s needs, and not just those of the sporting types – to incorporate a focus of ‘health and fitness for all’.

There has been some ad hoc development of ‘health and fitness’ courses over the past couple of years, but the philosophy of the HEC/PEA project encompasses a far broader interpretation of this concept than the commonly-emerging six-week block of work centring on fitness training and measurement. The project team has, therefore, set up a series of working parties consisting of Advisers, teachers, lecturers, and coaches, to aid other teachers in establishing a health focus within the traditional curriculum areas, as well as incorporating new developments for the programme; for example, how can dance, gymnastics, swimming, and athletics contribute to a focus on health; and can specific ‘health and fitness’ materials, to facilitate learning about the effects of exercise on the body, be produced? It is obvious that PE teachers cannot be expected to succeed in the impossible task of getting all young people to like such activities, but at least they can make the prospect more agreeable, and perhaps stimulate enthusiasm through making them aware of the value of exercise.

A ‘health focus’ in the PE curriculum

If teachers really do value the contribution which a ‘health’ focus can make to a child’s education, then it is necessary to work out a way of justifying it in curriculum terms, which means identifying aims and the best methods of achieving them. For example, the strong evidence cited in Neil Armstrong’s paper that young people’s life-style can affect their susceptibility to heart disease later in life may well prompt concern and the desire to do something about it. At first sight, the issue might seem to be one of increasing the physical activity levels of young people so as to make them more sweaty and breathless for longer periods in the day. However, the more far-reaching implications of the problem must soon be faced:

1. Are PE lessons sufficiently frequent to provide ‘regular’ exercise?
2. What chances already exist for physical activity outside PE lessons?
3. How are the activity levels to be increased?
4. Does the school’s PE philosophy encourage the majority of pupils to pursue physical activity outside the school environment – in other words, does it seek to promote physical activity as ‘fun’?
5. To what extent do intrinsic (‘feel good’) and extrinsic (competitive) stimuli compete or conflict?
6. To what extent does increased knowledge of the value of exercise succeed in promoting physical activity?

Regarding the ‘knowledge’ component, there appear to be two ways of finding a ‘health focus’ in the curriculum. A variety of health aspects may be examined with reference to specific subject areas, or one health component may itself be a theme or theme-related. For example, the subject of aerobics can be promoted through a varied programme of gym, games, athletics, swimming, etc.; on the other hand, the topic could be taught within a unit of work dealing with the effects of exercise on the body. Probably a position within these two extremes will be adopted as the situation demands.

The project and planning

The HEC/PEA Health and Physical Education Project is working closely with six LEAs: Coventry, Ekhfield, Gloucestershire, Leicestershire, and Rotherham. Resources and manpower limit the number of participating areas,
and these Authorities volunteered their services to the project; teachers and Advisers are meeting regularly to evaluate current practice in schools, and to develop ideas for a change of emphasis in their programmes. For example, the teachers have used Dickinson's questionnaire on activity patterns (4) to gauge the extent to which their pupils exercise. It seems that the results are similar to those from Dickinson's study, and they are now addressing ways of encouraging a greater number of pupils to exercise.

One tactic which has emerged is to try to expand the physical experiences available within existing lesson time: rather than devoting a considerable percentage of the timetable to hockey, netball, soccer, rugby, and athletics, they are examining ways of bringing minor games into the sessions, of planning 'sport for all' sessions after school, and even encouraging parents to come along and join in too.

One group is exploring the possibility of having a 'health and fitness promotion week' involving the whole school, in which the PE, home economics, and biology departments, together with the catering staff, encourage staff, pupils, and parents alike to eat sensible food and to take part in some form of regular activity.

Many countries are now running their own courses to assist PE teachers in coming to grips with a rationale for health-based physical education. These include examination of the existing curriculum, exploration of health and fitness, practical sessions on how to implement a focus of health, and so on. Representatives from the project wish to attend as many of these courses as possible, and thereby establish contact with interested teachers to share ideas. The Physical Education Association proposes holding several one-day regional courses during 1986.

Do norms and knowledge help?

There have been many requests for information on acquiring fitness testing norms and percentiles. The project questions the value of such teaching aids: we believe that the administration of fitness tests to relate young people to a 'norm' involves the danger of turning them away from activity completely should they see themselves as 'failures'. Research evidence from the United States, where percentiles are abundantly available, indicates their limited use in establishing more healthy lifestyles. However, we do understand the value of tests in allowing pupils to explore their own fitness levels for gauging progress at a personal level, and this area is being explored in the project.

If pupils are to benefit from an exercise programme, then certainly information about why it is good for them can be helpful. However, if they do not enjoy the physical activity, for whatever reason, they are unlikely to pursue it without 'encouragement' of one sort or another. It therefore seems that the imparting of information may be of secondary importance to the generation of enthusiasm; and this may be the more difficult challenge of the two.

The project is a shared venture by professionals, and a Newsletter helps them to keep in touch with each other. Six issues are published each year, and the annual subscription is £7.50 (cheques payable to Loughborough University, please). If you would like to be involved in this curriculum development, please write to Fiona Dowling, Department of Physical Education and Sports Science, University of Technology, Loughborough, Leicestershire, LE11 3TU.

References

The health-related fitness programme to be described here has been developed to suit one particular 14-18 school. It must be recognised that every institution is unique, and given a particular flavour by its facilities, equipment, staff, and students. The programme given here is therefore not necessarily suited to everyone, but it is hoped that it may offer some different methods of approaching present-day PE.

The first step is to look at the pupils, and to evaluate what the present PE programme offers that is of lasting value to their later lives.

A traditional programme

Young children enjoy a challenge, and frequently have to be restrained in practical activities, as they can harm themselves through over-exuberance when climbing trees, hanging upside-down from bars, and so on. They do not need coercing into physical activity - it usually comes naturally. However, as these children grow older, their sports and pastimes frequently become more organised and competitive, which causes some to drop out.

The teaching profession has inherited a traditional programme which normally includes soccer, rugby, hockey, netball, athletics, gymnastics, and a few others. These have been good for those who are suited to them - but not all children, let alone adults, find these activities agreeable. There are many reasons, such as the wide range of physical development or skill that can make competition meaningful; children are very quick to weigh up the benefits or otherwise that they will get from participating in different activities! They will put in more effort if they feel enjoyment, achievement, success, or social gain. Winning is a part of this, but it is certainly not the only thing. If they feel failure, humiliation, fear, or conflict with their image, they will not want to participate at all - let alone make an effort.

Valuing exercise

Very few of our pupils' parents take part in sport, but that does not mean that they do no physical activity at all. They walk, cycle, swim, and sometimes jog. Society is becoming increasingly aware that lack of physical exercise is one