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 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

A school reviews its ‘health and fitness’ programme

Chris Worcester
Quorn Rawlins School and Community College, Leicestershire

The revaluation of an existing PE curriculum to promote ‘fitness for health’ is described. The principal objects are to increase knowledge about the individual’s lifestyle and health choices, and to encourage a higher level of physical activity. ‘In practical terms, they must find the success and enjoyment that will encourage them to maintain physical activity for the rest of their lives.’

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 long-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 coer- cing 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
important factor in increasing the risk of heart disease. The British Isles are becoming world leaders in death-rates from this cause; the British Heart Foundation says that heart disease is today’s biggest killer, with a thousand victims daily. Research in many countries has shown the value of exercise in the prevention of a whole range of hypokinetic diseases.

Consequently, there are millions of people today taking physical exercise in various forms – aerobics, pop-mobility, multi-gyms, fitness centers, and so on. These people want to look good, feel good, and avoid illness. Sports are not essential for a normal healthy life, but physical activity is – as a profession, we must face up to this. We can have a healthy, normal adult life without ever doing most of the activities more traditionally provided in schools – millions do. However, physical activity does confer the following necessary benefits on pupils.

1. The acquisition of motor competence.
2. The acquisition and maintenance of physical fitness.

Although sports are not essential for this, it does not follow that they have no place: they have to be put in perspective, and possibly adapted to meet the aim of ‘PE for life’.

Planning our programme

There are other factors involved in health-related fitness as well as the need for physical activity. Such factors as diet and nutrition, stress and relaxation, smoking and drinking, body composition, strength, stamina, and suppleness all play a significant part here. It is not sufficient simply to provide different practical activities and have a new philosophy: intelligent decisions about activity in our life-styles require knowledge of the facts. This includes knowing not only what is necessary for the individual to be able to diagnose, evaluate, prescribe, and subsequently take the correct course of action.

The 4th and 5th years in our school each have about 500 pupils, and six years ago they all took a CSE course, approximately 350 of them taking the exam. The PE department felt that this exam went only some way to giving the pupils the kind of knowledge referred to above, so the essential parts of this course were developed and other parts were added to them. Lessons progressed through chalk-and-talk to worksheets, and finally to group work, and the best of these have been employed in our present programme. During this time, the PE staff were busy working in pairs to prepare resources by attending courses, inviting experts in, and training with the local Health Education Office. We converted a music room into a fitness laboratory where we teach an average of 24 mixed-ability pupils for two periods of 50 minutes each week, in 5- or 6-week blocks over the two years.

There are four such blocks as the pupils rotate around RE, Careers, and Health Education. The theory part of the Health Related Fitness course is shown in Table 1.

The practical side is new: ignored, and has been planned to be consistent with the stated aims of the theory course. All 4th and 5th-year students have two periods of PE a week. They are taught only by PE staff, and there are no games lessons. A gym-based course – which relates closely to the theory of different methods of training – and the weight-training course are compulsory for all pupils, as shown in Table 2. All groups are mixed, and three or four activities are offered at any one time in 5-week or 6-week blocks.

Table 2. A practical component for health-related fitness.

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Application</th>
<th>Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to exercise</td>
<td>Compulsory</td>
<td>Gymnasium-based course and weight-training</td>
</tr>
<tr>
<td>Activities for fitness and leisure</td>
<td>Optional</td>
<td>Jogging, aerobics, pop-mobility, swimming for fitness, keep-fit, dance</td>
</tr>
<tr>
<td>Sports for fitness and leisure</td>
<td>Optional</td>
<td>Individual sports: badminton, tennis, weight-lifting, etc.</td>
</tr>
<tr>
<td>Team sports: soccer, basketball, hockey, netball, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remedial work</td>
<td>Withdrawal</td>
<td>Counselling and practical help for students</td>
</tr>
<tr>
<td>School teams and coaching</td>
<td>Extra-curricular</td>
<td>Cross-country, soccer, hockey, rugger, basketball, cricket, etc.</td>
</tr>
</tbody>
</table>

Table 1. A theory component for health-related fitness.

Year 4 Unit 1
Physical fitness: exercise
The importance of exercise and physical activity. Cardiovascular fitness, strength and muscular endurance, and flexibility: their measurement, and how to achieve and maintain them. How to exercise safely and effectively.

Unit 2
Accidents, First Aid, and safety
How to deal with accidents relating to motor vehicles, sporting activities, the home, and everyday life. Their avoidance and prevention.

Year 5
Unit 3
Life-style management I

Unit 4
Life-style management II
Life-style problem-solving – an appraisal of individual life-style patterns. Links with the community: sports clubs and leisure facilities.

(Continuous)
Individual record cards of height, weight, skinfold measurements, and fitness evaluations.

Considering individual needs
Extra-curricular activities are also important, but they, too, have changed in recent years. Practices are not just for the best players: they are available to all, and the only criterion is that the pupils should wish to learn more about their chosen activity. In basketball, for example, more than 24 pupils have represented the 4th year so far this season.

Another relatively new feature in our teaching is in remedial PE. Two PE staff now have a total of four periods a week in which to help pupils on a more individual basis by withdrawing them from lessons. We liaise with the high schools, the school nurse, and local doctors, and we help those with weight problems as well as those recovering from illness or injury. These periods can also be employed for counselling pupils about PE-related problems.

We feel that the individual must have sufficient knowledge about the relationship between fitness and life-style to be capable of evaluating, diagnosing, prescribing, and taking action on their own behalf both now and later in life. In practical terms they must find the success and enjoyment that will encourage them to maintain physical activity for the rest of their lives. We shall never 'win them all', but we can hope to be more successful with this approach than we have sometimes been in the past.
Levels of ‘vigorous physical activity’ among pupils

John Balding

HEC Schools Health Education Unit
University of Exeter

Health-related fitness programmes are concerned with promoting ‘acceptable’ levels of physical activity. Just what constitutes an acceptable level is not only difficult to define, but is also hard to measure. By using a questionnaire to investigate pupils’ levels of activity, a better insight may be obtained. This article discusses some results of analysing pupils’ school-based vigorous physical activity.

The health-related behaviour data amassed by the HEC Schools Health Education Unit now includes information on more than 50,000 school pupils between the ages of 11 and 18. Within the most recent of the data banks, which is currently being expanded at the rate of several hundred cases every week, we have information available on more than 13,000 pupils.

The sample used for this analysis consists of 13,395 young people (6,927 girls and 6,468 boys) between the ages of 11 and 16. This group is taken from 64 schools located in 30 Educational Authorities scattered throughout England, Wales, and Scotland. The catchment areas vary, with 12 schools being predominantly urban, 28 suburban, and the remaining 24 rural. This sample is not a controlled one, since the schools make the decision whether or not to use the Questionnaire service. However, they are recommended to use mixed-ability rather than streamed groups, so that a representative sample of the school’s population is surveyed.

The Questionnaire examines a very wide variety of health-related behaviours in its 66 questions. One of these examines the extent to which games, sports, and active recreations play a part in these young people’s lives. A sample of the check-list of activities is shown here (Fig. 1). They are divided into Team activities, Individual activities, and Other sports, which may take place either In school and Out of school, and be indulged in either At least once a week or At least once a month. Using this information, the ‘physical activity’ index may be obtained. There are separate indices for ‘vigorous team’, ‘vigorous individual’, and ‘non-vigorous individual’ activities.

Involvement in ‘vigorous’ activities

The other ‘health and fitness’ papers in this issue emphasise involvement in vigorous activity and the contribution schools can make to promoting it in young people’s lives. Therefore, a summary of school-related involvement in vigorous activity is given here. This index of involvement is calculated by giving two points for every sport or recreation that took place at least once a week, and one point for any that happened at least once