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A POSSIBLE LIST OF AIMS FOR THE JUNIOR CYCLE OF POST-PRIMARY EDUCATION, TOGETHER WITH THEIR IMPLICATIONS FOR EDUCATIONAL PRACTICE

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Educational aims vary with the background from which the pupils come, with the society, or sub-section society, in which the pupils are going to live, and with the part pupils are going to play in that society, both in and out of work. We do not have adequate data on which to base a reasoned statement of aims: we know very little about the important features in the home backgrounds of our pupils, or even which are the most important things one should find out about; we know very little about the demands that are going to be made upon our pupils as they lead their lives after they leave school and about the sort of problems they are going to be called upon to tackle; we know very little about the changes that are going to take place in the society in which we live and the knowledge, skills, and attitudes that are going to be called upon to tackle these problems; and we know very little about the long term consequences of different types of educational input.

Yet, as always, professionals have to take steps, with only incomplete information to guide him, to develop a better system. However the attempt to say something about these real problems may serve to indicate the areas in which it is most important that research be carried out, and serve to force researchers to clarify the concepts they use. It is therefore with a view, not only to bringing to bear such knowledge as we do possess, but also with a view to stimulating the generation of appropriate information, that the following material has been put together. It is hoped that discussion will serve to generate a more complete picture.

It has been found convenient to group the material into the areas delineated by the committees working under the chairmanship of Dressell and Mayhew (1954). The areas these investigators delineated are as follows:

- (1) To develop communication skills; the ability to seek out and understand the ideas of others and express one's own effectively.
- (2) To develop skills of scientific thinking, understanding of scientific methodology, and of ability to think productively, logically, and accurately.
- (3) To develop citizenship skills.
- (4) To develop character and skills of interpersonal relationship.
- (5) To introduce pupils to the sources of enjoyment and enrichment available through culture, hobbies, and work.

1. Communication Skills: The ability to seek out and understand the ideas of others and expressione's own effectively

At a basic level this involves being able to read, write, and speak. It may be thought that the attainment of these things is the responsibility of primary education, and that they have no place in secondary education. However, there are grounds for doubting whether even elementary levels of skill in these things are attained by some 10 to 20 per cent of the population. As far as higher levels of attainment are concerned it may well be doubted whether more than a handful of pupils at Inter Cert level know how to make efficient use of the mass media and libraries, are able to read in such a way as to quickly abstract material relevant to a given problem from the stack of written documents that are normally available, or able easily to inspect tables of figures and numbers in order to glean relevant insights. Still fewer pupils would be familiar with the existence of a range of mathematical languages, aware of their respective merits, and confident of their ability to master these should the need arise.

Looking at the other side of the coin the number of pupils who are themselves articulate - in speech, writing, generating and presenting descriptive statistics, or using mathematical languages in situations of importance to them, would also appear to be small.

At more personal levels it may be important to encourage pupils to develop the ability to listen to others and find out what lies behind, often badly expressed, points of view, and to help them develop means of communicating their feelings to themselves and to others. These we will discuss further in the section on character development.

Implications for Teaching: If one is interested in developing these skills it is necessary to provide opportunities for pupils to practice them in situations in which they have an opportunity to find out more about things in which they are interested, and are then able to communicate the results in speech, writing, figures and diagrams. It may be necessary to structure elaborate learning experiences in which, for example, pupils carry out research and then communicate the results through lectures, discussions, newspapers, radio programmes and magazines to other pupils.

Having generated motivation by providing these opportunities, one would have to go on to provide packaged courses in such things as efficient reading, foreign languages, public speaking, effective writing, data for

presentation, interpretation of figures and numbers, and in various forms of mathematics.

Implications for Evaluation: Summative evaluations systems would have to recognise and take steps to allow for the following facts: different topics require different searching strategies, different people effectively utilise different searching strategies, different material is best presented through different media, different pupils have higher potentiality for different communication skills, different recipients respond best to different modes of communication, and different pupils will be familiar with different content, and have different ideas to communicate.

2. To make sure that pupils understand scientific method and can apply the techniques and knowledge they have learned to physical, social, and personal problems; to develop skills of scientific thinking, and the ability to think productively, logically and accurately

Here we are concerned, not so much with conveying scientific knowledge, because the chances of conveying the right knowledge to the right pupils are extremely remote, but with conveying an understanding of scientific method and ability to apply it in all walks of life. To do this it is not sufficient to convey an abstract congnitive account of the philosophy of science, but to generate *habits* of scientific thought, together with an explicit understanding of how it is to be used.

The concepts to be conveyed in a behavioural form are:

- . Ability to recognise problems
- Ability to set about trying to understand those problems systematically, by systematic observation and data collection
- Ability to evolve concepts
- Ability to generate theories to summarise the observations and data, and to seek ways of testing these theories
- . Ability to utilise mathematics as an aid to watertight logic
- Ability to recognise assumptions
- . Ability to recognise faulty reasoning
- Ability to bring together previously distinct findings and methodologies

#### Implications for Education

Retraining courses for teachers. Emphasis on project work to tackle previously untackled problems which, incidentally, would involve skills of locating and acquiring information, reading, writing, talking, knowing ones

way around outside the school, presentation of results, utilising statistical and mathematical languages etc. It would be essential to have specialised packaged courses and instructional programmes which could be taken up as the need arose. It would be necessary to make sure that pupils knew what knowledge existed.

Implications for Summative Evaluation

The main criteria to be looked for when evaluating pupils attainment in these areas would be the skills and attitudes listed above: the specific content in relation to which they were displayed would obviously vary a great deal from pupil to pupil.

3. Citizenship: To make sure that pupils can (and do) participate as informed and responsible citizens in solving some of the economic, social, and political problems of their community, state, nation, and the world as a whole

It is clear that to some extent this involves conveying knowledge of some of these things — the ones the pupil is to do something about — through projects similar to those discussed in the last section. But such things also involve familiarising pupils with the way local and national government in fact works and enabling them to develop the attitudes and skills necessary to deal with these institutions. Since this cannot be purely at the cognitive level, and particularly at the unreal level found in many school text books, it means having pupils study social problems and then negotiate with bureaucracies in order to get something done about them. In addition it means developing and practising the communication and scientific skills mentioned earlier and social skills like leading, following, organising, planning strategies, considering alternatives, working with others, and developing appropriate attitudes towards authority.

These things in turn mean that schools will have to develop package programmes to develop these characteristics, they would have to develop role-play situations, psychological games, group project work, discussion lessons, and extra-curricular activities, designed to enable pupils to haltingly develop these characteristics, provide them with the vocabulary with which to crystalise what they already know from their own experience of themselves and their fellows, and opportunities to have real experiences with committees and the organisation of change at all levels in society.

Implications for Summative Evaluation: Cognisance would have to be taken of the fact that different pupils would develop different sets of these skills - some being good decision makers, others social researchers, others group leaders etc. Attitudes to social institutions would have to be monitored and pupils' perceptions of these institutions assessed.

### 4. Character development and development of interpersonal competencies

Although this area has been a central concern to educationalists from time immemorial it is only now that the relevant notions and educational techniques are becoming explicit. The sort of things one had in mind are as follows:

- . Strength of character: ability to resist mental breakdown and pressures toward anti-social behaviour
- Development of personal integrity and responsibility
- . Ability to tackle potentially disabling mental conflict, and ability to handle stress and integrate conflicting pressures and tendencies
- · Openness to new ideas
- . Ability to notice the need for innovations, and willingness to take the responsibility for initiating them upon oneself
- . Ability to work systematically, purposefully, and effectively towards one's goals
- . Absence of 'trained incapacity'; feelings of adaptability and efficacy
- . Ability to turn oneself wholeheartedly into one's chosen task
- . Determination to make the most of one's abilities
- . Awareness of one's main strengths and the sort of thing that one enjoys doing: leading, helping, decision taking, woodworking, nursing, writing, researching, co-ordinating others
- . Positive self image and ability to relate to others
- . Self confidence and confidence in one's ability to perform one's chosen tasks
- . Confidence in one's ability to acquire the knowledge, skills, and attitudes that one may require to perform any chosen task
- . Development of a sense of identify knowledge of one's make-up, interests and ideals clarification of one's values, interests, preferred style of life, and career
- . Ability to function for much of the time at the rational altruistic (Piaget, Havighurst, Kohlberg) stage of moral development and hence ability to resist pressure towards anti-social behaviour
- . Ability to grow new roots in new communities
- · Development of respect for others, honesty, openness, and forth-rightness
- . Desire to do a worthwhile job in the community, to take a pride in doing it and to enjoy doing it well

- Ability to relate to others, to lead, to follow, to work with others, to get to know others, to harmonize with others, to bring out the best in others
- Ability to handle conflict effectively that is to be able to listen to other people (and in fact to do so!); to avoid dismissing what they have to say as being stupid or absurd, but rather to be prepared to examine the ideas in order to discover what lies behind them, what is worthwhile and important in what is being said, and thereafter to be able to relate to others in such a way as to forge a new joint task which takes account of what is right in both points of view
- . To understand how people perceive things and can (and do) allow for the effects of selective perception, the ability to recognise that what one perceives is a construction based on very slender shreds of evidence, and that other people perceive things differently. Neither may be correct. To acquire the habit of allowing for the fact that one's own perceptions (let alone interpretations) are probably inaccurate.

#### Implications for Education

Achievement of these goals means providing pupils with information about a wide range of ways of life and value-attitude systems and their consequences, encouraging them to think about their own values, and self images, and helping them to resolve the conflicts they feel. It means providing them with opportunities to haltingly develop new ways of thinking, feeling and behaving, in situations in which the consequences of a mistake in behaviour are not so disastrous as they would be in real life, and in which new habits can be developed until they are strong enough and smooth enough to be emitted in the hostile real world. It means providing pupils with opportunities to become thoroughly familiar with emotions and patterns of thinking which may be totally unfamiliar to them, so that they can, if they wish, integrate them into their own self-images.

Some of the characteristics - such as the development of self confidence and persistence - mean that pupils require to be helped to do something which they want to do but which at first appears much too difficult. It would seem to be relatively unimportant what this task is. They should also develop a number of areas of absolute expertise of value in society; and that means helping pupils to discover their strengths, and build on them.

## Implications for Summative Evaluation

The main implication seems to be that pupils should receive a clear indication of what their strengths are; with the wide diversity of talents needed in society there should be a place for them all.

5. Introduction to Culture, Hobbies, Courses, Careers, and Ways of Life

The object here is to make sure that pupils know of the existence of, and have to some extent effectively sampled, very many cultural products, hobbies, courses, careers, and ways of life, so that they can themselves decide what sort of person they want to be and what avenues they wish to pursue. To a very considerable extent this involves taking them out of the classroom and encouraging them to participate in a very wide range of settings. It also means providing them with information — at affective and behavioural levels, by means of enabling them to participate in the way of life of those who have made different decisions — about the long-term consequences of different decisions