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OBJECTIVES IN EDUCATION

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A number of controversial issues in education which highlight different objectives are reviewed Next, reference is made to some investigations in which the perception of educational objectives among teachers, pupils, ex-pupils and parents were studied explicitly Differences of opinion between teachers, pupils and parents make it difficult to see how any objectives can be pursued effectively under the present circumstances In spite of differences, however, there are substantial areas of agreement, in particular concerning many non cognitive aspects of education, which do not seem to receive as much attention as many would like in the current scheme of things Finally, it is suggested that appropriate aids to deciding on various orders of priority among educational objectives would be socio technical analyses of the life-styles of various sections of the population

In view of the amount of money spent annually on education, it is surprising how little formal attention has been devoted by educationalists to the specification of educational objectives Despite some efforts in this direction (1, 3, 4, 5, 8, 9, 10), there has been a general failure to consider educational objectives or what we are really about in education (11) The Robbins Report (2) is alone among official British reports on education in pointing out that, in spite of the fact that both employers and potential employees clamour for education, there is little real evidence that it does the country (or the individuals concerned) any good

In practice, if one asked people what the aims of education are, a very wide range of objectives is enumerated development of character, willingness to work at boring and useless tasks ('which they will have to work at all their lives') unwillingness to tolerate unpleasant situations (a desire to deal with them either by moving oneself out of the situation or by manipulating the situation to bring it more into line with what one wants it to be), Christian morality ability to express oneself, willingness to listen to and understand others, willingness to recognise problems, willingness to challenge what appear to be the authorities on a subject, critical thinking, 'good taste', self-confidence, maturity, leadership, changes in self images, bringing pupils to view as appropriate to themselves certain social roles and vocations of which they had, perhaps, dimly heard, but had never seen as roles that they could themselves fill (such as managers, professors, entrepreneurs) What is significant about this list of objectives is the lack of unanimity between educationalists, the varying degree of generality at which the objectives are stated, the lack

of relationship between objectives and the educational inputs which take up so much time in education, and the absence of measures to assess the extent to which attainment of these aims is achieved in the examinations used to classify pupils as educated or not

While the objectives which education is intended to achieve receive little enough attention, the possible ill effects that education may have are hardly considered at all Examples of possible ill effects might be giving pupils unrealistic vocational ideas, causing them to have negatively toned images of careers like engineering, and causing them to have a mentality which allows them to continue working at boring and useless tasks when they could uproot themselves and find new jobs

CONTROVERSIES IN EDUCATION

A number of controversies in education seem to stem from differing perceptions of what the objectives of education are, or, at least, what the objectives of various educational innovations are As a means of clarifying educational objectives which are important to at least some teachers, it is proposed to look at some of these controversies in this paper The controversy concerning specialization in arts or science has received considerable attention One point of view claims that scientists should know *something* about literature, and arts people something about science On further investigation, one finds that this can mean a number of different things It can mean, for example, that scientists should know something about personal relations (how to deal with people such as politicians, committees, colleagues and other members of a research team) It can also mean that a scientist should develop a personal philosophy of life (which may result in deciding that he will never work on the development of poisonous gasses), or that he should be able to express himself clearly (as he will have to when dealing with his committees and in preparing his publications), or that he should discover enjoyable interests, hobbies, pastimes and literature, or that he should know something about society, political institutions and so on

Since the original statement said that science students should know something about the arts, it is interesting to compare these aims with the aims of arts teachers When one asks art teachers what they are trying to do, it turns out that they are inclined to advocate the 'academic study' of their subjects This seems to involve the study of the subject-matter to discover how the author created his effects (which might well be termed scientific analysis and subjected to the scientific method of verification) and it also seems to involve the *tracing of origins* of themes

to previous authors, which is, again, essentially a scientific process Where, then, one may ask, does the belief that studying arts will lead scientists to achieve the fine objectives listed above come from?

The converse, that arts students should know something about science also seems unsatisfactory What is often meant is that arts students should know what scientific method is and how to apply it to a wide range of problems, including historical, personal and social ones, that they should know how to mend fuses and how television sets and cars work that they should not be afraid of numbers and symbols, and that they should be familiar with the snares in interpreting tables of numbers such as are found in official documents As in the case of arts courses it is salutary to ask how many science courses in fact emphasise these sorts of thing

In general, the arts for scientists and science for arts students formulation is an oversimplified and, indeed, incorrect, formulation both of the problem and of its solution Furthermore, the conflict between the objectives as seen by those advocating a policy and those executing it serves to highlight the need to examine very carefully proposals to extend traditional types of education without clearly stating the objectives of so doing, and examining the relationship between the policy proposals and the objectives the policy seeks to attain

Another area of controversy which serves to high light educational objectives is that concerned with discussion lessons It seems that people who enter this controversy are often talking about very different things At least ten different objectives are subsumed under the 'discussion lessons' rubric, and different people often have different ones in mind when they heatedly dispute the value of 'discussion lessons' These objectives are (i) to teach students to express themselves orally and to train them in the skills of public speaking, (ii) to reduce shyness and the fear of speaking in public, (iii) to encourage students to realise that there are opinions different from their own and that they can learn from other people, (iv) to get them to discuss and think about social problems such as road accidents, old age etc , (v) to encourage them to think for themselves about social issues and not simply repeat what is in the newspapers, (vi) to help them to learn material through having expressed things themselves, (vii) to help them to learn through having discovered things for themselves, (viii) to encourage them to think about philosophical issues, (ix) to encourage them to think for themselves about their subjects (for example to practise the skills they will eventually need to practise as scientists—observational and inventive skills—rather than the skills they require to become scientists—skills of memory and

routine), (x) to provide relaxation and enjoyment within a normally structured framework A consideration of this variety of objectives pertaining to discussion lessons should lead people who discuss such lessons to make their objectives more explicit, to consider how their innovations relate to their objectives, and to generate more specific teaching inputs directly geared to the objectives they have in mind

The debate about comprehensive education and mixed-ability teaching shows similar features This debate provides an illustration of another vague and global teaching input appealing to a wide range of objectives, which in fact are often contradictory if one seeks to attain them all at the same time in the same school, it also serves to underline the importance of educational objectives outside the cognitive area The objectives of comprehensive education seem to be variously thought of as being (i) to allow the school to run a wide range of different sorts of courses geared to the needs of different sorts of pupils, (ii) to allow for an extensive period of observation, guidance and placement (which would include acquainting the pupil with an extensive range of different subjects in order to allow him to clarify his own interests), (iii) to do away with the privileges (such as better teachers, books and facilities) commonly associated with grammar schools, and thus with academically more able pupils from higher social class backgrounds, (iv) to raise the aspirations of pupils from poorer backgrounds by bringing them into contact with pupils with higher aspirations and from other backgrounds (v) to improve the performance of the academically less able pupils by mixing them with academically more able pupils, (vi) to avoid the feelings of being a 'defined failure,' commonly associated with lower forms of a streamed system, (vii) to motivate higher performance by having a large number of streams in which, if a pupil does not consistently work hard he knows he will be moved down, (viii) to be able to 'set' subjects so that a pupil can be placed in an appropriately high 'stream' for some subjects even though he may be in a lower 'stream' for other subjects (ix) to involve middle class parents in the fight to improve education as a whole and not just for grammar-school children, the assumptions being that working-class parents would not fight to improve education and that they would want their children to receive the type of education intellectuals want for their children

Emphasis on mixed ability classes similarly seems to involve several notions (i) providing the less able pupils with an opportunity to learn from the more able ones, (ii) encouraging the brighter pupils to appreciate the human worth of less academically able ones, (iii) motivating the teacher to give each pupil the maximum of individual attention, (iv)

motivating the teacher to consider educational goals other than academic performance (e g development of initiative, self confidence, and tolerance for others) through the realisation that academic performance is an inappropriate goal for many pupils, (v) forcing the teacher to use group teaching and individual project work for the following reasons *a* to enable the teacher to change his role from that of disciplinarian instructor and goad-to-activity to that of help-mate and counsellor *b* to encourage pupils to develop initiative, self-confidence ability to study on their own, ability to use resources like libraries and other reference sources, and ability to work with others, *c* to encourage the teacher to provide each individual child with an education suited to his background attainments, abilities, interests, and aspirations, *d* to encourage pupils to develop reading skills, and skills of analysis, presentation and communication, through having something interesting and worthwhile to find out about or communicate, *e* to encourage pupils to find their strengths and build on these rather than to emphasise their weaknesses *f* to encourage pupils to do the things they will have to do as adults if they are to continue to learn (find their own material, contact experts make use of their own observations, evaluate the pronouncements of authorities), *g* to produce students having a wide range of different areas of knowledge, skills, attitudes and interests rather than all having the same basic areas of knowledge, similar attitudes and skills, *h* to avoid giving pupils a sense of failure by being unable to do what others do, *i*, to encourage pupils to relate what they are learning to their everyday lives, (vi) it is hoped that by encouraging project and group work the teacher will be forced to generate classroom environments which permit pupils to practise and learn social skills, by generating behaviour in this area in an educational setting it is also hoped that teachers will be enabled to monitor growth and development of characteristics which would otherwise have eluded their observation

It will be clear from what has already been said that most of these objectives could be pursued much more effectively than they are at the moment if appropriate specific teaching inputs were utilized This could be done without having to create large schools or unstreamed classes both of which may have disadvantages, especially if they are adopted as ends in themselves and not as means of attaining some of the objectives listed If not properly run, large schools can engender intense feelings of anonymity and regimentation and result in depersonalisation of human relationships They often provide only a very restricted range of courses, offering very little scope for upward mobility of lower-stream pupils after the first year in school because of the increasing gap which de

velops between them and the class above Mixed ability classes can pose immense problems for both the brighter and duller pupils if the teacher addresses himself to the median level of ability and does not come to pursue educational objectives other than traditional forms of academic attainment Less able pupils may suffer rather than benefit from having others in the same class with whom they have no hope of competing academically and against whose social background their own may seem pathetic, they may thus come to feel intensely inferior while the bright pupils become bored and get up to mischief in class

EXPLICIT STUDIES OF THE PERCEPTION OF OBJECTIVES

We turn now to two studies which have attempted to study pupils', parents' and teachers' perceptions of educational objectives in a systematic way, examining how widely the objectives are shared, and the relative importance attached to a variety of objectives In the first of these, a survey was carried out in Britain among 1,500 teachers, 4 500 parents 4 500 pupils aged 13 to 16 years of age, and 3,500 young adults aged 19 to 20 years (6) In this study, it was obviously important that the method used to study the weight attached to various educational objectives by the populations surveyed should not be dependent on the informant's ability either to put into words notions which were only vaguely formed in his head or to understand notions which were either completely foreign to him or stated in words which were too complex for him to understand An extensive programme of exploratory interviewing was therefore carried out among pupils, teachers and parents so that the investigators could formulate the various objectives clearly in their minds and then translate them into words that would be understood by everyone although, perhaps, regarded as somewhat unsophisticated in phraseology by some of the more intelligent and educated informants In the end, some two dozen objectives were isolated and the informants were asked to indicate how important they felt each to be A selection of the results is given in Table 1, supplemented by some of the results from a subsequent study of sixth-form pupils and their teachers in Britain (7) and a pilot study of Irish pupils and teachers Figures from the Irish study are much less reliable than the figures obtained in the much larger and more representative British studies They are in fact based on the responses of 73 teachers and 157 pupils from eleven schools which seem fairly representative of Irish schools

A number of observations may be made about Table 1 The general British trends will be discussed first because of the more satisfactory

TABLE I

IMPORTANCE OF OBJECTIVES IN EDUCATION
(Percentages saying aim very important)

Objective	British 13 16 yr olds intending to leave at		British VI formers	Irish 13 18 year olds	British 20 yr olds who left school at		Parents of British		British Teachers			Irish Teachers for		British Heads for 15 yr old leavers
										for VI formers for VI formers				
	15	17			15	17	15 yr old leavers	17 yr old leavers	for 15 yr old leavers	more academic	less academic	more academic	less academic	
Teach you things that will help you get as good a job or career as possible	87	89		—	86	71	88	87	47		—	—		28
Teach you things that will be of direct use in your job or career	81	72	44	—	69	41	78	69	33	27	47	—	—	14
Help you to do as well as possible in examinations like GCE or CSE (Leaving Cert / Inter Cert)	67	86	72	86	66	60	70	93	19	80	38	72	76	19
Ensure that you can express yourself clearly in writing	72	68	56	58	87	87	91	91	63	85	80	88	85	62
Run clubs that you can go to out of school hours	27	28		67	39	47	69	46	52			—	—	67
Make sure that you are considerate and at ease when dealing with people *	64	54	47	64	63	52	78	71	72	61	64	71	74	87
Encourage you to develop a considerate attitude toward other people			32							77	78			
Teach you things that will be useful when running a home for example bringing up children home repairs decorating *	66	32	10	32	62	20	55	20	49	9	20	33	41	46
Help you to know what s on in the world nowadays	39	32	33	64	53	54	62	60	63	65	65	78	77	64

*These are large sex differences on these items

nature of the data, the Irish divergences from the trends will then be considered From the data, it is clear that teachers do not share the orientation of the pupils and parents towards the vocational aspects of education, an orientation that is shared by fifteen and seventeen-year old leavers To some extent the data suggest that the teachers are correct in their avoidance of this orientation at any rate, there is a marked drop in desire to be taught things of direct use in ones job among the twenty-year olds, particularly among those who left school at seventeen On the other hand, even if the teachers are correct, it is important for them to make it clear to both pupils and their parents that whatever they are teaching is of more value in the long run than directly usable vocational skills Unless this is done it is clear that many of the teachers will be defeated in their objectives and will encounter the discipline problems which so many of them fear with the raising of the school-leaving age

As far as examination achievement is concerned the results in Table 1 are doubly interesting Only two-thirds of the fifteen year old leavers thought that these were very important compared with some eighty-five per cent who thought that school should teach you things that would be of direct use to you in a job or help you to get as good a job or career as possible Although the emphasis given to examination performance is considerably higher among the seventeen-year olds, neither group attaches as much importance to it as do their parents, and it is of interest that it is not merely an important objective but the over-riding one among parents of seventeen-year old leavers The twenty-year olds who left school at seventeen attach less weight to it than do their contemporaries at school Pupils then don't seem overly concerned with examination results, their parents do Teachers place examination achievement lowest in their list of objectives Small wonder that pupils and parents seem to be in conflict with the school in this area

Teachers are more likely to be concerned about social skills than parents or pupils, indeed the aims which were most frequently rated as 'very important' by the teachers were help them to develop their personalities and character (92%), help them to speak well and easily (87%), help them to be independent and able to stand on their own feet (86%) The fact that pupils and parents do not so often see these as an important function of the school may be because they regard these as things which happen automatically when the pupil leaves school and gets a job As the same time, pupils seem to feel that at present the schools do these things extremely badly, 50 per cent of fifteen-year old leavers said that 'teachers forget you are growing up and always treat

you like kids' and a further 30 per cent of those who had anything else to add, when asked at the end of the interview if there was anything else they would like to say about their school said that there were too many restrictions, petty rules and the like While this may be due to the cramped conditions under which teachers work, it again seems that, if teachers are to achieve their aims, they will need to rethink their methods

It seems that teachers are quite right in thinking that it is important to teach fifteen-year old leavers about what is going on in the world because the percentage rating it 'very important' goes up among the twenty-year-olds and again among the parents However, it is not perceived as any more important by sixth formers or by sixteen-year old pupils compared with thirteen-year olds This suggests that it is contact with the outside world and not age *per se* which leads to a recognition of the importance of education of this sort It would seem that, if it is to be successful, pupils will somehow have to be confronted by the sort of problems that twenty-year olds and parents have encountered, before they will be in a position to appreciate education of this type

Some tentative comparisons between the British and Irish results may now be made Irish pupils as a whole place more stress on examinations than do the British groups Perhaps examination performance has for longer been a stronger determinant of social mobility in Ireland than it has been in Britain Certainly the author's impression is that in Ireland there is a much higher level of concern with examinations as a means to obtaining a good job, coupled with a much more widespread belief that it is the piece of paper which is important and not the education itself Indeed there seems to be a much lower valuation for education *per se*—a hypothesis which is supported by the low stress placed on learning about subjects other than those studied for exams and the very low stress placed on learning about aspects of school subjects not required for examinations (the percentages of Irish 13-18 year olds thinking these things very important being 58, 39, and 34 respectively)

In the sixth-form study (11) which followed the study of young leavers in Britain, there were again considerable discrepancies between the views of teachers and pupils Pupils ranked having information about different sorts of job and careers first while teachers ranked it twelfth they ranked having a wide variety of subjects from which to choose from fourth, while teachers ranked it thirteenth, and they ranked having advice about which career to choose sixth, while teachers ranked it twentieth Teachers on the other hand ranked the ability to express yourself clearly in writing fourth, while pupils ranked it tenth they ranked 'help you to

develop a questioning attitude' fifth, while pupils ranked it twenty-first, and they ranked 'encourage you to develop considerate attitudes to others' tenth while pupils ranked it twenty-third

From the general results of the sixth form enquiry it seems that the qualities of personality and character which teachers wished to develop consisted of willingness to be independent of adults, to be self-motivated, to be able to work on ones own, willingness to think for oneself, willingness to organize others, to lead, self-confidence and willingness to speak in public, consideration for others, critical thinking or questioning attitude, willingness to look after less privileged members of the community, a philosophy of life (represented by 'think out what they really want to achieve in life'), and skill in human relationships

It is clear from these studies that many of the educational objectives which pupils, parents and teachers consider most important receive scant attention in traditional courses and even less emphasis in examinations Yet, by their very nature, they are the qualities which most determine the vigour of a nation and the human resources it has available to call upon They are qualities of character, and include things like willingness to think for oneself to be original, willingness to notice the need for innovations, confidence that one has the ability to initiate such innovations, willingness to persist at a challenging task; desire to seek out such tasks, willingness to entertain new ideas, willingness to use such intelligence as one possesses, willingness to set about adapting the environment to ones needs rather than lower ones objectives to fit in with what the environment easily provides, and willingness to do things oneself rather than leave things to others to be master of ones destiny rather than a pawn of fate

ANALYSIS OF JOB AND LIFE STYLES

One way of bringing other educational objectives into the forefront of discussion is to find out what pupils and students actually do in their jobs and lives after they leave school or university What we really need is a full socio-technical analysis of the lives of people in various walks of life We need to know about different patterns of satisfaction and frustration, how education has contributed to these, and how it could reduce some of the frustrations By different patterns of satisfaction and frustration is meant that one person may obtain satisfactions from one set of things and be frustrated by another set, while another individual may manage to deal with those frustrations but be frustrated over other things It is meant to imply that we live in a pluralistic society where we

are not educating the public but the publics, that there is not one set of objectives of education, but several sets geared to the needs of the various groups making up the population

From the study of early school leavers we know about what students do after they leave school Firstly, and this is a very significant finding for the education of girls, half the 19-20 year old women who had left school at fifteen were engaged or married One-third were already married A fifth had actually started their families As a result, a quarter of all the women who had left school at fifteen were not in paid employment at all but were looking after their families As far as the men were concerned, 62 per cent of the fifteen-year old leavers had taken some form of further education, mostly by day release or evening classes

We obviously need to know more than this, though this information in itself is instructive What is required are job analyses for all sorts of different jobs and professions We do not have this kind of information at present Let us, however, attempt such an analysis for physicists, based on the observations of the author in a physics laboratory First of all, the physicist is required to notice that there is a problem in a particular area which requires investigation, such as for example, to describe air movements in rooms Then he has to devise a way of investigating the problem (a method of observing air movements in rooms) After this, he has to look for a way of summarising his data—in terms of a mathematical model, for example In order to do this he has to know of the existence of a wide range of mathematics Afterwards he has to be able to write up his research, and perhaps convince his committee that further research is worthwhile He may also have to cope with problems in the organization of his research team Where in our physics courses do we train people to do such things? And how little of what is taught is of use There is indeed much scope to generalise the basic course (albeit in a way which is not usually implied when that term is used) and to prune and particularise the vocational part of the course

It would be useful to have accurate work studies of the jobs of scientists managers executives, and, indeed, of all professional groups On the basis of these we should be able to make a very worthwhile reorganisation of our educational system It is not intended to imply that we should make our university courses into vocational training Far from it But the courses should be relevant to something, in particular an attempt should be made to impart the necessary knowledge and attitudes through precisely designed and carefully programmed courses geared to explicit objectives, as well as to teach generally useful attitudes and skills, especially social ones

We are unlikely to be able to start a socio-technical study of the lives of the population as a whole, all at once, but some groups of people seem to be crucial in our society, and it might be useful to select some of these for attention It seems that we particularly need people able and willing to notice the need for social innovations and to get them implemented It would be useful to study what such people are like and what their backgrounds are, and what training they require Training should not be limited to only a few people Changes are needed throughout our society and we need to do our best to make sure that everyone seeks out a job in which one can play a worthwhile part in the community It is also important that everyone should try to do that job to the best of ones ability, noticing the need for innovations, and making efforts, supported by all those around one, to set up institutions to meet new needs It is hard to think of a means whereby everyone could be an active participant in government It is relatively easy to believe that everyone could seek out a worthwhile job do it as well as possible, be continuously on the look out for possible ways of improving the world around one, and take steps to create a structure and appoint people to it in order to implement proposed improvements

A study of leaders and innovators in this field should suggest important improvements that might be made to our educational system At present that system provides very few opportunities to learn the social skills necessary to work with other people, to learn to listen to them and take what they say into account, to realise that they too have good ideas which they often cannot express because of prior ideological commitments and social pressures

Not only does our educational system rarely provide opportunities to learn these things, it often provides role models for quite the opposite forms of behaviour it provides pupils with role models which stress non-consultation, that authority knows best, that authority is above criticism and it provides a syllabus which conveys the idea that all, or at least most, answers are already known and that the first requirement of the pupil is to learn what is known and be able to solve routine problems by routine methods His task is to 'behave himself' and learn it is not to think out his own moral standpoint act according to his judgment question and innovate Given this situation, there is a great need to make educational objectives more explicit and to build in to the curriculum specific learning experiences designed to achieve social and attitudinal objectives more effectively

REFERENCES

1 BLOOM, B S (Ed) *Taxonomy of educational objectives Handbook I Cognitive domain* New York David McKay, 1956

2 GREAT BRITAIN COMMITTEE ON HIGHER EDUCATION *Higher education* London HMSO, 1963

3 KRATHWOHL, D R, BLOOM, B S, and MASIA, B B *Taxonomy of educational objectives Handbook II Affective domain* New York David McKay, 1964

4 MADAUS, G F Educational objectives The blueprint for instruction and evaluation *Irish Journal of Education*, 1967, *1*, 37 46

5 MONTAGUE, E J Behavioural objectives *Science Teacher*, 1968, *12*, 33 35

6 MORTON-WILLIAMS R, and FINCH, S *Young school leavers* London HMSO, 1968

7 MORTON WILLIAMS R *et al Sixth form teachers and pupils* London Schools Council Publication Company, 1970

8 PETERS, R S *Ethics and education* London Allen and Unwin, 1966

9 TYLER, R W *Basic principles of curriculum and instruction* Chicago University of Chicago Press, 1950

10 WHITEHEAD, A N *The aims of education and other essays* (2nd ed) London Ernest Benn, 1950

11 WRIGLEY, J The Schools Council In Butcher, H J, and Pont, H B (Eds) *Educational research in Britain 2* London University of London Press, 1970 Pp 21-34