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SCHOOLS AND THEIR CURRICULA

Charles Farrugia

Most readers will have some decided views about the meaning and function of 'schools', having spent many years attending one. They may be less familiar with the precise meaning of 'curriculum', a word which most people use interchangeably with 'syllabus'. This chapter aims to introduce readers to a qualified understanding of schools as institutions which aspire to fulfil society's ideals in education. Furthermore it interprets the curriculum as the instrument, made up of learning content and teaching methods, which schools employ to fulfil these ideals. In turn, deeper insight into the function of schools and the purpose of the curriculum should help readers to understand better the demands of the teaching profession, and consequently, its important role in the educational system.

Schools can be studied from various perspectives. One can examine the physical and structural layout of school buildings for their functional effectiveness, or one can analyse the organizational and administrative set-up of schools in relation to their educational goals. One can also investigate the human element such as the interaction among school personnel. This chapter will not address these features; instead it will concentrate

on the basic question: What are schools for?[1]

People living in western industrialized societies tend to take for granted the ready availability of extensive educational services. Few young people in Europe and North America appreciate that mass education and schools as we know them today are fairly recent phenomena. For example, most young people in Malta are unaware that local legislation on compulsory school attendance was introduced as recently as 1924, that Universal Primary Education (UPE) would be enforced twenty-two years later, at the end of World War II and that Universal Secondary Education (USE) came into being as late as 1970.[2] Students who today have such an easy access to schools find it difficult to believe that a sizeable number of people still living in Malta and Gozo have never attended school, that many people in third world countries have unclear ideas about what a school looks like, and many others would be quite envious of the extensive school system and

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[1]   A most valuable insight into what goes on in schools is provided by two major works: JACKSON, P., *Life in Classrooms*, (Rinehart and Winston, Holt, New York 1968) and NIAS, J., *Primary Teachers Talking*, (Routledge, London 1989). A dated but still intriguing collection of students' perspectives of school is provided in BLISHEN, E., *The School That I'd Like*, (Penguin, Harmondsworth 1972).

[2]   Although several theses have been written on the subject, a comprehensive history of education in Malta still awaits publication. The better known works are by ZAMMIT MANGION, J., *Landmarks in the Development of Education in Malta*, (unpublished B.Educ. dissertation, University of Malta, 1952) and CAMILLERI, J.J., *Canon P. Pullicino* (unpublished M.A. dissertation, University of Malta, 1969). Others have written about specific educational developments, notably, FARRUGIA, C., *The Status of School Teachers in Malta*, (Unpublished Ph.D. dissertation, University of London 1985) which brings out the relationship between the educators and the administrators in the Maltese educational system. The current work by several members of the Faculty of Education at the University of Malta, especially Mary Darmanin's ethnographic work, Joseph Fenech's current study on the curricular traditions in Maltese Primary education, and Ronald Sultana's pioneering work on the previously neglected Trade Schools, are helping to fill the gap.

educational services that Maltese students enjoy.[3]   It is ironic
however, that while most people in Malta and abroad strive for
improved educational facilities, few have precise notions about the
services schools should provide.   It is more ironic still that
professional educators offer scant help in this regard since they
themselves often disagree about the role and function of schools,
indeed some hold very conflicting views.[4]

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[3]   Statistical information on the educational provisions in Malta and the students
benefitting from them can be gleaned from the Annual Reports published by the
Department of Education. FARRUGIA, C., 'Malta: System of Education' in
POSTLETHWAITE, T.N. and HUSEN, T. (eds), *The International Encyclopedia
of Education*, (Pergamon Press, New York, 1985) provides a general overview
which now has been overcome in some areas by developments since the 1988
Education Act.   A more up-to-date and detailed analysis can be found in
FARRUGIA, C. and ATTARD, P., 'Malta: A Case Study', in BRAY, M. (ed.),
*Sourcebook on Ministries of Education in the Small Countries of the
Commonwealth*, (Commonwealth Secretariat, London 1990).

[4]   Some of the more eloquent writings from the traditionalist/functionalist camp
are provided by: LEVINE, D.V. and HAVIGHURST, R., *Society and Education*,
(Allyn and Bacon, Boston 1979); BLOOM, A., *The Closing of the American Mind*,
(Simon and Schuster, New York 1987); HIRSCH, E.D., *Cultural Literacy*,
(Houghton Mifflin, Boston 1988) - the latter two basing their major arguments
on the works of John Dewey.   An earlier and better known critique of the
traditional role of schools is provided by ILLICH, I., *Deschooling Society*,
(Harper Row, New York 1971).   BOWLES, S. and GINTIS, H., *Schooling in
Capitalist America*, (Basic Books, New York 1976) is a more empirically founded
work.   FREIRE, P., *Pedagogy of the Oppressed*, (Herder and Herder, New York
1972) has given credence and popularity to the Neo-Marxist/Radical perspective
on education.   APPLE, M., *Ideology and Curriculum* (R.K.P., London 1979);
GIROUX, H. and PURPEL, D., *The Hidden Curriculum and Moral Education*,
(Mc Hutchan, Berkeley, California 1983); GRACE, G., *Teachers, Ideology and
Control: a Study in Urban Education*, (Routledge and Kegan Paul, London
1978); YOUNG, M.F., *Knowledge and Control, New Directions for the Sociology
of Education*, (Collier Macmillan, London 1971) and LIVINGSTON, D. (ed.),
Critical Pedagogy and Cultural Power, (Macmillan, Basingstoke 1987) among
others have provided some strong arguments in favour of Critical Education.   A
very interesting paper by RORTY, R., 'Education Without Dogma', Dialogue 2,
(U.S.I.S. 1990) argues that there are great similarities between the final aims of
Functionalists and Radical educators as both want schools to create literate
citizens and independent thinkers who can distinguish right from wrong for
themselves. The journal *Education* (Faculty of Education, University of Malta)
devotes a whole issue to Critical Education with some interesting insights on
the concept of local education [vol.3 no.4 (1990)].

A TRADITIONAL VIEW OF SCHOOLS

The majority of people in our culture look favourably on schools. Normally they are anxious to preserve the accumulated knowledge, skills, culture and values of their predecessors in order to pass them on to their successors. They also strive to improve their material and social conditions to render each generation better off than the preceding one. Pre-industrialized societies transferred the limited knowledge, skills, culture and mores of their restricted communities from one generation to the next. Folklore, communal rituals and the shared experiences provided by the extended family system served as sources of initiation and instruction. Post-industrial societies have changed all that.[5] Traditional methods cannot cope with the knowledge explosion, the technological change and the international morality of the mass media. Most parents living in modern societies lack the competence, the time, and perhaps the aptitude to provide the complex and formal education required by their children. They gladly delegate the task to those who can provide the service, namely teachers in schools. Gradually schools have taken over many of the duties previously provided by the family and the community.

Communities, often represented by the State, construct buildings, set up institutions, enact laws, and employ personnel to meet demands for more, better and increasingly sophisticated educational provisions. As a result, schools operating within elaborate educational systems, have evolved as the main agencies for maintaining and perpetuating and in exceptional cases changing, the norms and values of society. They also provide much of the knowledge, life-skills and occupational know-how

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[5]   Many anthropological works deal with the impact of industrial and social change on the community. TOFFLER, A., *Future Shock* (Bodley Head, London 1970), remains a highly readable book. Toffler's predictions which seemed highly improbable at the time of publication, have now been proven valid. FANTINI, M. and SINCLAIR, R.L. (eds), *Education in School and Non-School Settings*, (American National Society for the Study of Education; University of Chicago Press, Chicago 1985), contains a number of studies on the interaction between schools and other social forces in society.

which enable young people to operate and survive in the complex milieu of industrialized societies.

More pervasively, schools conform to the needs of society not merely by teaching and transmitting knowledge, skills, concepts and beliefs, but also by embodying society's norms and values within the school culture. For example, schools reward industry and achievement, encourage competition and perseverance, stress obedience and conformity, punish deviance and protest. In the traditional perspective, schools are considered as necessary, indeed indispensable, extensions of the community.

A RADICAL VIEW OF SCHOOLS

Not everyone views schools in such a positive vein. In fact, for the very same reasons outlined in the previous paragraph, radical educators condemn schools as the perverse agents of the establishment which strives to preserve its selfish interests by maintaining the status quo and its privileged position in society. Several radical educators have argued convincingly that the curriculum, administration and culture of the school replicate the attitudes and conditions that operate in society at large. They point out for example, that schools differentiate between people and services, they adopt curricula that promote docility; they establish priorities and allocate resources that reinforce social and cultural inequality. Critical educators condemn school policies that categorize, label and stereotype students and subjects to fit established and often preconceived attitudes and values, that reinforce the social and economic advantages enjoyed by the privileged classes and passed on from one generation to the next. Critical educational theory regards such schooling as de-humanizing and undemocratic, when education should liberalize and emancipate individuals. Radical educators assert that most of the teaching and learning provided by traditional schools are unnecessary commodities invented by the rich and the powerful to create artificial needs which render the weak and the impotent even more dependent on officialdom and bureaucracy.

Other critics label schools as archaic human repositories where young people lose their natural tendencies, and instead acquire crippling social inhibitions. The severest critics accuse schools of serving as legitimating agencies to lower artificially the

unemployment figure amongst youths. In the process, they argue, schools condition and produce the next generation of docile, passive, uncritical work-force ready to be exploited by unscrupulous and dehumanizing industry. Critical educators do not seek to do away with schools, but attempt to transform their role and character so that instead of perpetuating social inequalities, schools would contribute to eliminate them.

The debate between the conservative and the radical perspectives of schools is an extremely interesting one, but cannot be debated fully here. However, one can conclude that, in spite of the criticism levelled against schools, the majority of people acclaim schools as institutions which prepare the young members of society for their future life. Consequently, schools are valued to the extent that all countries devote a considerable portion of their national budgets towards the maintenance and improvement of their services. For example, in the last twenty years successive Maltese governments have committed an average of 10.2 per cent of the annual expenditure to the educational service.[6] The money spent on schools is only one indicator of people's concern for better educational services; other pointers are the ardour by which parents pursue their children's scholastic advancement, and the race for academic credentials. Most Maltese rely on schools to disseminate knowledge and skills, impart concepts and values to those who lack them, usually the young members of society.

EDUCATING THE WHOLE PERSON

The quest for more schooling does not automatically lead to a critical evaluation of what schools are expected to, and actually, do. In the relatively short time that Universal Primary and Secondary Education have been available in Malta, schools have become so ingrained in our culture that people just take them for granted, perhaps too much for granted. People simply expect schools 'to teach' or 'to educate' without investigating further. The

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[6]   This is considerably higher than the normal seven per cent devoted to education in technologically advanced, rich, industrialized countries; cf. FAGERLIND, I. and SAHA, L.J., *Education and National Development: A Comparative Perspective*, (Pergamon, Oxford 1983).

majority link schooling with the restricted function of preparing students for examinations, academic certification and university or employment entry requirements. They are satisfied as long as their children move smoothly along the scholastic ladder. Some people stress the civic aspirations expecting schools to improve the fibre of society by forming good, moral and responsible future citizens. Few people are inquisitive or competent enough to question the learning content and the teaching methods adopted in schools. Fewer still are capable of judging the quality of the teaching, the suitability of the syllabi or the relevance of the content. Many are simply satisfied to assign schools the all-encompassing task of 'educating the whole person'.

This slogan is a convenient one: it sounds high-minded and inspiring without being too specific to render it controversial. It also has the appeal of antiquity. Charles Hummel wrote that for the ancient Greek philosopher Aristotle

> the goal of education is identical with the goal of man. ...all forms of education are directed towards a human ideal. ...Aristotle considers that education is essential for the complete self-realization of man.[7]

Through the ages, this ideal has been reflected and reproduced by practically all great thinkers about education from Plato to Comenius, from Pestalozzi to Froebel, from Dewey to Whitehead. Today, it is endorsed by the professional education literature, and has been enthusiastically adopted in political rhetoric. For example, the 1988 Education Act commits the Maltese government

> to ensure the existence of a system of schools and institutions accessible to all Maltese citizens catering for the full development of the whole personality...

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[7] The quotation is taken from HUMMEL, C., 'Aristole', *Prospects 70*, vol. XIX, no. 2, (1989). The theme of 'educating the whole man/person/individual' recurs in all the works of the great educators throughout the ages. An interesting perspective on the theme runs through RUSSELL, B., *History of Western Philosophy* 2e, (Allen and Unwin, London 1961), but the classic works on the subject - although he might not even mention the term - remain those by DEWEY, J., *Democracy and Education*, (The Free Press, New York 1944) and DEWEY, J., *Experience and Education*, (The Free Press, New York 1944).

Such expressions serve mainly to emphasise the state's commitment to provide a wide-ranging educational service. They embody ideals that are far too abstract to be of real significance to classroom teachers. The ideal of 'educating the whole person' or 'catering for the full development of the whole personality' would remain mere slogans if they are not sustained further by the more concrete aims and objectives of the school curriculum. In the case of Maltese primary schools, the National Minimum Curriculum spells out how this ideal can be achieved by setting out aims and objectives under the following general headings:

1. the promotion of good behaviour and character formation;
2. the acquisition of literacy and numeracy;
3. an introduction into the culture of contemporary Malta;
4. an introduction to scientific knowledge;
5. the training in activity, creativity of thought and action.[8]

One notes, therefore, that while society entrusts schools with the multifarious mandate to educate the whole person, educators have to devise learning content and employ teaching strategies to

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[8] Notice the similarity of the aims of the Maltese National Minimum (Primary) Curriculum with those of other nations:
    a. The British educational authorities in 'The School Curriculum' (1981) identified the following six educational aims:
        i. to help pupils to develop lively, inquiring minds, the ability to question and argue rationally and to apply themselves to tasks, and physical skills;
        ii. to help pupils to acquire knowledge and skills relevant to adult life and employment in a fast-changing world;
        iii. to help pupils to use language and numbers effectively;
        iv. to instill respect for religious and moral values, and tolerance for other races, religions, and ways of life;
        v. to help pupils to understand the world in which they live, and the interdependence of individuals, groups and nations;
        vi. to help pupils to appreciate human achievements and aspirations.
    b. In 1944 the U.S. Educational Policies Commission in Education for All American Youth identified the following 'Ten Imperative Needs of Youth', and impressed on schools the desire to promote activities that enhance:
        i. productive work experience and occupational success,
        ii. good health and physical fitness,
        iii. rights and duties of a democratic citizenry,
        iv. conditions for successful family life,
        v. wise consumer behaviour,

translate this rather vague and all-encompassing bidding into a more concrete and manageable form.

THE CURRICULUM

The shift from the abstract plane of educational ideals to curriculum aims and objectives has important pedagogical implications for three main reasons. First, it helps teaching personnel to distinguish between responsibilities that primarily belong to the school from those that can, and should, be more adequately catered for by the family, the church, industry and other agencies. The distinction should enable schools to concentrate on those tasks for which they are equipped, and to avoid spreading their resources among a plethora of activities which fall beyond their scope. Second, the identification of specific educational aims enable teachers to identify curriculum goals, establish specific learning objectives, and organize instructional activities that are valid, meaningful, and relevant to the students' needs. Teachers are more likely to utilize time and facilities in schools to the best advantage when they teach according to declared and stated objectives rather than general and vague ideals. Third, teachers who work towards clearly established criteria are in a better position to answer the personal, but basic,

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vi. understanding of science and the nature of man,
vii. appreciation of arts, music, and literature,
viii. wise use of leisure time,
ix. respect for ethical values,
x. the ability to think rationally and communicate thoughts clearly.
c. The first Soviet Minister of Education Anatoli Lunacharski addressing the First All-Russia Congress on Education identified the Soviet aims of education as those that lead to:
i. every man, becoming a labouring man,
ii. having a scientific education,
iii being aware of human culture
iv. the development of human thought through the perception of knowledge, physical education, aesthetic education and the creative impulses toward beauty. See LUNACHARSKY, A., 'Speech at the First All-Russian Congress on Education' in *On Education: Selected Articles and Speeches*, (Progress Publishers, Moscow 1981).
The political ideologies of many countries may contrast but the aims of education are very similar.

professional questions: What am I doing here? What is my role and what are my duties in this school? How well am I doing?[9]

EDUCATIONAL AIMS AND CURRICULUM OBJECTIVES

One can study various aspects of the curriculum: the core curriculum, the official or the stated curriculum, the hidden curriculum, curricula that are child-centred, subject-centred or society-centred. One can look at curriculum development, innovation and evaluation, as well as the sociological, the philosophical and the psychological implications of curriculum implementation. These are important features of curriculum studies. However, this paper will limit itself to establishing the basis of school curricula, and to relating the subjects taught at school with society's ideal of 'educating the whole person'. It explains how teachers in schools engage in teaching and learning

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[9] TABA, H., *Curriculum Development: Theory and Practice*, (Harcourt, Brace and World, New York 1962) remains the seminal work the themes of which have been taken up in detail and discussed in various national contexts. BLOOM, B., *A Taxonomy of Educational Objectives*, (Longman, London 1956) on the domains of learning still remains widely quoted but little understood by the average reader, in contrast to MAGER, R.F., *Preparing Instructional Objectives*, (Fearon, Palo Alto, California 1962) which is a clear, often entertaining work on this topic. TAYLOR, P. and RICHARDS, C., *An Introduction to Curriculum Studies*, (N.F.E.R./Nelson, London 1985) provides an excellent introduction to the subject, while KELLY, A.V.(ed.), *Curriculum Context*, (Harper and Row, London 1980) covers in a comprehensive way the main curriculum issues that most teachers will meet. LAWTON, D., *The Politics of the School Curriculum*, (Routledge and Kegan Paul, London 1980) and LAWTON, D., *Curriculum Studies and Educational Planning*, (Hodder and Stoughton, London 1983) are excellent works on the subject. Those readers who wish to see some excellent examples of instructional aims and objectives in specific subject areas, can consult the documentation provided by the various G.C.S.E. examination boards in Britain. Two recent works on the national minimum curriculum which follow the Education Act of 1988 are: WAIN, K., *The Maltese National Curriculum: A Critical Evaluation*, (Mireva Publications, Malta 1991) and FARRUGIA, C., (ED.), *A National Minimum Curriculum for Malta*, (F.I.S. / University Of Malta/ Ministry of Education, Valletta, 1991).

strategies to fulfil this educational ideal. Through curricular activities, teachers help students become:

1. effective communicators;
2. autonomous and critical thinkers;
3. responsible and civic-minded citizens;
4. cultured and creative individuals;
5. self-supporting and productive workers.

The approach through the rest of this paper stresses the view that students are individuals who have latent qualities and capabilities which are actuated and refined at school. This approach views the word 'education' as derived from 'educere' - 'to bring out', rather than 'educare' - 'to form'.[10]

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[10]   Many prominent educators have written extensively about what they consider
       to be the major aims in education, and the five I identify here cannot claim to
       be original, even if my approach to the subject does have some novelty. My
       identification of the five aims and how they are reflected in the curriculum
       have emerged from a course of lectures entitled 'Pedagogy: the Art
       and Science of Instruction' first offered to student teachers in 1967. Although
       there are many similarities between the notes for those lectures and the
       present text, the differences are substantial and reflect my evolutionary
       thinking on the subject over a quarter of a century in teacher education. I was
       'initiated' into the subject of Aims in Education in 1966-7 when attending
       lectures by R.S. Peters at the University of London Institute of Education;
       PETERS, R.S.,'Must Education Have an Aim?', Authority, Responsibility, and
       Education, (Allen and Unwin, London 1963) and PETERS, R.S., Ethics and
       Education, (Allen and Unwin, London 1966) reflect Peters' s lectures. I was
       also greatly influenced by HIRST, P. and PETERS, R.S., The Logic of
       Education, (R.K.P., London 1970); HIRST, P., Knowledge and the Curriculum,
       (R.K.P., London 1974); WHITE, J., The Aims of Education Restated, (R.K.P.,
       London 1982). Subsequent works in the United Kingdom by STENHOUSE, L.,
       An Introduction to Curriculum Research and Development, (Heinemann,
       London 1975); SKILBECK, M., 'Openness and Structure in the Curriculum', in
       The Curriculum: Research, Innovation and Change, (Ward Lock, Taylor and
       Walton, London 1973); HARGREAVES, D.H., Interpersonal Relationships in
       Education, (R.K.P., London 1972) and others in the United States by TYLER,
       R., Basic Principles of Curriculum and Instruction, (University of Chicago
       Press, Chicago 1949), and JACKSON, P. (ed.), From Socrates to Software: The
       Teacher as Text and the Text as Teacher, (N.S.S.E., Chicago 1989), among many
       others, have reinforced my strong belief that successful teaching and fruitful
       learning depend greatly on a close link between the theory and practice of
       education, and that the curriculum should bring the two branches of education

PEOPLE AS COMMUNICATORS

The ability to communicate at a high level of abstraction
constitutes one special attribute that distinguishes humans from
other species. Humans use sounds and visuals, signs and symbols
to construct communication codes that convey complex messages
replete with multifarious ideas and abstract concepts. Language
with its grammar, syntax, pauses and inflections is one such code.
The use of numbers, diagrams, still and moving images, music,
sound signals, mime, ballet, etc. are other codes which humans
use continually at various levels of complexity.

However, the ability to communicate goes beyond the mere skill
of using and interpreting signs and symbols. It implies the
capacity to organize one's own thinking in a way that makes sense
of one's feelings, beliefs and ideas. Most adults can achieve a high
level of intrapersonal communication enabling them to understand
themselves and their environment. Some adults and many young
people find it very difficult to organize their own thought
processes or to understand their own emotions, to the extent that
they need guidance not to become frustrated, withdrawn or
aggressive. Once people organize their ideas they often wish to
share them with others; they also want to know what others feel
and think, practices that lead to the interpersonal communications
most of us engage in continually. Sometimes, communication
processes are efficient; when communcations fail the result is
misunderstandings, arguments, and conflicts. It is one of the
major tasks of schools and teachers to help their students
understand themselves and thus to be able to understand and
communicate with others.

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together in the classroom. Hence the text's emphasis on a close association
between educational aims, objectives, content and methods. A recent work that
reinforces my belief is PAUL HIRST's paper 'Theory and Practice: a False
Dichotomy?' presented at University Departments of Education annual
conference in Cambridge in November, 1989. WHITEHEAD, N.A., *The Aims in
Education*, (Free Press Macmillan, London 1967) remains an inspiring work.

The school curriculum is replete with subjects to achieve this end. Language teaching is the most prominent, but by no means the only activity. People do not have to go to school to learn their mother tongue: they learn it at home and in the community. However, the school curriculum provides structured learning experiences through language and grammar exercises which train students to acquire knowledge and understanding of the world around them, and to express themselves precisely, without ambiguity. Even mundane exercises that promote correct spelling and punctuation contribute towards the students' ability to communicate accurately their written and oral messages. Vocabulary exercises enrich their repertoire with new words; grammar and sentence construction, leading first to simple composition and later to essay writing, help students in organizing their own thoughts and promote self-expression. Reading and comprehension exercises provide opportunities to understand and interpret all types of information, ideas and beliefs. Foreign language learning opens up vast communication possibilities with people whose language is not one's own, with exposure to their culture and literature. Mastery of language modes becomes the major media through which knowledge is attained and understanding of phenomena is formulated.

Literacy is a high priority area on the school curriculum; so is numeracy, that is, rendering students able to interpret, compute and communicate through numbers. People who cannot use numbers find it extremely difficult to operate effectively in an industrialized society where they are bombarded continuously with numerical information. It becomes one of the objectives of the curriculum to equip students, through mathematics, with the ability to understand and handle numbers as an increasingly powerful tool of communication.

In Social Studies and Media Studies students encounter other forms of communication media. They learn that still and moving pictures, diagrams, contrived visuals, real and simulated sounds form part of the mass communications media, which like verbal language have their own structure and syntax. To those who learn to interpret and use them correctly, their messages convey precise information; to the uninitiated receiver, they complicate and confuse the communication process. Most students start school only partly initiated in the highly complex process of

communicating with others. Through direct personal encounters and through mediated experiences, the curriculum expands and refines this facet in the development of the whole person.

PEOPLE AS CRITICAL THINKERS

Artificial intelligence enables machines to communicate at an extremely high level of efficiency, transmitting the most complex messages over vast distances in exceedingly short spans of time. These machines, regardless of their remarkable efficiency, lack the human capacity to be autonomous thinkers: they are programmed to be efficient, to act and respond in a specified, pre-ordained manner. In contrast, people have the particular gift not only to react (animals and plant life do so routinely) but to initiate action. The most advanced computer cannot take the initiative of its own accord, its actions and reactions are ultimately controlled by human intelligence.

Many people, however, can be particularly reticent in using their intellect and instead rely on others to interpret events for them, to make declarations on their behalf, to take decisions on their account. Many fail to use even a fraction of their intellectual powers, and they have to be taught how to cultivate and expand this remarkable human gift. Therefore, society expects schools to pay particular attention towards the development of students' cognitive and intellectual abilities. Abundant curricular activities aim to train students to gather information, analyse and store it. The school organizes activities which encourage students to be self-critical, to probe for consistency their own thought processes and expressions, to analyse the messages coming from others. They are taught to test them for reliability, flushing out ambiguities, spotting omissions.

Take mathematics and science, for example. Contrary to popular misconceptions, much of the curriculum content in mathematics is intended not just to equip people to be numerate. Similarly, much of science learning is not meant just to help students become acquainted with natural phenomena and scientific principles. Both school subjects aim towards the higher educational objective of helping people become critical and logical problem solvers. Of course, in both subjects the ability to handle

numbers and to grasp scientific data is essential. Equally important is the ability to:

1. identify the real and crucial issues of the problem;
2. tease out and extract all the important information, ignoring the irrelevant;
3. analyse the collected data, even the seemingly contradictory, in order to establish relationships;
4. seek solutions, even those which might appear unusual, radical, or contrary to one's own convictions;
5. test the solutions against the stated problem for reliability and consistency, and if these fail the test, try again and again. Unless seen in this light much of the mathematics and science covered at school becomes irrelevant.

The application of the scientific method as a source of knowledge and concept formation is only one approach, and is elaborated on here as an example. Knowledge and understanding can be derived also from learning experiences in the domains of aesthetics and creativity, human and social studies, language and literature, morals and religion, as well as the physical and technological world. Therefore, curricular activities in these domains do not serve merely to work out such instructional tasks as comprehension exercises, or to engage in literary criticism, and debates, or to learn history and geography etc., but to acquire knowledge and understanding, to learn languages, literature and elocution, as well as to think clearly, to infer, to read between the lines, to reason things out, to draw conclusions, to become skilful in solving real-life problems. The right approach to social studies issues, religious and moral questions, and historical events etc., includes classroom work that promotes critical and independent thinking, to distinguish between truth and falsehood, to glean reality from propaganda, to question the status quo, to evaluate all types of knowledge, and to seek new knowledge.

One notes that the achievement of these objectives interrelates with other aims and curricular activities. The aim of helping people become autonomous, critical thinkers can hardly be achieved if they are unable to read or communicate efficiently. The attainment of curricular objectives in one area is a precondition for the other. Consequently, the five aims as presented here are

differentiated for the purpose of comprehension, and not because they should be regarded separately. Indeed, they are inter-dependent and mutually supporting.

PEOPLE AS SOCIAL BEINGS

Modern societies spend a considerable amount of taxpayers' money on education with the aim of shaping future citizens who respect the laws, contribute to the stability, and ensure the social well-being of their communities. This aim is not a modern phenomenon. Its roots are found in primitive as well as in sophisticated societies, which, through a mixture of incentives and censure, acculturate their members to conform with established laws, mores and conventions. When Socrates broke this rule, his fellow Greek citizens condemned him to death 'for corrupting youths'. He had encouraged his students to question accepted beliefs and thus threatened the harmony of the community.

The dilemma whether schools should serve as the perpetrators of traditional values, or whether they should act as the catalyst of social change, can be an acute one for educators. Society charges the school with the seemingly conflicting tasks of rendering students intellectually autonomous and independent thinkers, and at the same time, coaching them to accept and conform with societal norms. Curriculum designers and teachers have to grapple continuously with this challenge as it surfaces in the various aspects of the officially stated and the hidden curriculum.

The teaching of Religion, Social Studies, History, Geography, Civics and Media Education strive to bridge the two seemingly opposing ends. These subjects aim, first to acquaint students with the beliefs, the conduct, the institutions, and the structures that exist in their society (and at a more advanced stage, those operating in other societies). Once students understand the underlying principles which govern the values, attitudes and behaviours permeating their culture, they will be in a better position to analyse, assess, criticize and, if necessary attempt to alter, the prevailing religious, social and economic structures and conditions regulating their lives.

A balanced and integrated curriculum contributes significantly towards the formation of a moral and socially responsible 'whole person'. Teachers design learning situations which equip students

to acquire knowledge, record their experiences, explore their emotions and relationships, evaluate their attitudes, diagnose their values, question their beliefs, examine their morals, test their behaviour at home, at school, at play and at communal gatherings.   Students can be introduced to real or simulated situations where they learn about, and analyse the religious, social, political and economic structure of society; where they compare their customs, folklore and culture with those of other nations.   They can investigate how geographical, environmental and historical factors interact to create conditions that have direct impact on their own lives and on the lives of those inhabiting neighbouring or distant countries. Students can reinforce their social and collegiate spirit by working and collaborating with other people, perhaps from a different social, economic, religious or ethnic background.   They learn about communal benefits and responsibilities when they seek support from their colleagues, and when they help fellow students who are in difficulty.   They are encouraged to exploit every occasion to express and communicate their values, beliefs, opinions and convictions, and at the same time to demonstrate that they are able to tolerate and listen to those who might think differently.   Once they understand their own social milieu, they can compare and contrast, in order to incorporate and assimilate into their own, the beneficial aspects of the lives of others. By helping students to understand themselves and their role in their own society, the school enables them to appreciate the role of others, even when the latter's opinions, morals, attitudes and behaviour differ considerably.   The school curriculum can serve as a most powerful agent to promote social harmony not only in one's community, but also in 'the global village'.

PEOPLE AS CREATIVE INDIVIDUALS

From the builders of the prehistoric temples and the cave dwellers at the Hypogeum to the designers of the latest architectural masterpieces and the inhabitants of a modest housing estate, members of Maltese society, like their counterparts elsewhere, provide ample evidence that people strive to embellish their surroundings and to improve their quality of life. They achieve this goal through a variety of artistic media: tactile, visual, audio,

and literary. The level of creative awareness contrasts between one society and another; levels of aesthetic appreciation vary between sectors of the same society depending on the degree of artistic sophistication. However, different societies have a common desire to preserve, protect and enhance what they regard as aesthetically beautiful and artistically valuable.

Society expects schools to develop in students an understanding and an appreciation of its artistic, cultural, historical and social heritage: its paintings, sculptures, music, theatre, literature, film, the constructed and natural environment, as well as its folklore, customs, and traditions. In this respect, therefore, heritage extends beyond historical buildings and monuments, and the contents of libraries and museums. For example, if the Maltese have a social disposition to be hospitable, to be charitable, to cherish the democratic ideal, these too form part of their heritage. Society expects the curriculum to enhance these attributes among its young.

The development of cultured and artistically sensitive persons cannot be restricted to a rear-view mirror mentality, simply looking at the past and the heritage bequeathed by one's ancestors. The curriculum should also be forward looking, and strive to encourage people to be creative, so as to increase and enhance the artistic and cultural riches for the benefit of generations to come.

Activities more closely related to this curriculum aim are the teaching of Music, Movement, Art, Craft and Design, Theatre and Drama, Prose and Poetry, Physical Education and Sports. Practice in the various art forms enables students to develop their imagination and expand their capacity for creative thought and action. The curriculum provides them with opportunities to express their feelings and experiences, including those that emerge from their cultural practices, traditions, and encounters with the environment. It encourages the refinement of physical and perceptual skills, talents that are reinforced with the development of creative ideas and the confidence to act upon them. Furthermore, the recording and transmitting of the various art forms serve as live and tangible media of communication that integrate a variety of curricular aims and objectives. For example, specific curricular projects can bring together the various talents that students possess, such as clarity of thinking and execution,

creative verbal, visual and spatial expressions, collaborative effort, refined application of intellectual and physical skills, as well as imaginative and collegiate management. The diffusion and exchange of such projects serve not only the artistic aspects of the curriculum but the other aims as well.

It serves, for instance, to combat the restricted mentality that sees one's attributes and national heritage from an exclusively parochial view-point, rather than from an international perspective. In this perspective everyone's talents are regarded as universal gifts that make people appreciate each other's talents and see the good and beautiful around them.

PEOPLE AS WORKERS

Some educators tend to play down the vocational role of education, to the extent that a few malign this aspect of formal schooling as a thwarting of the educational ideal. The general public tends to think otherwise; many parents, at least in Malta, judge the quality of a school in terms of its potential contribution towards their children's future employment. A good school, they argue, helps students to acquire the right academic qualifications which in turn lead to enhanced job openings. One cannot endorse such a narrow view of schools and education since earning one's living and being economically self-supporting is only one facet of 'the whole person'. It is also true, however, that the rhetoric on ideals in education and the aims of the school curriculum, can be blatantly oblivious of the genuine concerns that parents have about their children's chances of obtaining a secure and rewarding job. Although most societies do not advocate the purely utilitarian function of education, people expect schools to contribute towards students' future vocational needs and the community's economic well-being.

In Malta none of the subjects offered at the primary and early secondary levels are directed specifically towards vocational education, since such subjects as Accountancy, Technical Drawing and those offered in the Trade Schools are introduced in the third year of secondary education. However, most of the subjects taught, even at the earliest stages, help students to acquire competencies which enable them to attain occupational self-fulfilment and financial security later on in life. A cursory

look at the curriculum demonstrates that it serves as a powerful vehicle towards this end. Its most obvious contributions are those which make students literate and numerate, which render them able to seek out and use knowledge, to communicate effectively, to develop manual skills, to speak one or more foreign languages. The understanding of scientific principles, familiarity with technical terms, ability to engage in laboratory work, practice in a rational approach to problem solving, etc., all contribute further towards the transformation of students into productive and economically self-supporting workers. Academic achievement and certification at the various levels of the educational system, together with specific vocational education either at the late secondary or at the post-secondary level provide students with the necessary credentials to apply for and obtain jobs.

The curriculum moulds young people into future workers in less obvious ways. From the earliest stages of the school system, the curriculum contains structured activities aimed to inculcate students with a desired work ethic. Class projects and group work promote a collaborative and collegiate effort; so does the sharing of skills, tools and materials, the exchange of views, and the division of labour according to one's inclinations and abilities. School sports and games that promote team work and encourage a team spirit not only cater for the physical fitness of the individual, but also promote cooperative effort.

The 'hidden' or unstated curriculum can instill in students working methods and attitudes which they will carry on with them in adult life. On one hand, these could be positive attitudes such as solidarity with fellow students or workers, resistance against the temptation to exploit others, defence against being exploited by others. They could be negative attitudes such as antagonism and rivalry which are spurred on by excessive competition and the 'obsession of collecting diplomas' so characteristic of the academic rat-race. In any case, the school culture imitates and contributes significantly to the adopted work ethic of one's society. Thus, for example, teachers insist on complete and accurate, rather than haphazard and careless work, on punctuality, on working against a schedule and sticking to one's commitments. Schools reward sustained effort and good results, perseverance in the face of difficulties, initiative and resourcefulness in problem solving. Conversely, they penalize

incomplete and shoddy work, discourage unfair competition, cheating and procrastination. The stated curriculum speaks of the promotion of these attitudes under the heading: 'Formation of Character'. But frequently these attitudes emerge unobtrusively, and more pervasively in the hidden curriculum to reflect many of the occupational conditions which people face at the work-place.

The curriculum can imbue students with vocational attitudes which they will retain in adult life such as positive orientation towards technological innovations and towards frequent job mobility which have become normal conditions in industrialized countries. School and curricular policy, even at the earliest stages of education, can turn students into workaholics or, in the wrong environment, can induce them to become work-shy. Students, therefore, can be educated to develop healthy attitudes which place the value of work in its real perspective alongside other concerns in life, including the proper use of leisure time.

As stated earlier, there is considerable controversy about whether schools should directly or indirectly prepare students for the world of work. The Functionalist paradigm considers schools as major and valuable contributors towards the formation of a productive and well-adjusted work-force. Neo-Marxists and Radical educators, on the other hand, accuse conventional schools of perpetrating mentalities and practices that encourage indoctrination and exploitation of workers. Teachers cannot evade these issues. They have to examine the extent to which their teaching liberates and emancipates or constrains and manipulates their student's intellectual, social, moral and sometimes, physical development.

TEACHING AND LEARNING METHODS

The pursuit of the ideal 'educating the whole person' commits teachers to consider two aspects of the curriculum. One is the content that has to be taught and learnt, and which can be gleaned from the objectives contained within the educational aims identified above. The other relates to the methods, or the pedagogy applied in schools to cover such content. Therefore, having identified what students ought to learn, one has to examine the most appropriate instructional processes teachers ought to apply.

At this point, one can indulge in the argument as to whether the curriculum should be student-centred or subject-centred or society-centred. The debate raged on in the sixties and seventies; now most educators agree that the curriculum should contain elements of all three perspectives. Teachers have to teach students a certain amount of subject-content to enable them to live satisfactorily in society. Teaching modes that cater for these perspectives must satisfy at least three main conditions.

First, the instructional approach has to conform with, and reinforce the intended learning objectives. For example, if the learning objective and its related subject-content aim to make students autonomous and critical thinkers, the instructional process cannot adopt a doctrinaire or propagandist approach since the educational aims and the teaching mode would be incompatible. Similarly, spoon feeding, inert memory work, and repetitive exercises cannot be associated with problem-solving learning techniques. In the same vein, a school that is committed to promote democratic principles and civic awareness has to provide a learning environment where all students are encouraged to express their ideas freely without fear of intimidation or retribution. Teachers of communication studies cannot act as mini-demagogues: they have to listen, engage in dialogue and consider seriously what their students have to say, not simply pay lip-service to communication theories and limit themselves to dull paper exercises of little or no relevance to students' concerns.

The second condition views teaching and learning as a dynamic process which requires careful planning and delivery if it is to reach the stated aims and objectives. Haphazard, ad hoc instructional sessions rarely satisfy this condition since they cannot cope adequately with the complex and interactive exchange that evolves continuously between teachers and their students. Careful instructional planning takes into account the learners' needs, aptitudes and limitations. It includes the major learning points to be covered, their logical progression from the easiest to the most difficult. It contains the use of examples which illustrate the principle concepts and the relationships between them. Proper lesson design incorporates the imaginative utilization of textbooks, teaching aids, supportive classroom exercises and homework. A well-planned lesson ensures that steps are taken to test whether learning has actually taken place, and provides for any revision or

remedial action that might be necessary when teachers discover that the quality of learning is deficient.

The third condition requires that the teaching process leads to the type of learning that has long-term, preferably permanent value. This implies that the instructional process does not become an end in itself. Besides being pleasant and enjoyable, and therefore a rewarding experience, teaching should transcend the classroom environment. For example, if students learn a number of new words, the learning should be for life and not limited to the vocabulary test next morning, the end of term test, or the final examination. If through a history lesson or a literature session, students learn a specific concept, or develop attitudes towards a particular issue, they should be able to transfer what they learn, to make connections with other events and other issues. This type of learning will live on long after the end of the scholastic year, or the scholastic life-span. Alfred North Whitehead wrote that students who have had a true and complete education can throw away their books when they reach the end of their schooling. They will not need them, for even if they do not recall all the minute details, they will still retain the ideas and the concepts.

Teachers who, through the curriculum, can create a learning environment with such results will contribute in a significant way to bring out the latent qualities of their students, and at the same time to satisfy society's desire of helping students become 'full and complete persons'.