

### Prioritising "learning to know"

**D**ebate and reflection on educational courses basically come down to debate and reflection on the sort of knowledge and skills we want young people to have. Approaches are diversified and sometimes contradictory, and proposals are naturally varied.

The current period is marked by a spread of ideas ranging from the search for encyclopaedic knowledge to training the mind, and from the development of a critical mind to nationalist conformism – to mention but a few. Every period has had its own priorities reflecting the political, economic and social concerns of the day, and the outcome has frequently been that new courses have been added to earlier ones that had been prioritised according to needs (and possibly fashions) in each of our societies.

It is not a new debate. As long ago as the 16th century, the French writer Montaigne articulated the issue of education in words that ring as true today as they ever have: 'a well made head,' he said, 'is worth more than a full one'. All democratic countries believe, quite rightly, that a 'well made head' is greatly preferable to a 'full one'. Exponential increase in knowledge simply confirms that techniques for accessing information are much more important than knowledge itself, particularly in scientific fields, since knowledge rapidly becomes obsolete as a result of scientific and technological advances.

More recently, the report to UNESCO of the International Commission on Education for the Twenty-first Century, chaired by former Commission President Jacques Delors, argues that 'learning to know' is one of the four basic pillars of learning. There is no question that basic knowledge of oral expression, numeracy and reading are vital, but techniques for accessing databanks have become even more so. Although a matter of regret for many, the education system no longer has a monopoly on knowledge: we learn at school, but we also learn outside. It is therefore important for education to give young people not only the tools to access knowledge outside school, but also those required to link the knowledge acquired both at school and outside.



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This leads us to the key question: 'What should we be teaching young people?' Courses are no more than incomplete vectors for accessing knowledge and behaviour, and 'the school of life' is another framework for learning that is becoming more and more important through the concept of 'life-long learning'.

These developments pose the question of the role and training of teachers in new terms. Their responsibilities are growing, and they certainly have to continue acquiring new knowledge, but above all they must teach young people to organise their knowledge, to arrange it in hierarchical form, to establish links within it, and to acquire more knowledge.

There is no doubt that an inter-disciplinary approach to education more accurately reflects the concerns of our societies nowadays. The days of ready-made – let alone scientific – truths are gone. 'Learning to know' now has priority. Public education can only gain credibility as a result. ♦

### CONTENTS

Introduction	12-13
Teaching history in Israel	14
Curriculum 2005 in South Africa	15
Values and Ethics	16-17
Rebooting education in Asia	18-19
Internet in schools	20
Environment	21
Roles of teachers	22

# Curriculum – trends and development

Education is usually described as a process whereby students receive knowledge and skills. One crucial question is: what knowledge and what skills? Almost equally important is: who makes these decisions and how should these matters be regulated in an educational system? These questions are often referred to as curriculum.

## What do we mean by curriculum?

The concept of curriculum can be used in two different ways. One concept generally refers to everything students learn at school. Another is the educational plan laid down in some type of official document defining the content of education in a country.

These “curriculum documents” could be of different types. They could be included in national legislation or they could be a separate document issued by the government, the ministry of education or another institution authorised to make decisions on education policy.

## The structure of curriculum

There can be two extreme types of curriculum. On the one hand, the very detailed curriculum prescribes what the teacher is supposed to teach, when to teach, how to teach and in which order to teach. In such a system the teacher has no choice but to use an official textbook, which has been approved by the authorities. On the other hand, the more general curriculum only outlines educational aims and objectives. The teacher, or in some cases the school or the local school board, is left with the decision as to how to achieve these objectives. Based on the general aims and objectives the teacher will decide what areas are most important to include in the teaching, which method to use and in which order things should be taught.

In most countries, the curriculum is somewhere in between these two. Where the curriculum is stating only aims and objectives there seems to be a growing concern about monitoring that these aims and objectives are achieved. This has led to increased interest in evaluation. Evaluation is often organised through different types of tests. In some respects that could also be described as a method of indirectly establishing a curriculum.

## What to include in the curriculum?

One of the major problems confronting education today is how to select what is supposed to be covered by the curriculum. There are increasing demands from many different actors in society to add new subjects to the curriculum. There is also an enormous growth of knowledge in the world. To replace one subject with another subject in the curriculum is always difficult and controversial. The number of hours the students can spend in school are limited, as well as the number of hours they can be expected to use for homework during their free time. This

puts a constraint on the curriculum. It is not possible to keep on adding new subjects or new parts of a subject to the curriculum without considering how to deal with the matters already integrated in the curriculum and there are limits for what the school can do.

There is no simple answer to the question how to add new knowledge to the curriculum. Probably the answer has to combine at least three elements:

- A critical continuous revision of the curriculum (this has sometimes been referred to as “rolling curriculum reforms”).
- More emphasis not on the isolated facts, but on the knowledge and skills to learn, to find information, to process information and to be curious (what is referred to as learning to learn above).
- Emphasising the professional freedom of the teacher to judge what programme and which methods are most appropriate for a class to attain general aims and objectives.

## The content of curriculum

Society and the labour market are undergoing rapid changes. Globalisation, the introduction of new technologies, changes in work organisation, and the development and dissemination of information are important features of these changes affecting education. In this context, important relevant questions for the curriculum are: what new qualifications are needed for the labour market in modern society and what effects new technologies will have on the skills needed in professional life?

Quality education is to a large extent a matter of doing the right thing, which means that education must face up to the changes taking place in society. Important problems such as environmental problems, AIDS/HIV, violence, and the growing threat to democracy caused by increasing racism and xenophobia, must be addressed in the education given to the students. Finding positive and comprehensive methods of improving the work on these subjects will most certainly contribute to increasing the quality of education.

One new challenge demanding new educational approaches is the multicultural society. How can everyone be guaranteed an adequate education? How can children from minority groups be given the necessary support to learn the language spoken by the majority in society? How can schools deal with education in the minorities' own language and culture? How can we

# INTRODUCTION

teach children and young people to respect and appreciate cultural diversity? How can the coexistence of different cultures be used as an enrichment of the schools?

## Trends

Concerning new subjects introduced to the curriculum or new approaches, several trends can be observed, some of which even contradictory.

Back to basics: A number of studies in both industrial and developing countries have shown that large numbers of students have insufficient basic skills, such as reading and fundamental arithmetics. From this perspective, many governments have emphasised the need to improve the teaching related to these skills. Schools and teachers have been requested to pay more attention to teaching basic skills and to seeing that students get appropriate time to learn and master those skills.

Languages: As a result of the globalisation, the learning of foreign languages has been more and more emphasised in industrialised countries. There is a tendency to start learning the first foreign language earlier. In the past foreign languages were often introduced at the secondary level, but there is now a clear tendency to move the introduction of a first foreign language forward to primary education, and sometimes even to the first grades of primary education. Another issue is the language of instruction. In many developing countries the former colonial languages have played a major part in the education system from primary education onwards. The tendency is now to replace these languages with the local one during the first school years and to gradually introduce a second language later on.

Mathematics, Sciences and New Technologies: The fast development of new technologies has triggered a debate on the need to improve education in mathematics and sciences. This debate also concerns the use of new technologies in the classroom. The development of information technology must be considered in relation to the curriculum. Using new technologies has two dimensions: first, learning to use them and second, using them as a tool in the education. To what extent should IT be part of other subjects or introduced as a separate subject? How can the use of new technologies affect the syllabus in different subjects?

Learning to learn: Life-long learning has recently been one of the most debated new orientations in education. Obviously this approach puts education in a new context. If education is supposed to prepare young people for a society where you always have to be ready to learn and relearn, to learn how to learn becomes a central objective in itself. Learning to learn must be to learn to reason and how to seek and use information. Another important aspect is the curiosity

and the will to learn. Critical thinking is another facet that could also be added to this approach.

Values: There has been a growing concern about democracy in society. Some countries are in a difficult transitional phase establishing or re-establishing democracy, while other countries recognise the need to defend and improve it. Alarming reports concerning right extremism and racism among students have forced governments to consider how education can actively contribute to the enhancement of democracy. From this perspective there is a need to see how education, both in terms of pedagogical methods and content, can contribute to the development of democratic values among students.

## Importance for teachers

Obviously the development of curriculum has many implications for teachers. What subjects to teach and what to emphasise will have an impact on teachers' qualifications. A highly structured curriculum defining in detail what is to be taught will leave less space for the teacher to make a judgement about the use of pedagogical methods and other matters related to work in the classroom. A general curriculum stating aims and objectives will on the other hand give more professional freedom to the teacher. From a teachers' perspective there are good reasons to argue for a professional autonomy allowing the teacher to determine the class programme and decide how to attain agreed educational objectives.

There is a strong case for teacher organisations to be involved in the discussion on curriculum matters. It should be borne in mind that teachers as stakeholders have specific interests and qualifications to appraise these changes:

- The working conditions of teachers correlate highly with the curriculum.
- Teachers have far-reaching knowledge and experience of the needs stemming from the situation and life in educational institutions.
- No curriculum change can be efficient without the support of and active partnership with the personnel who will ultimately be responsible for its implementation. ♦



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## ISRAEL

## The Battle over Israeli History: an Intellectual and Moral Challenge for Teachers and Educators



Mid-1999, new history textbooks, revealing a less glorious past, were in the heart of an intense public debate in Israel.

The uproar was quite unexpected, as were the dimensions to which it grew. At the heart of the debate was a new approach to the teaching of the history of Israel, which questioned the accepted myths of Zionism, placing them under the scrutiny of factual examination, whilst voicing and legitimizing the version expressed by Israeli Arabs.

The controversy began in mid-1999, when the textbooks for middle school and high school first presented a historical picture that differed somewhat from the accepted one describing the Zionist struggle over Eretz Israel. The authors are relatively young historians, who hold a liberal, democratic world-view and are committed to the peace and reconciliation process between the State of Israel and the Arab world. Furthermore, in the current spirit of pluralism and multi-cultural trends, the authors wanted to avoid presenting a single, hegemonic and ethnocentric conception, and preferred an outlook which comprises both a combination of a critical dialogue with social myths and cultural conventions, and an openness to different narratives and alternative interpretations as they are expressed by minority groups in the population.

The result is manifest on several levels. First of all, in contrast with the prevalent attitude in old history books, viz., of glorifying the deeds of the Jewish public and denying the legitimacy of the deeds of the Arab public, the new books embody the humanistic approach of adherence to the equality of the value of man and of the value of cultural communities. Secondly, these books call into question the prevailing version that, on all fronts and in all situations, the Jewish army was significantly outnumbered, and that its victory was therefore clear proof of the qualitative

superiority of the Jewish population over the Arab population. Thirdly, the new books presented in a clear way what many preferred to repress: that during the War of Independence some of Israel's Arabs indeed fled of their own will, but many were forcefully driven out of their homes by the Israeli army. At the same time, unlike history books that are considered post-Zionist, these books – the ones which provoked the controversy – never doubted the validity of Zionism nor accused the Israeli government of that period, neither of a planned mass deportation of Israel's Arab population nor, definitely, of an attempted mass murder or ethnic purge.

These new characteristics of the history textbooks gave rise to two types of debate within the Israeli public: One is on the factual level, and is concerned with the degree of truth or objectivity of the description of historic events. The other is on an ideological level, and deals with the possible offending of the patriotic feelings and motivation of Israel's youth when faced with a historic picture which is of less mythic and glorious proportions than they had been raised on.

Keeping the above in mind, the question that arises is, what should be the proper stand taken by teachers and educators in Israel? As individuals and citizens, teachers obviously have their own personal opinion and outlook. At the same time, as members of the education profession, teachers have a special value commitment, in the spirit of universal human rights and children's rights and in the spirit of the ethical code of the teaching profession. In this context, and especially in view of the fact that Israel's teachers and students comprise both Jews and Arabs, the supreme commitment of teachers of the history of Israel should be to the intellectual values of rational and critical enquiry and to the moral values of human equality, dignity and peaceful co-existence. In other words, since Israel is a democratic, pluralistic and multi-cultural society, its educational system is committed, first and foremost, to pan-human universal values of science and morality. Alongside of which it can, of course, also nurture and encourage national and ideological values – on condition that those do not contradict basic, pan-humanistic values. ♦

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## Target: Curriculum 2005

Since 1994, the South African education system is in the process of radical transformation after decades of apartheid education, used as a tool for the enslavement of black people.



The apartheid state managed an education system that was characterized by racism, sexism and ethnocentrism. The gross inequalities in funding of the education and training system as well as the severe rationalisation of the access to education on a racial and ethnic basis resulted in millions of blacks having little or no access to education. This had a devastating impact on the social and economic development of the country. It is little wonder that South Africa's schools, colleges and universities were transformed into battlegrounds against apartheid.

The advent of the new democratic South Africa ushered in a host of progressive legislation. A new law on education<sup>1</sup> was adopted in the spirit of the Reconstruction and Development Programme. Under apartheid the curriculum was used to reinforce racial ideology and control and discouraged teachers and learners from developing initiative and critical thinking. It was therefore imperative that the new curriculum be restructured to reflect and promote the values underlying transformation in South Africa.

South Africa with its human rights orientated constitution guarantees equality and non discrimination, cultural freedom and diversity, the right to basic education for all, and equal access to educational institutions.

In the new curriculum, emphasis is also placed on an integrated approach. Furthermore, all South Africans should have access to life long learning which would empower them to participate in an ever-changing competitive global world. The changes are aimed at elevating the skills of the learner.

This necessitated the adoption of a new approach encapsulated in the concept, Transformational Outcome-Based Education (OBE). The adoption of OBE involved a lengthy consultative process with all major stakeholders. This is being implemented in institutions of learning under the policy framework entitled Curriculum 2005.

OBE regards learning as an interactive process between and among educators and learners. It is learner centered and learner paced, with the teacher playing the role of facilitator in the teaching and learning process. The focus is on knowledge, skills, values and attitudes, i.e. what the learner should know and be able to do/apply in the real world.

One of the principles for the transformation of education is that the state's resources be equitably used to provide the same quality of learning opportunities for all citizens. However, the new economic policy<sup>2</sup> (GEAR), pursued by the new government has made the realization of this principle extremely difficult. The union movement led by COSATU<sup>3</sup> has criticized GEAR on its failure to deliver on the social agenda especially in education and health. The Teachers Union SADTU has been critical of the decline in spending that has been a direct consequence of GEAR.

SADTU has endorsed OBE and is committed to its success. However, as the National department gears itself to evaluate the current status of Curriculum 2005, the situation unfolding in many schools is cause for concern.

SADTU has observed that provincial departments lack the capacity to effectively deliver Curriculum 2005 to both teachers and learners. The absence of a culture of service and delivery within the education bureaucracy has forced some schools to abandon implementation of Curriculum 2005.

The lack of resources and conservative fiscal policy combined to produce falling education budgets (in real terms) since 1996. As a result resources needed to redress past inequalities have been limited, so that severe infra-structural problems persist. Lack of resources has also meant inadequate preparation - in terms of training and materials - to support the new curriculum.

SADTU views the current review process as crucial; therefore we have encouraged the National Department to ensure that all stakeholders are part of the process so that intervention for success of Curriculum 2005 is a collaborative effort that addresses the concerns of all stakeholders. ♦

The values and principles that underpin transformation of education and training are as follows:

- Education and training is a basic human right
- All to have access to life long learning
- Open access to education and training for all
- Redress of education inequalities
- Realization of democracy, liberty, equality and justice
- Curriculum to promote the values underlying the democratic process and the declaration of fundamental rights in the constitution and encourage independent and critical thought
- Principle of democratic governance be reflected in every level of the system
- Resources be deployed according to the principle of equity, coupled with improvement in quality of education
- Accountability, sustainability, efficiency and productivity



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# A Framework for Teaching Values and Ethics

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Character education is one of the largest international educational reform movements today.

Practitioners are growing impatient with the discussions and are more interested in taking action by creating schools that are caring, civil, and challenging; challenging both academically and behaviorally. Values enter into discussions over the curriculum, because school-based educators are responding to the public's plea for safe, violence-free schools, and for a plan to infuse universal values that are the "glue" to living in a democracy. As Delattre<sup>1</sup> stated, many educators, parents, and organizations have concluded that children and youth will either learn the "habits of morality" or they may learn the negative "habits of the streets."

Few, if any, P-12 educators worry about whether their character education program is viewed as "conservative or liberal," an issue that emerges continuously in the literature. They worry about the character development and ethical behavior of children and youth. They worry about how to help students to be good academically, good socially, good personally, and ultimately good citizens. DeRoche and Williams<sup>2</sup> assert that character education in school occurs when children have opportunities to clarify, reflect, reason, discuss, debate, read, apply, empathize, analyze, evaluate, and practice. Values are also learned through children modeling the behaviors they see adults following.

P-12 educators know that the reports concerning violence in schools, racism, and extremist behavior among youth occur more and more frequently in the news. They are looking for strategic help on: how to get a character education program started or how to improve the one they have; how to select and use curriculum materials and apply effective teaching strategies; how to build partnerships; how to evaluate the program development process and anticipated outcomes; and how to communicate results to parents and the public. The comprehensive character education framework<sup>3</sup> summarized here is designed to provide leadership for those who want to either create a character education program or improve a program they now have.

#### A Comprehensive Character Education Framework

After analyzing how successful character education programs are organized, reviewing the literature, and having conversations with specialists and practitioners, a framework emerged that includes all of the elements displayed in Figure 1. The framework is based on several premises: (1) stakeholders have effectively organized themselves (community or school-site council) for implementing the components; (2) character education is seen as a community affair, with schools taking the

lead but not expected to do it alone; and (3) the framework is a template to be modified and revised to meet local needs.

#### Components of the Framework

**Expectations and Consensus:** The sooner a character education council addresses the question of expectations, the better the program's focus and the clearer will be the expected outcomes. To answer the question, "What are the expectations for the character education program?" requires extensive conversations. It is through these conversations that consensus on core values emerge. This leads to a discussion of how values will be incorporated into the character education program. The list of expectations helps to "drive" the implementation and evaluation of the program.

**Leadership/mission:** Children learn values all the time, whether or not the adults around them are aware of it. Schools and communities should be places where children learn the values, attitudes, skills, and knowledge that they need to be good human beings, good citizens, and successful in their career choices. The mission must be supported by a school leader, usually the principal, who can articulate the vision, promote it, and rally support from stakeholders for it.

**Climate:** School climate/culture is a critical factor in the success of a character education program. Observations and conversations with teachers, parents, and administrators confirm that a school's climate reflects what students are learning through the 'hidden' curriculum. The hidden curriculum consists of the events, situations, and incidences that occur on a regular basis that may be planned or unplanned. The school climate includes rules and procedures, assemblies and honors, and the working relationships between staff, faculty, parents, and administrators. School climate is a major factor affecting a program's success, because it can negate the effects of any formal program. Educators must pay attention to the values students learn from the hidden curriculum, formal curriculum, and co-curricular activities.

**Curriculum and Co-curricular Activities:** Although it is not a separate element in the comprehensive framework, it is important to note that teachers need access to the wide-variety of curriculum materials and sample activities that teach the consensus values in the classroom and extend that learning beyond formal lessons.

**Implementation criteria:** A set of criteria (11C's) that are the building blocks for implementing a character education program were distilled from a review of effective programs. The 11C's are: caring, collaboration,

Editors' note: Due to technical constraints Mrs Williams contribution had to be slightly shortened. A full version of her article can be consulted on [http://www.ei-ie.org/educ/english/eedmag6\\_2.htm](http://www.ei-ie.org/educ/english/eedmag6_2.htm)

# VALUES IN EDUCATION

## The Comprehensive Framework

Ed DeRoche and Mary Williams

commitment, courage, change, connections, coherence, consensus, communication, culture, and critical. Standards: Six sets of standards have been created to guide educators in all phases of the character education program: i.e., program standards, implementation standards, curriculum standards, teaching standards, partnership standards, and assessment standards. For example, educators use the program standards to guide planning the character education program and to help stakeholders make informed decisions.

**Training – Instruction and Staff Development:** According to Tom<sup>4</sup>, teaching is essentially a moral craft and all interactions between students and teachers contain moral elements. Teachers need to be aware of this fact and accept their responsibility as character educators. The instructional strategies that make a difference to students in how well they learn the core values are the ones that facilitate and guide students from analysis to application; giving them opportunities to put their knowledge of the values into practice. In the process, students build self-esteem and become independent learners as they learn the values. Six essential instructional principles<sup>5</sup> can be used in training educators to insure that students learn academic content and the values that permeate the character education program: (1) create a community of learners in classrooms; (2) be hardworking and really care about student learning; (3) create a climate of mutual trust and respect (an ethic of care); (4) create a collaborative/supportive learning environment; (5) act consistently according to stated intentions; and, (6) model the behavior students are expected to follow.

The implementation plan must include ongoing training for teachers and opportunities for them to reflect on their efforts. Teachers need time to discuss progress; to reflect upon the values and their infusion into the formal curriculum, and to ask questions about which strategies are working and which are not.

**Partnerships:** Parents (care-giving adults) are a child's first teachers and moral educators. Character education participants should know that parent involvement in the education of their children has been found to positively influence their academic achievement and attitudes. Reviews have shown that when parents are involved in school, children get better grades, have more positive attitudes toward school and work, have higher expectations, and exhibit more positive behaviors.

Beyond parents, partnerships with individuals and organizations interested in character education are invaluable. Together, teachers, parents, and community

members can have a greater impact on engaging children in learning and practicing the consensus values if they work together. John Gardner<sup>6</sup> reminds us that "the community should maintain, nurture, and foster support, trust, cooperation, respect, and integrity among its members." The school staff should build effective partnerships with parents and the community so that the expectations of the character education program are likely to be reached.

**Resources:** Comprehensive character education programs will benefit from the rich variety of resources currently available. Many resources (programs, curriculum materials, and assessment instruments) can be found at the Character Education Partnership's (CEP) clearinghouse<sup>7</sup>. Networking with others that are implementing character education programs can also be a great help, and you can join an international discussion regarding values, ethics, and citizenship on the CEP website as well.

**Assessment/Audit:** Each school can organize for assessment by creating a committee specifically for evaluation and assessment. The Evaluation Committee should spend time discussing purposes and responsibilities; centering around such questions as: "What are we expected to do? and How can we assess the intended outcomes of the program effectively and efficiently?" The Evaluation Committee should audit each aspect of the program and determine what is to be evaluated, when, where, and by whom. The committee should also study the research and look at how others are evaluating character education programs. In order for you to be able to report successes back to the parents and community, you will need to be systematic and thorough in gathering data to confirm the degree of your success at reaching program expectations/ objectives .

### Concluding Comments

From a conversation with Aristotle we can learn that the point of character education, "is to help cultivate in students those characteristics which they will need to flourish as adults, to live well and fare well, to lead happy lives." Using the comprehensive framework described here, P-12 educators can take a leadership role by moving past conversations and taking action on developing, implementing, and evaluating their character education program. ♦



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6 Gardner, JW (1992). Reinventing community. Carnegie Corporation Occasional Papers, New York: Carnegie Corporation, pp. 4-5.

7 To access the CEP database of programs, materials, resources, and assessment instruments go to their website [www.character.org](http://www.character.org). See DeRoche and Williams Educating hearts and minds: A comprehensive character education framework. (2nd Ed) for comprehensive and specific assessment checklists. Tigner, SS (April, 1990). "Moral education: A conversation with Aristotle," in Better Schools, Better Lives. Boston University, Center for the Advancement of Ethics and Character, p. 37.

# Rebooting Education in Asia

## SINGAPORE

### THE INFUSION OF THINKING SKILLS

In 1997 the Singapore Government announced its reform of the education system with the slogan "Thinking Schools, Learning Nation". The Singaporean Government has shown it means business by slashing the curriculum by up to 30% to allow for more time for *"the infusion of thinking skills"*.

*"Content can be acquired later, but students must be able to learn on their own. That is essential,"* says Thong Chee Hing, of the Ministry of Education. A committee of university and polytechnic teachers has been set up to make sure nothing vital to later study is dropped.

Examinations, the heart of Singapore's fiercely competitive education system, are being overhauled to reflect the new emphasis on creative independent learners. The university admissions system, for instance, will not rely solely on 'A' level results but instead *"make a more holistic evaluation of a person's potential"*.

In 1997 the Government also introduced an Information Technology (IT) masterplan for schools. By 2001 every teacher in every school will have received substantial training in using IT as a learning tool. By 2002 every school will have a ratio of one computer for every two students, allowing for up to 30% of the curriculum to be IT-based. While the emphasis is on mastering concepts and developing thinking skills, students by the time they leave secondary school are expected to have acquired minimum competencies in desk-top publishing, spreadsheet and database construction, and in sourcing information from CD ROMS and online resources.

With increasing globalisation brought about by the

## HONG KONG

### CONSIDERABLE EXTRA FUNDING FOR IT

*"When we talk about the information age, I think it can be taken as a synonym for 'We don't know what to do exactly,'"* says Dr Nancy Law, senior lecturer in curriculum studies at the University of Hong Kong. Like Singapore, however, Hong Kong is re-focusing its curriculum to give students computer skills and encourage independent life-long learning. Within a year of Hong Kong becoming a Special Administrative Region of China in 1997, a new five-year strategy Information Technology for Learning in a New Era had been introduced. The five-year plan which will be completed in 2002/03 aims to *"turn our schools into dynamic and innovative learning institutions where students can become motivated, inquisitive and creative learners"*.

The government has set a target of having 25% of the curriculum taught with the support of IT. Schools have been given flexibility in deciding how to achieve that



Internet, the Singapore government is concerned that the young will forget their roots. A new subject, National Education, has been introduced to "engender a shared sense of nationhood and understanding of how our past is relevant to our present and future." National education is being taught across all subjects in the curriculum.

Teachers in Singapore have seen their workloads grow alarmingly over the past few years.

They now work an average of 53 hours a week as a result of the government initiatives. The Singapore Teachers Union has done what it can to help teachers adjust by running workshops and seminars.

*"But Singapore cannot afford to slow down,"* says Swithun Lowe, STU Deputy General Secretary, *"so though there was an acceptance [by the Ministry of Education] that teachers are going to move at a different pace and we've got to allow for that, we took the view that change had to come, will come, and we had better learn how to manage it and take a positive mental attitude towards it."* ♦

target but the Education Department and Curriculum Development Council are "reviewing the existing curricula with a view to suggesting common teaching strategies using IT and those specific for individual curricula". Considerable extra funding has been set aside to support the new IT based curriculum. At a cost of more than \$2,880 million, the government is providing about 65,000 computers for primary and secondary schools, over 45,000 training places for teachers and Internet access for all schools. Software specifically designed for supporting the Hong Kong school curriculum is being developed in conjunction with educational software publishers. An IT pilot scheme in 10 primary and 10 secondary schools is underway to establish best practice for IT application in teaching and learning.

Hong Kong's curriculum changes, however, go deeper than just integrating IT into the curriculum. There is recognition that a highly competitive examination-driven education system may not be best way to equip students for the 21st century. Curriculum reform is starting with basic questions: *"What is worth learning? How*

EI recognises that in a limited number of industrialised countries, efforts have been made to provide school establishments with computers linked to the Internet, but that those in the developing countries clearly run up against the greatest difficulties in obtaining materials of this kind, and that as a result the unequal access to the new technologies will only increase the gap that already exists between the resources allocated to public education in the industrialised countries and in the developing countries; as well as inside of the country:

EI recalls that education is more than an act of transmitting simple facts, even with the new information technologies, and that genuine education implies the deployment of knowledge, attitudes and values that requires the presence of properly qualified teachers:

EI resolution on the Information Revolution and Education-Second World Congress, Washington D.C., July 1998



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*can students learn more effectively?"* Hong Kong educationalists want to develop a curriculum which is learner focused, recognises that students have multiple intelligences and different potentials, is flexible and diverse enough to suit the needs of students and different school contexts, and is developed in partnership with all sectors of society.

The curriculum is also being reformed to encourage lifelong learning and develop the whole person. In place of compartment-

talised and overcrowded school subjects, there will be a broad and balanced curriculum comprising Key Learning Area - Chinese, English, Mathematics, Science, Technology education, Personal, Social and Humanities education, Arts education and Physical education. The culture of over-reliance on text books will be changed through greater emphasis on inquiry learning and the introduction of diversified learning resources. It is also proposed to introduce a broad based art curriculum which will include different art forms to encourage creativity, imagination and aesthetic perception. How successful the curriculum reforms will be depends on the willingness of the community to accept that a well rounded education has more value than narrow academic success. That new focus will have to be reflected in changes to the examination system and admissions requirements for university before real change occurs in the classroom. ♦

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## JAPAN ZEST FOR LIVING

In Japan, the comprehensive five-day school week will start in 2002, according to the final report of the Curriculum Council. The Council has discussed switching teaching methods from a passive students' learning to one encouraging autonomous learning. The Council has also carefully selected curricula and considered helping schools develop educational activities that have room for growth so that each child can learn "zest for living."

From 2002, weekly school programs will be reduced by an average of two hours. School hours will be reduced to between 23 and 27 hours for primary students, 28 hours for junior high school students and 30 hours for high school students.

The workload imposed in certain subjects, such as Japanese language, mathematics and science, will be reduced. *"From places where teachers teach, schools will become places where students learn"*, explained the Chairman of the Curriculum Council, Shumon Miura.

A revision of the Japanese school curriculum by the Curriculum Council has not been conducted since 1987. Criticism of the education system has grown in recent years, particularly concerning the excessive workload imposed on students as a result of an extremely rigid and onerous system of schooling.

The Japan Teachers' Union welcomes the fact that the emphasis has been shifted from the traditional policy of cramming knowledge to the development of ways of learning. Comprehensive study has been introduced and room for elective study has been enlarged to encourage the development of "the ability for self-study and critical thinking"; and the importance of the roles of

and linkage among the school, the home and the community has been recognized.

With regard to educational evaluation the policy of *"reviewing the current system"* based on common evaluation methods and taking into consideration the stage of education and the characteristics of subjects for improvement has been announced to reform the traditional unitary criteria.

However, the JTU points out that the recommendation is far from sufficient to produce the *"zest for living"* and *"relaxation"* as emphasized by the Central Educational Deliberative Council. No mention has been made of reviewing teacher training and the text contains no response to meet the demands arising from global issues and social structure such as human rights, gender, peace, environment and internationalization.

At the 1998 EI World Congress, the JTU had suggested the adoption of a resolution called Societal Alienation of Children due to *"Kokoro-no-are"* (Emotional & Mental Stress)

The adopted EI resolution noted "The increasing alienation of children from societies due to *"Kokoro-no-are"*, in particular the increasing incidence in developed countries of teenage suicide, assault and murder of friends and teachers by young people". The resolution further underlined "[...] They suffer from stress caused by increasing academic expectations in rigid school structures and the absence of environments where they can recover from mental trauma or simply grow in a safe and relaxed atmosphere. [...] Teachers also suffer from enormous stress in these circumstances."

The resolution suggested to *"urge each affiliate to take action to address these problems through a review of the current education system with a view to ensuring appropriate environments for learning, the provision of health and counselling services and community support for families wherever necessary."* ♦

Noel O'Hare  
Journalist

## Better equipment, but curricula still lag behind

**Connected schools are not yet just around the corner in France, where the integration of Internet in schools remains very uneven and curricula are slow to adapt.**

Computer facilities have improved in France in recent years. In upper secondary schools the ratio of students to computers is now 7 to 1, up from 12 to 1, while it has gone from 26:1 to 17:1 in lower secondary schools. The same ratio has improved from 100:1 to 30:1 in primary schools. A France Télécom survey<sup>1</sup> reveals that teachers are increasingly relying on the Internet as an educational tool and appear more confident in their use of it. (76% of them have made use of their school's Internet connection, up from 61% in 1998.)

As for the curricula, there are still very few courses or classroom activities involving the Internet. Teachers have to manage on their own. The two-day training courses that are offered to them remain wholly inadequate. So it all comes down to motivation: while Internet buffs can prove very creative, others stubbornly refuse to use it. "To make students think, one needs a constructive educational approach. They will find information on their own instead of simply taking in the teacher's lecture. That's what we call the constructivist approach, as opposed to frontal pedagogy," explains Ulf Fredriksson, the Education Coordinator at Education International.

"We are about to move from 19th Century-style education, i.e. traditional classroom education, to a more adaptive approach involving, among other elements, important aspects of mutual pedagogy such as teamwork and the pooling of resources," explains Guy Pouzard, a chief inspector of schools in France. It is indeed necessary to understand the information, to process it, to know about its value and relevance, to be able to identify sources and especially to recreate relevant and reliable information. These are all functions about which children learn very little during their education.

Guy Pouzard has also reacted to criticism that children may suffer from the disappearance of teachers in a society in which schools often remain the last places where they can look up to figures of authority and knowledge, in light of decaying family structures. In his opinion, the use of new technologies is not a dehumanizing factor. "Even when educational methods change, teachers remain indispensable," avers Pouzard.

Numerical technologies have facilitated the access to sources for users who in turn can create information for others. Those users have thus grown from more or less well-informed consumers to consumers-producers. Since it can be demanding in terms of quality and relevance, the production of information must also involve

one's sense of responsibility. Hence it is essential to introduce these elements into the educational process.

Does transmitting knowledge without learning how to sort information not amount to thinking that the master's speech is flawless and that there is no alternative source of information to his? Does it not amount to unconsciously integrating the idea that certainty and perfection are the only important educational values? Why not admit that "transmission" is merely one part of information, and that the most important is not just what is transmitted but also, perhaps even more, what is understood?

### Internet at school

Below are some of the results of the survey conducted by France Télécom on relations between teachers and the Internet.

- Households in which at least one parent is a teacher are better equipped than other households are. In 1999, 38% of all teachers had an Internet connection at home (20% in 1998).
- The main reason for teachers not to use the Internet remains the lack of time (to the same extent as in 1998), while the lack of training is mentioned in only 20% of the cases (as opposed to 38% in 1998).
- Parents are increasingly under the impression that the Internet will be a necessary tool in their children's professional and everyday life (78% vs. 70% in 1998). Parents further believe that children should learn about the Internet at school (80%).
- Almost 50% of all parents believe that the Internet will help them communicate better with teachers.
- Teachers from all types of schools use the Net primarily for educational reasons (59%), gathering information to prepare courses.
- Teachers, especially in primary schools, also use the Net to share information with colleagues.
- 67% of all students in upper secondary schools use the Internet primarily to research information (63% of students in lower secondary schools, 39% of students in primary schools).
- 65% of students use the Internet in the classroom, mostly for IT (30%), history (26%), geography (25%), and French courses (24%).
- E-mail communication seems somewhat less popular, as only 10% of all teachers believe that activity should be developed further (as opposed to 22% in 1998). 75% of all students want to make greater use of e-mail services, down from 86% in 1998.
- 90% of all teachers deem the use of Internet a worthwhile activity for themselves (up from 63% in 1998), and 75% of them think browsing the Net is a good activity for students (up from 50% in 1998). ♦

<sup>1</sup> The survey was conducted in November 1999 by polling 400 teachers (from primary and secondary schools, both in general education and vocational education and training), 500 students (from secondary schools, both general and VET), and 600 parents. The initial survey was conducted in October 1998, using the same subjects. (Source: <http://www.edu.francetelecom.fr/actualites/Etudes/page.htm>)

# ENVIRONMENTAL EDUCATION

## Environmental problems are global concerns



One of the best ways of building values and awareness on environment is to educate the people, especially the young generation.

*"I believe that environmental studies must be a required class in elementary school, because the foundation of all things, such as tidiness or messiness, is laid in us when we are young children. Such classes must also be required in high school. Before entering adult life, a person must not only understand the importance of ecology and know how to behave in this big home called Earth, but also be well educated about the environment. As for the middle school, I believe that students already receive enough information in chemistry and biology. It is possible to teach these disciplines without connecting the scientific information to existing environmental problems. Students of the middle grades must be involved in real, practical projects, under the leadership of adults, that help them connect the information and the problems'", writes Mrs Konchenko, from the Blagoveshchensk High School No. 5 in Russia, on the website of the Wild Ones, a very interesting website suggesting classroom activities on environmental education.*

Internet is a great source of information in this field. More and more non-profit organisations develop environment-based teachers' packets, curriculum guides and supplementary curriculum to help young people develop an awareness of environmental issues, and the understanding and skill to take informed and effective action. Modules guide students through investigations of human health, resource consumption and environmental issues at their school/home/community and encourage taking action for improvement. Educators get general follow-up support and various formats of workshops and more in-depth, in-service support for schools and organisations. The professional organisation North American Association for Environmental Education (NAAEE) is developing standards for Environmental Education (EE) materials<sup>2</sup>.

In Europe, the Foundation for Environmental Education in Europe (FEEE)<sup>3</sup> has been actively promoting, since 1981, education about the environment and sustainable development. By the end of 1999, over 4,000 schools were undertaking EE projects.



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The Eco-Schools Programme<sup>4</sup> aims to raise students' awareness of environmental and sustainable development issues through classroom study of themes such as energy, water and waste. The whole school is involved in practical initiatives, for example, saving water, recycling materials and avoiding littering. Where environment and sustainable education is not part of the national/regional curriculum, recommendations are made as to how this can be incorporated. The Programme incorporates seven elements which any school can adopt as a methodology. These elements have been designed to be the core of the Eco-Schools process, yet the structure is flexible enough to be adopted in any country, and at any level of the schools' previous environmental achievements. Pupil involvement throughout the process is an integral and essential factor. ♦

Think globally, act locally

*"Environmental education is a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action".*

UNESCO Tbilisi Declaration, 1978.

Teachers who choose to teach environmental issues in their classrooms may come up against some opposition. More and more environmental education is being criticised by the religious right, free market environmentalists and the "wise-use" movement. Why are these groups so critical of environmental education? The religious right feels discussion of the environment will lessen interest in creationism, free market environmentalists think it will undermine industry, and "wise-users" fear their children are being taught that what they do for a living is bad.

1 L.N. Konchenko, Some Thoughts On Environmental Education, <http://www.thewildones.org/Curric/enved.html>

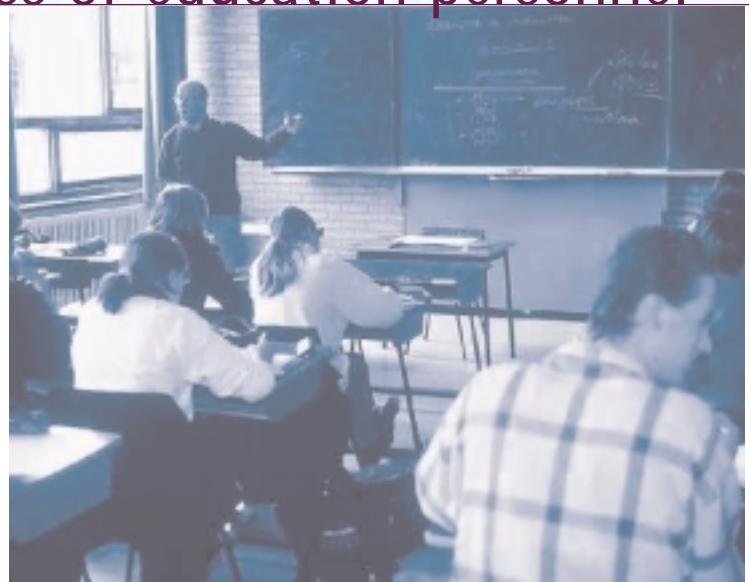
2 In 1990, the US Congress passed the National Environmental Education Act, encouraging partnerships and long-standing environmental education efforts among federal agencies, local education institutions, state agencies, non-profit organisations, and the private sector. <http://www.epa.org>

3 FEEE - Foundation for Environmental Education in Europe is a network of organisations working to promote environmental education in 22 European countries. Each member organisation undertakes individual projects and shares in common international efforts such as the Eco-Schools Programme. <http://www.feee.org/>

4 European Eco-Schools may be known by different names e.g. 'Green Schools' in Ireland, 'Umweltschule' in Germany, and 'Eco-Escolas' in Portugal

# The changing roles of education personnel

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Lifelong education in the 21st century

*'If we want to shape the world and facilitate our fellow humans the ways to adapt themselves to the knowledge society, to the new economic era, to the new needed social justice era that we all have to be able to build, then this is the time to agree on the importance of lifelong learning.'*

These were the words used by Workers' Group spokesperson Paula Borges<sup>1</sup> at the second joint sectoral meeting organised by the ILO for the education sector, to describe the importance attached to lifelong learning by education employees, and by teachers in particular. The meeting, which was held in Geneva from 10 to 14 April, was an opportunity for representatives of government, private-sector employers and teachers' unions to focus on changes in the role of the teacher in the context of lifelong education. Participants used a report prepared by the ILO secretariat to examine the concept of lifelong education; they later focused mainly on teachers' responsibilities and further training, and on the development of genuine partnerships between the various actors.

At the conclusion of the debates, the meeting adopted the report of its proceedings, some conclusions, and a resolution submitted by the Workers' Group (see box); all of these documents will be presented to the next meeting of the ILO's Governing Body, which will decide on appropriate follow-up.

The conclusions that have been adopted clearly reaffirm the right to education as a fundamental human right; they stress that lifelong education is nowadays vital for everyone, and that, it is a key question for social cohesion and the sustainable development of human societies. With regard to funding, participants concluded, and recorded, that, governments are responsible in the first instance for ensuring that an appropriate budget is allocated to education, and that they should use 6% of GDP as a benchmark.

Agreement was also reached on the need for teachers to have basic training, or preparation for the job,

that meets the highest possible standards, with access to the profession being restricted to those holding a first-cycle university degree or any other diploma deemed to be equivalent.

In conclusion, the meeting was seen as positive by the entire Workers' Group although, as in 1996, they lamented over the absence of certain governments, the low level of representation of some others, and increasingly heavy involvement of private-sector employers. ♦

## RESOLUTION CONCERNING ACCESS FOR ALL TO A QUALITY EDUCATION

### Extracts

... when in meetings with other international agencies and especially the international financial institutions, to recommend the adoption of more effective strategies with a view to promoting access for all to education and training;

to take advantage of the organisation of the UN Special Session of the General Assembly: World Summit for Social Development and Beyond, [...] to impress upon them the urgent need for quality education and training for all;

to pay special attention to the results of the Special Session of the UN General Assembly: Beijing +5 (5-9 June 2000, New York), especially regarding access to education for girls, with a view to quality education and training for all.



Monique Fouilhoux  
Education Coordinator