International Expert Meeting
on General Secondary Education
in the Twenty-first Century:
Trends, Challenges and Priorities

Beijing, People's Republic of China,
21-25 May 2001

Final Report

UNESCO

Education Sector

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*Acknowledgements*

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# Table of contents

# Executive summary: meeting agreements

The UNESCO international expert meeting on General Secondary Education in the twenty-first century held in Beijing, the People's Republic of China, in May 2001 reached consensus that:

■ Secondary Education should be given high priority.
■ The objectives and functions of secondary education need to be redefined for the twenty-first century.

The meeting then focussed on the major dilemmas Secondary Education is, or will be facing in meeting these redefined objectives and functions. These dilemmas involve the balance between mass and selective schooling, general and specialised (vocational) education and cognitive and behavioural outcomes.

*In respect of mass and selective schooling, consensus was reached that:*

■ Countries should continue to be committed to the goal of mass Secondary Education as a minimum in terms of policy and provision.
■ Commitment to universal access to Secondary Education as an aspiration should be maintained with efforts to remove barriers and obstacles as well as build on strengths and opportunities especially for girls.
■ Serious attention be given to making adequate provision for those not selected into Secondary Education, those who drop out or leave before completing the cycle and those denied access to their preferred streams.
■ Where there is not full transition from Primary to Secondary and/or from lower Secondary to upper Secondary, efforts must be made to accommodate all those who are eligible through alternative provisions. Where this is not possible available places should be allocated equitably and transparently.
■ Mass access to Secondary Education will require partnership between governments and other providers (private, NGOs, etc.), but governments should seek to safeguard the interests of learners by ensuring quality standards are maintained by all providers.
■ The structure of programmes and streaming practices should be reviewed to offer greater flexibility and choice to learners in the selection process, including the option to return to a preferred stream.

■ Future orientation at Secondary should be towards greater quality and diversity of what is provided, more flexibility in the organization of learning and greater responsiveness to the needs and circumstances of learners.

*In respect of general and selective (vocational) education consensus was reached that:*

■ The Secondary Education system should focus on links between academic and vocational subjects and their interdependence in the overall education of adolescent learners of both genders.
■ Secondary Education is about preparation for life and should reflect the reality of life in the twenty-first century that encompasses a seamless to-and-fro between continued learning and the world of work.
■ The nature of vocational subjects, the way in which they are organised and taught, as well as the recognition given to them determine their status in the Secondary school curriculum.
■ Secondary Education including Vocational Education needs to address not only the human resource needs of the society but also the development needs and aspirations of the individual.
■ There is a strong trend in Secondary Education in most countries to include some element of Vocational Education for all learners. Some countries are experimenting with ways of providing such joint education to different population groups, including migrants, isolated rural populations and learners in regular secondary schools.
■ Incorporating Vocational Education into Secondary Education can be expensive resulting in poor quality teaching and a lowering of status of these subjects. Innovative and cost-effective strategies to overcome this problem have included contracting out the teaching of subjects to nearby specialist schools and centres or creating different ways of teaching Vocational disciplines that are less demanding in terms of equipment, materials and practically trained instructors.
■ As the trend of life-long learning is becoming clear, Secondary Education is adjusting to this reality by developing flexible structures and varied options in their programmes, as well as having stronger links to the world of work.

*In respect of cognitive and behavioural outcomes, consensus was reached that:*

■ There is recognition that traditional academically based education does not adequately address students' needs in terms of realizing their full potential, especially in a context of rapid economic, cultural and social change and gender based discrimination.
■ Given the declining role of other socializing agencies schools should take greater responsibility for helping learners acquire life-skills.

- The emerging role of teachers (notably as facilitators), their status, integrity and commitment are essential for implementing life-skills education successfully. The quality of pre-service and in-service teacher training is critical in this regard.
- Teaching methods, school facilities and services should be developed and adapted to provide life-skills/behavioural education.
- The role of Secondary school principals needs to be consistent with this new reality.
- Education decision-makers need to be sensitised to the consequences of their choices based on evidence of such factors as the links between academic success and personal and community well being.
- A multi-sectoral approach involving government ministries, NGOs local communities, etc. is essential for successful implementation of this kind of education.

*Other themes identified by the meeting that Secondary Education is, or will be, facing in achieving its new objectives and functions* included:

- Inclusive and compensatory education.
- Eliminate gender disparities.
- Strengthening equity.
- The effective use of information communications technology.

*The meeting further agreed that the resources and/or strategies needed to respond to the new objectives and functions of Secondary Education and to manage the themes or dilemmas* include:

- Commencing with the view that students are at the centre of any education reform;
- Understanding that there are three interrelated components to support students' learning – the people, whether educational professionals, parents or community members, the educational policies that offer a framework for what students need to learn, and the infrastructure.

Member nations sought UNESCO's assistance in attaining the following in relation to these three interrelated components:

- For students
    - ◇ Reconstructing Secondary Education to ensure a consideration of learners' diversified needs and provide them with knowledge and life-long skills including vocational learning;
- For teachers, curriculum and school:
    - ◇ Giving priority to teacher education (pre-service and in-service);
    - ◇ Ensuring that the curricula present goals and objectives clearly and precisely and reflect local needs – including socio-economic needs;
    - ◇ Ensuring schools both understand and have the ability to become learning organizations/ learning communities.

■ For infrastructure and policy:
  ◇ Ensuring that policy-makers stress and give enough attention to Secondary Education;
  ◇ Providing access to Secondary Education by providing a place for all learners;
  ◇ Offering appropriate resources for Secondary Education through adequate budget allocations.

*Specific suggestions for future UNESCO activities centred on:*

■ Providing written case studies and/or a data base of best/successful practice in Secondary Education with a focus on issues identified at this meeting -
  ◇ Vocational Education,
  ◇ distance learning and information communications technology,
  ◇ life-skills and life-long education,
  ◇ discovery learning,
  ◇ the changing role of teachers and the use of roles other than teachers in schools,
  ◇ pre-service and in-service teacher education and increasing the status of teachers,
  ◇ assessment literacy (ie, having and being able to use assessment with predictive validity) and evidence-informed policy and accountability,
  ◇ capacity building or organizational learning/learning community,
  ◇ whole-of-government approaches to policy and practice,
  ◇ the balance between administrative, budgeting and curriculum centralisation and decentralisation,
  ◇ complementary and alternative provision of resources.
■ Organise forums and facilitating international exchange and cooperation in the area of Secondary Education leading to a major World Education Forum on Secondary Education;
■ Continue to provide a vehicle for establishing the ideals for Secondary Education in the twenty-first century and for holding governments accountable for moving towards these ideals.

# Introduction

The Dakar Framework for Action (UNESCO, 2000, p.8) states that "Education is a fundamental human right. It is the key to sustainable development and peace and stability within and among countries, and thus an indispensable means for effective participation in the societies and economies of the twenty-first century, which are affected by rapid globalisation."

More specifically, the Delors Report exhorts us to see Secondary Education "as a crucial point in the lives of individuals: it is at this stage that young people should be able to decide their own future, in the light of their own tastes and aptitudes, and that they can acquire the abilities that will make for a successful adult life." The report continues that Secondary Education, "should thus be adapted to take account both of the different processes whereby adolescents attain maturity ... and of economic and social needs."

Aware of the fundamental importance of education and the growing need to focus on Secondary Education, the international community has taken up the challenge. Clear commitments have been made within the Dakar framework for action to improve the relevance and effectiveness of Secondary Education. Included in these commitments is agreement to eliminate gender disparities in secondary education by 2005 and achieve gender equality in education by 2015. The focus will be on ensuring girls full and equal access to and achievement in education of good quality.

In order to complement international efforts and facilitate policy dialogue on this commitment to Secondary Education, as well as to learn more about new developments occurring at field-level, the UNESCO International Expert Meeting on General Secondary Education in the Twenty-First Century: Trends, Challenges and Priorities was held in Beijing, People's Republic of China, from 21 to 25 May, 2001. In attendance at this meeting were (see Attachment 1 for the full details of participants):

- high level officials responsible within Ministries for Secondary Education from eight countries in different regions and varying contexts, from the least developed and most highly populated countries to the developing and developed nations, balanced in terms of gender, namely, Australia, Bangladesh, Canada, the People's Republic of China, Republic of Guinea, Lebanon, Mexico, and the Russian Federation;
- two international experts in the field of Secondary Education reform;
- a number of experts and other invited observers from the People's Republic of China;
- staff from the National Commission of the People's Republic of China for UNESCO;
- staff from UNESCO Beijing and Paris including the Director of Secondary,

Technical and Vocational Education and Chief of the Section for General Secondary Education;

■  a rapporteur.

As background reading for the meeting participants received a number of country reports and a major overview of the issues by Professor J.M. Leclercq (see the Reference section for details).

# Meeting opening, aims and organization of report

Ms. Shi Shuyan Deputy Secretary-General National Commission of the People's Republic of China for UNESCO welcomed participants and then Mr Qian Tang Director of Secondary, Technical and Vocational Education and Chief of the Section for General Secondary Education reminded participants of the existing international agreements on education, including education for all by 2015 and elimination of gender differences by 2005. Mr Tang then sought the meetings' view on the importance that should be given to Secondary Education and, if it was of high importance, the advice that could be given to UNESCO in terms priorities for action.

Ms Sonia Bahri Chief of the Section detailed the three specific aims of the meeting for General Secondary Education as:

- to identify the contexts and educational trends facing us now and in the future and the implications of these contexts and trends for the objectives and functions of Secondary Education;
- to identify the challenges and dilemmas arising from this analysis of the contexts and trends;
- to identify priority areas, the resources and strategies required to respond to the objectives and manage the dilemmas.

The agenda for and this final report of, the Beijing International Expert Meeting were organised around these three aims. For the first two aims, summaries are provided of the expert background paper, country papers and presentations, discussion and debate, and conclusions reached by the meeting. Also reported are the results of an opportunity for participants to identify areas of non-agreement as well as other challenges. For the third aim, a summary is made of country papers and presentations, discussion and debate and a list is provided of participants' agreements and advice. A concluding section summarises these agreements and advice in the context of the Dakar Framework.

# The context:

## do the objectives and functions of secondary education need to be redefined in the twenty-first century?

### 1. *Background Document*

In his background document Professor Bill Mulford argued that at the beginning of the twenty-first century it is only right that we take stock of the many changes in the world around us and to affirm the purposes of the education we are providing and that a broad-brush approach to this stock-taking is most helpful - for when lost on a highway a road map is useful but when lost in a swamp, whose topography is constantly changing, a compass which indicates the general direction and allows individual and local ingenuity is better. Mulford identified four compass points, four major dimensions of change in the social context, as well as some of the implications of each for education. The four dimensions were the new conditions for learning (N), the society (S), the economy (E), and the workplace (W).

### Society

- Given societal pressures from increased connectedness, greater complexity, uncertainty and diversity, and continued deprivations, including the fact that many young people are themselves on the margins of society rather than playing a constructive role, successful educational provision clearly faces high demands on human factors and social interaction in a knowledge society.
- Education in the twenty-first century needs to focus more on:
  - ◇ In addition to cognitive outcomes, the non-cognitive, behavioural aspects of education, including social competency and learning;
  - ◇ People who can move from one body of knowledge to another and from one set of skills to another with relative ease - what is important is not how much a person has learnt, but how much they are capable of learning and how much knowledge they create over their life-time;
  - ◇ People with critical, creative and flexible communicative competence (especially for an era of global communisations and 'hard sell');
  - ◇ Youth being enlisted in the task of sustainable development - young people are

> of necessity the future society and their commitment to its development in a constructive way is crucial.

- Good schools model such focuses and are seen as social communities rather than as places of mere academic study. Good schools are also closely associated with the development of the social capital of their community including both genders.

## Economy

- Societies are moving away from an industrial economy and towards a knowledge economy. The scope for unskilled labour is shrinking. There is an increase in the proportion of the labour force that is part-time or casual in small and medium size enterprises and self-employment. There is a decrease in repetitive and routine work and increased workplace reliance on skills, adaptability and problem-solving skills. The challenge of these changes in the economy and its labour force to education is great.

- The entire concept of the current education system that mirrors the time in which it developed, a time dominated by government-regulated endeavours in an industrial society with its industrial manufacturing processes, is questioned. In a way, students in the current system are regarded as raw material and processed en masse in places called schools. Students are constantly scrutinised by quality control mechanisms, such that some are selected for further processing and refinement, many others are rejected as 'wastage' or second-class products.

- Even for those who 'succeed', it is suggested that changes in the nature of the labour market have made completion of secondary education and passing achievement tests largely useless credentials for labour market purposes – that is, either for successful individual employment or for a more productive workforce for the economy.

- The new objectives of education in the twenty-first century need to focus more on:
  - ◇ Learning rather than a tightly prescribed, controlled and examined knowledge qualification;
  - ◇ Initiative or entrepreneurship;
  - ◇ Behavioural outcomes including life-skills.

- Despite an increasing recognition that in knowledge-based societies and economies countries neglect their education system at their economic peril, another recent response to changes in national economies has been for some governments to seek to reduce public expenditure, including that to education. Among other things, this reduced expenditure has resulted in an older teaching force that tends to be resistant to change and a lack of resources to successfully develop and implement the needed changes.

- This situation has in some cases meant an unfortunate and greater involvement by governments in education. Unfortunate because more directives seem to have been issued and time lines for meeting the directives seem to have shrunk to fit the time between elections. Unfortunate because of an increasing obsession to reduce acceptable outcomes to a narrowly defined and readily measurable set of skills and levels

of achievement on those skills. Successful redefinition of the objectives and functions of Secondary Education is a much longer-term proposition involving a wide set of outcomes, some of which are not easily measured.

## Work

- New work patterns have led directly to higher levels of unemployment, especially for young people - including those with only Primary Education. At the other end of the education scale, employers are saying that a degree is not enough and that many university graduates do not have the qualities they are looking for, that is the ability to communicate, work in teams, adapt to change, be innovate and creative, and have familiarity with the new technology.

- As well, when individuals are no longer prepared for specific occupations and when they have to face a variety of specialisations in their working lives, it is not meaningful for all to follow the same curriculum with the same expectations. It may also be unrealistic to expect education to prepare the young for work, especially in the sense of specific vocational skills.

- Yet, in the industrial society model of education, students undergo the same teaching with the same curriculum. Students have no control over their own learning path or pace. Many of the failures of such a system are simply those who do not fit the uniform production process. The new objectives of education in the twenty-first century will need to focus more on collective rather than individual intelligence (Brown & Lauder, 2001) that supports the position that:
    - ◇ All are capable rather than a few;
    - ◇ Intelligence is multiple rather than a matter of solving puzzles with only one right answer;
    - ◇ Imagination and emotional engagement are as important as technical expertise;
    - ◇ Our ability to imagine alternative futures and to solve open-ended problems, and our interpersonal skills, be included in our definition of intelligence;
    - ◇ There is a need to acquire new knowledge continuously throughout one's life.

- What can be learnt effectively at school may be the more generic competencies, necessary for all work and applicable to a wide range of circumstances. For example, the Australian State of Queensland's recent educational review (Education Queensland, 2001) resulted in four new basic clusters for organising the curriculum: life pathways and social futures (who am I and where am I going?); multiliteracies and communications media (how do I make sense of and communicate with the world?); active citizenship (what are my rights and responsibilities in communities, cultures and economies?); and, environments and technologies (how do I describe, analyse and shape the world around me?).

## New Conditions for Learning

- The new conditions for learning resulting from the continual increase in Secondary

school enrolments raises the crucial issues of mass and/or selective secondary education as well as the choice that might be needed to be made between a common school for all and a variety of specialised programmes offered by different schools.

- Whatever the choice, preparation for university education is no longer an adequate rationale, especially with so many going from secondary schools to employment, or technical and vocational education, or even to unemployment.

- But, as is implied in the above sections, the heavy flow from Primary into Secondary Education can be seen as the trigger but not the only cause of the need for secondary school reform. Changes in the society, the economy and the workplace all place pressure on Secondary schools to consider new conditions for learning.

- Other pressures on Secondary schools and their conditions for learning include: transitions from dependence to independence among our youth that happened naturally, as part of normal living with the normal institutions, particularly the family and church, are no longer guaranteed; the age of puberty has fallen; marriage and the commencement of child-birth are occurring later; there is less interaction between parents and children; certainty of employment has diminished; and, the growth of youth culture has been accompanied by an emphasis on material consumption.

- Developments in information technology have also changed the interrelationship of individuals and knowledge. Crucial to such change is the ease of access to information without needing anyone else's assistance or permission to use it through affordable computers and the World Wide Web. If information is readily available to individuals through personal means, what then is the role of teachers and the school? Non-formal and distance education certainly becomes more viable. But raw information is not yet useful knowledge. Teachers have the undeniable role of helping students in selecting, analysing and synthesising available information, and facilitating application and creation of knowledge.

- Unfortunately in this transition period between the old and new conditions for learning has seen increasing numbers of areas via for inclusion in the curriculum. The curriculum has become overcrowded. The more crowded a curriculum becomes the shallower and more superficial the educational experience becomes, with particularly disastrous effects on the most at-risk learners.

- The new conditions for learning raise the issue of the degree to which another the curriculum can be planned. There are undoubtedly areas of learning that must be planned and must take place sequentially, such as learning mathematics. However, most of our knowledge is not learnt in a planned manner. Learning is no longer seen purely as an activity occurring in isolated brain or body cells but also in social environments - it is by active discovery and exchange that we learn best. Learning through social experience cannot be engineered.

- The new learning conditions imply a clear need for new patterns of operation by secondary schools. Form needs to follow function. Those in and responsible for Secondary schools will need to adopt:

◇ New, flexible, facilitative ways of working (both as subject specialists and/or all-round educators);

◇ Educational teams open to other than teachers;

◇ New democratic, decentralised ways of governing their schools.

■ Above all, those in Secondary schools need to model the new conditions for learning - they need to be involved in:

■ a learning organization or learning community (where teachers are learners, including being learning partners with the students).

Mulford argued that the above analysis makes it clear that the objectives and functions of Secondary Education **do** need to be redefined in the twenty-first century. Even if by following the directions pointed to by the compass allows for individual and local ingenuity, the general direction is clearly one indicating a need for reform. However, successful reform will require us to resolve a number of major issues or dilemmas including the balance of general and vocational education, mass and selective schooling and cognitive and behavioural outcomes. These dilemmas are developed in the later sections of this report.

Mulford made one important concluding point - we need to ask what **should** the future be like in the twenty first century as well as what will the future be like. Education needs something other than the metaphors of decay, disaster and erosion as driving forces of change. As Leclercq's (2001, p. 5) working document for the meeting pointed out, "the analysis of context cannot merely consist in identifying overwhelming trends to which we must necessarily submit. Among those trends, we have to differentiate between what is acceptable and what is not." Children are the starting point for a strategy about the future of schooling. A constructive and optimistic vision of their futures and needs should inform the structure and processes of education.


## 2. *Country Papers, Presentations, Discussion and Debate*

As Leclercq's (2001, pp. 7&13) working document for the meeting pointed out, General Secondary Education "is no longer reserved, as in the past, for the minority of the most fortunate youth. Nor is it any longer the prime aim of secondary education to afford access to higher studies, even if that remains very much a goal. ... preparation for working life has become as important in secondary education as preparation for higher studies."

Leclercq (2001, pp. 13-14) maintained that societal change and the increased demand for Secondary Education will result in changes in curricula, teaching methods and school operations. "First and foremost, the syllabus needs to be modernised. ... disciplines ... must be upgraded. Room has also to be made for subjects which have until now been virtually ignored, such as the new information and communication technologies, civics, and inter-cultural education, not to mention increased provision for artistic culture or physically or sporting activities. ... [Changes] in content must be accompanied by changes in teaching methods ... it is by active discovery and exchange that we learn. ... We have to now concern ourselves with the whole person and his/her diversity. ... [Changes in curricula and teaching methods call for] the adoption of new ways of working by teachers, ... the formation of educational teams which are open to the entire educational community, ... [and] democratically based rules of conduct ... adopted as far as possible through dialogue and participation."

Country reports, presentations, discussion and debate were all sympathetic to the arguments presented in both the Mulford and Leclercq background papers. For example, the Russian Federation paper (Barannikov, 2001, p. 1) stated that the "transition to an information society is a great change in civilisation in the contemporary world" and that this and the trends in Russia's development "demand that the goals of school education should be revised." Bangladesh (Huque, 2001, pp. 1&3) noted that "with the globalisation movement comes the notion of 'global citizens' that necessitates a new form of education" and that "UNESCO's present initiative for assisting Member States in reforming Secondary Education to meet changing needs of the twenty-first century is a unique coincidence with the reform of education in Bangladesh." The Bangladesh Government's plan for 1995-2010 (Huque, 2001, p. 5) "identifiers the general objectives for the post-primary sub-sectors … [including] the attainment of universal secondary education."

A comment from the Canadian delegate provided a flavour of the required changes when she stated that "the focus needs to be on the individual and life-long learning through discovery. Connections across the curriculum are what are important. Schools should be at the service of students and only a bare bones curriculum is required in order to achieve community flexibility and learner centredness." The Chinese delegation also stressed the importance of students "learning by themselves."

While the demand for education was seen by delegates to be self-feeding - for example, for Mexico (Arancibia, 2001, p. 9) "seven out of ten choose to continue to their secondary studies") - they also agreed with Wright's (2000, p. 142) concern that no matter how big they get "Education systems which remain very prescriptive and restrictive will become counter productive." Wright (2000, p. 142) believes that "the desire for continuous learning, as a survival imperative in a rapidly changing world, means that we will have to liberalise the time-bound and place-bound nature of our current education process."

## **3.** *Conclusions*

After an extensive and wide-ranging discussion and debate on the background and country papers, consensus was reached that:

◇ Secondary Education should be given high priority;

◇ The objectives and functions of Secondary Education need to be redefined for the twenty-first century.

This consensus was strongly reinforced by Mr Li Lianning[1] Director General of Basic Education of the Chinese Ministry of Education when he stated, both in his paper on 'Reform of Secondary Education in China' and in his welcoming remarks at the dinner he hosted for meeting participants, that Chinese education was at a cross-roads, at a transition from Basic to Secondary Education. He added that because of this transition and the fact that China was soon to hold its first National Education Planning Meeting, the deliberations and recommendations from the meeting would be of great value for his country.

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1. Mr Lianning's presentation will be published by UNESCO in 2002).

# Themes:

# major dilemmas secondary education
# is or will be facing

After agreeing that Secondary Education should be given high priority and that the objectives and functions of Secondary Education need to be redefined for the twenty-first century, the meeting turned its attention to the major dilemmas Secondary Education is, or will be, facing – the balances in mass and selective schooling, general and specialised (vocational) education and cognitive and behavioural and life-skills outcomes. In what follows an outline is provided of the background document, then the country reports and presentations, and discussion and debate and finally any conclusions reached about each of the dilemmas. Also reported are the results of an opportunity for participants to identify areas of non-agreement on the three dilemmas as well as to list other important issues.

## 1. *Mass Access Versus Selection*

### 1.1  Background Document

In his background document[1] Mr Cream Wright pointed out that mass access involves both provision and uptake but that a number of barriers usually prevent full uptake. While there is a need to more beyond mass to universal education, such a move has its own problems, not the least of which involves adequate resourcing. However, selection can occur not only to, but also in, Secondary Education. In order to overcome the disadvantages inherent in this situation, Mr Wright argued for a move from a sellers' to a buyers' market.

■ Access to Secondary Education involves both issues of provision and uptake. Provision does not guarantee uptake. Barriers to initial access, persistence and completion include school-related barriers, home or community related barriers and wider societal barriers. What is needed are access conditions that encourage all to participate, legislation that discourages school refusal, no pedagogical impediments, socio-economic conditions that stimulate participation, and a political ideology and orientation favouring participation.

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1. This background document was prepared by Mr. Cream Wright with input from Mr. D. Kallen

■ Mass education can accentuates disadvantages. This is the irony of mass education without universal education where an isolated few without access raise the persistent issue of equity. There is clearly a need to move beyond mass education to universal education. But universal access to Secondary Education raises other issues including resourcing, alternative provisions and delivery mechanisms, and the ability to liberalise laws governing provision especially to eliminate gender disparities.

■ Selection as a rationing mechanism to Secondary Education has included selective entrance examinations and a hierarchy of school types for entrance. Such mechanisms usually compound privileges in the name of merit. Selection can also occur within universal Secondary Education through the structure of the curriculum (academic/ vocational), streaming and access to streams, the options and choices available, and student choices and the consequences of such choices.

Mr Wright argued that it was time to consider empowering learners as selectors. It was time to move from a seller's market towards a buyers' market. Such a change could result in flexibility and choice for learners, greater use of ICT in alternative provision and much more responsive institutions.

## 1.2 Country Reports, Presentations, Discussion and Debate

Country reports, presentations, discussion and debate tended to support the directions argued for in the background paper. There was strong support from Australia (Smith, 2001, p. 4) for the move from "the supply to a demand side" in the provision of Secondary Education. The Mexican delegate (Arancibia, 2001, p. 6) emphasised her county's priority "to expand Secondary Education above all in rural areas, in ethnic populations, and with minorities" and a number of delegates highlighted the importance of having systems in place for alternative access. The Guinean delegate (Kone, 2001, p. 7) argued forcefully for the system of Secondary Education to have "footbridges of catchup."

A particular concern of delegates focussed on the assessment systems in place in many countries and the need for them to be changed. For example, in Bangladesh (Huque, 2001, p. 5&8) "Private spending on secondary and higher education also tends to be wasted on private tuition to prepare for external examinations which emphasise memorisation of facts rather than problem-solving and analytical skills" and "The present terminal examinations … test the wrong things and distort the teaching process towards factual material rather than analytical skills." The Russian delegate (Barannikov, 2001, p. 4) agreed that the "assessment system should be directed not so much towards establishing the measure of assimilating (remembering) the students' minimum formal-knowledge component but reveal their ability to employ the content they have assimilated in solving practical, cognitive, value-oriented, and communicative tasks and problems."

The Chinese Joint Innovative Project on Raising the Quality of Secondary School Training (Ni Chuanrong, 2001, pp. 2&4) aimed "at changing exam-oriented education into quality education" by evolving "an evaluation system at three levels comprising student self-assessment, assessment between students and the teacher and teacher assessment." In Australia (Smith, 2001, p. 6) the integration and cross fertilisation of general Secondary and Vocational

Education and Training has brought advantages to the pedagogy and learning traditions of both areas, especially in the area of assessment and reporting on student learning: "One of the most significant achievements in Australian schooling in recent years has been the development of benchmarks of standard of achievement expected of students at successive stages of education. These benchmarks are the conceptual equivalents of the competencies used to define standards of Vocational Education and Training within the Australian Training Framework. Finding practical ways of relating standards, or criterion based, assessment with competency cased assessment will be a strong clue to support the continuing coming together of General and Vocational Education in Australia."

Discussion centred on the issue of the predictive validity of assessment systems and the fact that examination marks are not necessarily good predictors of either university or later job income success. Unfortunately students who want to pass examinations and teachers who want to keep their jobs may be colluding in the retention of out of date examination systems. Further concern was expressed that examinations distort the curriculum and what is taught and tend to perpetuate privilege. As the Canadian delegate commented, "We need to measure what we value rather than value what we measure."

### 1.3 Conclusions

After an extensive and wide-ranging discussion and debate on the background and country papers and country presentations, consensus was reached that:

■ Countries should continue to be committed to the goal of mass secondary education as a minimum in terms of policy and provision.

■ Commitment to universal access to Secondary Education as an aspiration should be maintained with efforts to remove barriers and obstacles especially for girls as well as build on strengths and opportunities.

■ Serious attention needs to be given to making adequate provision for those not selected into Secondary Education, those who drop out or leave before completing the cycle and those denied access to their preferred streams within the system of mass Secondary Education system.

■ Whilst the transition from primary to Secondary and/or from lower Secondary to upper secondary is not 100% in many countries, efforts must be made to accommodate all those who are eligible through alternative provisions and other measures such as double shift schools and distance education. Where this is not possible available places should be allocated equitably (gender, class, etc) as well as transparently. (Selection) The criterion for selection in some countries is a "selective examination". In some other cases available places are allocated on a first-come-first-served basis, whilst in yet other cases places are allocated on the basis of continuous assessment and/or annual examination results.

■ In many countries mass access to Secondary Education will require partnership between governments and other providers (private, NGOs, etc.), but governments should seek to safeguard the interests of learners by ensuring quality standards are maintained in alternative provisions of Secondary Education. Where there is already

a strong tradition of alternative provision (eg. Bangladesh private community schools) governments should build on this by assisting and strengthening these schools.

■ Structure of programmes and streaming practices should be reviewed to offer greater flexibility and choice to learners in the selection process including the option to return to a preferred stream.

■ Future orientation at Secondary level should be towards greater quality and diversity of what is provided, more flexibility in the organization of learning and greater responsiveness of Secondary Education institutions to the needs and circumstances of learners. (Empowering learners for selection).

## **2.** *General Versus Specialised (Vocational) Education*

### **2.1 Background Document**

In his background document Mr Cream Wright first identified the reasons for, and the key issues in, the provision of formal education. He then turned to key issues in the provision of general and specialised (vocational) education. He concluded with two lessons for the future regarding the status of Vocational Education and its place in life-long learning.

Formal education at all levels is essentially about supply and demand, or more accurately about provision and uptake. What are the reasons for the acquisition of prescribed learning in a formal setting? What is it that motivates citizens to seek opportunities for acquiring certain learning experiences? Answers to these questions have a universal as well as a national and local dimension. The following are some of the elements in answers that can help us to better understand the key issues involved in the general nature of education:

■ Every society needs to prepare its citizens for the roles and responsibilities that are essential for that society to function and survive as a recognisable cultural, economic, social and political entity.

■ Agencies that have traditionally been responsible for preparing citizens for the various roles in society include the family (nuclear and extended); religious organizations; community-based groups; political parties and interest groups; skilled trades (guilds); and the formal school system. What all these agencies do can broadly be labelled "education" or education and training.

■ The more developed and complex a society becomes, the more diverse and diffused are the roles and responsibilities involved, and the more formalised becomes the process of education (increasingly located in a school system).

■ Education concerns a wide spectrum of prescribed learning intended to cover the cultural, economic, social and political dimensions of human development. It is through these that society survives, functions and progresses in a dynamic manner. As formal schooling increasingly becomes the sole or main repository for providing education, the structure, content and management of the process of schooling becomes increasingly complex and politicised.

■ Most societies do not limit prescribed learning to the functional requirements of current roles and responsibilities (education is not purely utilitarian). There is also a concern with how society relates to other societies, how to achieve a new society as envisioned by those in authority, as well as a concern with the esoteric business of acquiring/pursuing knowledge for its own sake.

■ On the demand side, every individual needs to understand his/her place in society and must learn to perform various roles and responsibilities in order to be a functional member of that society. This is a major driving force underlying the broad demand for education on the part of learners.

■ ndividuals, families and communities are deeply aware that they need a range of knowledge and skills to survive, function and progress within society. They are therefore constantly seeking means by which they can fulfil these needs. It is yet another major driving force behind the demand for education and the search for learning opportunities.

■ There is an innate curiosity and desire to learn that is an integral part of human nature and central to the concept of human beings as problem-solving creatures. This is yet another (non-utilitarian) factor underlying the demand for education by individuals and communities.

These answers lead to a number of key issues in the demand, provision and uptake of education.

■ Historically the provision of formal education has tended to be dominated by a functional and utilitarian ideology, at least from the supply point of view. Society has tended to provide for education to the extent that this was necessary to meet certain public goals, such as skilled manpower for economic production, human resources for the government machinery, a citizenry that conforms to certain norms of behaviour, the preservation of a heritage and way of life that is highly valued, etc.

■ There has also been a competing ideology of education as liberation, which is more to do with the benefits and goals of individuals and communities than with general public goals. In this sense, education is seen as an empowering force that raises consciousness, improves self-reliance and helps individuals and communities to achieve their full development potential.

■ More recently there has been an increasing convergence towards the ideology of education as a basic human right. This entails both an obligation on the part of society to ensure appropriate provision of educational opportunities, and a right on the part of individuals and communities to access such provision without undue barriers and obstacles. It is an ideology that is pregnant with implications for political and social bargaining in the area of education.

■ Whatever the predominant ideology, education is ultimately about resources. The key issues are to do with use of public resources for providing education, and the role of private resources in accessing such education opportunities.

■ A critical issue related to resources, is what these resources (public/private) should

be invested in. This concerns levels of education and areas of education, as well as target groups of beneficiaries. Who provides (funds) and who benefits, and what are the choices and options available within this mix?

■ It needs to be appreciated that public resources are not limitless and that there are other competing priorities for these resources, apart from the education sector. This is an important caveat on the obligation of governments to provide education under the "rights" ideology. The trend has been towards the use of public resources to guarantee the rights of the disadvantaged, whilst ensuring that choice (based on use of private resources) for less disadvantaged groups is not stifled. This is a complex process fraught with controversy, as it often involves curtailing entrenched privileges enjoyed by groups that are already advantaged in educational as well as economic and political terms.

This analysis raises a number of issues to do with Secondary Education in general and specialised (vocational) education in particular.

■ The concept of Secondary Education can be defined and justified in terms of various factors, but it is mainly to do with the age of learners and the adolescent phase of human development. This phase has always been recognised in society and special provision is usually made in terms of "rites of passage" from childhood to adulthood. This always involves much deeper learning and preparation for adult responsibilities, as distinct from the more care-oriented learning or basic induction into childhood roles/responsibilities.

■ In as far as Secondary Education corresponds to learning during the adolescent phase of human development, it is characterised by learning that caters to the unique requirements of this stage as well as to the diverse requirements for future adult roles and responsibilities. The Secondary curriculum therefore has to cope with the major physical, emotional and psychological changes that the learners are undergoing at this stage. On the other hand this phase also offers important opportunities to build on the growing self-awareness, enthusiasm and dynamism of adolescent learners.

■ In some countries there is a status problem associated with vocational subjects that makes it difficult for learners to willingly opt to study these subjects when they have a choice. This goes back to the practice (still prevailing in some systems) of channelling so-called non-academic learners into vocational streams. The main implication of this streaming practice is that these learners are not capable of advancing to university, and should therefore be prepared for a vocation or trade that they will take up on completion of their Secondary Education. Despite such problems the need to better prepare Secondary school leavers for the world of work remains a strong priority for most countries.

■ The cost of including vocational subjects in the Secondary curriculum can be prohibitive for some countries. It is therefore difficult to vocationalise the whole Secondary system. Some countries have set up specialised secondary schools that are heavily oriented towards Vocational Education and Training. This approach

means that not all learners will have the opportunity to sample or opt for vocational subjects.

■ There is a concern in many countries that a Secondary Education that does not deal with the world of work is a handicap. This is because most Secondary students will enter the world of work on completion of their education. There are many innovations designed to bring the world of work into the Secondary classroom, although they do not necessarily involve Vocational Education.

■ Some studies have cast doubt on how well Secondary schools can prepare learners for the world of work through the teaching of vocational subjects. The problems involved include badly trained teachers, lack of proper equipment and materials. Because of these difficulties some countries have opted for a "diversification" approach to Secondary education. This introduces vocational subjects into the curriculum in a variety of ways. Typically there is a sampling phase in which all learners have the chance to take one or more vocational subject at an introductory level, so they can understand the field and grow to appreciate the knowledge and skills involved, even if they do not wish to take this up as a vocation. This phase then leads to specialist streams in which those who wish to study these vocational subjects in greater depth have the opportunity to do so, within the limits of what is available in the school.

■ The nature of traditional vocational subjects needs to change radically in line with the reality in the world of work, and in order to make these subjects much more attractive to Secondary school learners. The perennial teaching of some subjects like woodwork, metalwork, etc. ensures that the poor image of all vocational subjects will persist for a long time. At the other extreme, the teaching of computers (IT) represents the new and exciting face of Vocational Education. Curriculum planners need to work in collaboration with employers and professionals to create vocational subjects that are acceptable and can lead to further studies at the tertiary level, if learners choose to pursue that option.

Lessons of the above analysis for the future regarding vocational education include:

■ Vocational subjects should be taught in the best way possible for both genders to have a positive impact as pat of the Secondary curriculum. Every school does not have to cater for the teaching of vocational subjects, but could contract out this to the nearest specialist school through appropriate arrangements. Vocational subjects will eventually gain the right status and respect only when they are well taught as exciting and worthwhile disciplines.

■ Increasingly the distinction between academic and vocational is blurred and irrelevant. The Secondary school curriculum should be alive to this reality, so that learners are offered subjects that are modern and prepare them for life as it is lived out there. Life combines work with continuous learning! That is why we talk of life-long learning. This is what schools should prepare learners for!

## 2.2 Country Reports, Presentations, Discussion and Debate

Country reports, presentations, discussion and debate tended to support the points made in the discussion paper, especially on issues to do with competencies, the status of Vocational Education, and the increased blurring of the distinction between General and Vocation Education.

In Australian (Smith, 2001, p. 2) "increasingly we are seeing a re-emergence of Aristotle's notion of competence - skill embodying knowledge – hand and mind together." In Russia (Barannikov, 2001, p. 4) "the concept of key competencies … becomes the pivotal concept around which developments in the content … should be concentrated."

The lack of status of Vocational Education was of great concern to delegates. For example, in Guinea (Kone, 2001, p. 3) "in the case of repeated failures by a student he/she is dismissed from the General Secondary Education, but he/she is allowed to orient himself/herself towards the technical or professional education." The delegate from Lebanon also pointed the lack of prestige of the Vocational Education when compared to the University stream in her country. This lack of status was common despite many countries having among their objectives for Secondary Education statements similar to that from Mexico (Arancibia, 2001, p. 7), that is, "To help students join the workforce" or schools such as the Beijing Jingehan School visited by delegates which "has developed a system which connects the academic curriculum with real-life experiences."

Of great interest to participants was the Australian (Smith, 2001, pp. 3-5) initiative which has "set in place an infrastructure able over time to raise the status of Vocational Education and Training … Vocational Education and Training courses have been repositioned in the state curriculum in a way that eliminates the distinction between general and vocational education … The reforms ensure a rigorous, industry recognised, dual accreditation system … with a capacity for it to [link school, work and/or further training as well as] contribute to university entrance." This Australian development is consistent with Leclercq's (2001, p. 3) point that "the question of raising the skills level for entry into the labour market is not simply an issue for Technical or Vocational Secondary Education, but also for General Education – not the least because solid, broadly-based knowledge and also generic skills, such as the ability to communicate, now form the basis of all requisite work skills."

## 2.3 Conclusions

After an extensive and wide-ranging discussion and debate on the background and country papers and country presentations, consensus was reached that:

- Instead of accentuating the differences between so-called academic and vocational subjects, the Secondary Education system should focus on links between these subjects and their interdependence in the overall education of adolescent learners of both genders. (Competencies in head and hand.)
- Secondary Education is about preparation for life and should reflect the reality of life in the twenty-first century, which encompasses a seamless to-and-fro between continued learning and the world of work (Australia case study).

- The nature of vocational subjects, the way in which they are organised and taught, as well as the recognition given to them, all determine the real status of these subjects in the Secondary school curriculum.
- Secondary Education (including Vocational Education) needs to address not only the human resource needs of the society (China case study), but also the development needs and aspirations of the individual (Russia).
- There is a strong trend in Secondary Education in most countries, to include some element of Vocational Education for all learners. This is sometimes provided as part of a diversified curriculum (Bangladesh) or through themes and inter-disciplinary learning. It can also be provided through guidance programmes, work placement (Australia – NSW) and a cross-curriculum approach (Canada – Quebec).
- Countries are aware of the importance of combining Vocational Education with Secondary Education, and are already experimenting with various ways (eg. distance learning - Mexico) of providing such joint education to different population groups, including migrants, isolated rural populations and learners in regular Secondary schools. (Mexico).
- Incorporating Vocational Education into Secondary Education has proved to be very expensive in many countries. As such there has been a trend of poor quality teaching of these subjects, which in turn has resulted in poor status of these subjects. However there has also been a trend of innovative and cost-effective strategies in some countries, including contracting out the teaching of subjects to nearby specialist schools and centres, or creating different ways of teaching vocational disciplines that are less demanding in terms of equipment, materials and practically trained instructors.
- The trend of life-long learning is becoming clear in many countries, with job requirements constantly changing and people having to move back and forth into education/training and the work place. In some countries, Secondary Education has already started to become adjusted to this reality by developing flexible structures and varied options in their programmes, as well as having stronger links to the world of work.

## 3. *Knowledge-Based Versus Behavioural and Life-Skills Education*

### 3.1 Background Document

In her background document Ms Sonia Bahri argued that acquisition of knowledge is essential for Secondary level students but that it is not sufficient to properly prepare adolescents. Life-skills are also required. She raised the important issues of who takes responsibility for this life-skills education, the possibility of a new role for schools in its provision and the likelihood of utilising other than teachers.

Acquisition of knowledge is essential for Secondary level students.
- Acquisition of knowledge is classically and frequently considered as the main

expected outcome of education, and more specifically for formal, General Secondary Education. Knowledge is evolving with scientific and technical progress and needs to be up-dated as well as teaching and learning methods that need to be revised accordingly.

■ Everywhere in the world, student evaluation is very often based on knowledge acquisition. This evaluation determines among other things, integration into the Higher Education system. Of course, knowledge covers, in addition to classic disciplines such as mathematics, languages and history, social and contextual issues of common interest.

■ Acquisition of knowledge is less a matter of acquiring information than of mastering the instruments of learning, which will enable learners to understand the various aspects of environment and to be able to make sense of reality (including social, economic and scientific realities).

But students in Secondary schools are also adolescents.

■ Most of the time, for those involved with education, such as education administrators, school principals, teachers, the population attending Secondary schools are considered only as learners/apprentices, students, pupils or baccalaureate students, but rarely as adolescents. The terminology used by these professionals, that is, to which category we belong, is extremely significant. Students are also rarely considered as participants.

■ Adolescence is an age of psychological, emotional, and physical changes of great importance. This needs to be recognised and taken into account.

Therefore, acquisition of knowledge is not sufficient to prepare adolescents to cope with life issues and to make choices that could have important impact on their health, and their present and future life as adult citizens.

■ According to the Delors Report, "… traditional responses to the demand for education that are essentially quantitative and knowledge based are no longer appropriate. It is not enough to supply each child early in life with a storage of knowledge…; Each individual must be equipped to seize learning opportunities …, both to broaden her or his knowledge, skills and attitudes, and to adapt to a changing, complex and interdependent world."

■ The Delors Report articulates education as the four pillars of learning to know, learning to do, learning to be, and learning to live together. The two last pillars are more directly related to the psychosocial development of the adolescent.

■ During the mid-twentieth century, with more massive access to Secondary Education a new phenomenon in the history of humanity appeared: a large number of young people working and living together with only one adult (the teacher) for more than eight hours a day. In the past, young people, except in the army, were controlled by bosses or patrons and were not therefore left to themselves. Adult role models were present and available for counselling and guidance at the same time instruction, technical and less frequently general, was provided. An apprentice, for

example, who was working in handicraft directly with his boss (master) and had only a few companions with him, was benefiting from an adult behavioural model and occasional advice and guidance, in addition to the technical skills.

■ Therefore other specific skills than general, technical or vocational are needed to prepare adolescents to 'learn to be' and learn to 'live together'. Also, research has shown the links that exist between levels of academic achievements and personal and social well being of the adolescent. In brief, there is a need for an adequate education that covers more than training or instruction.

What is this education to be called?

■ Several organizations, UN agencies, NGOs, institutions, and national programmes have their own terminology to describe this important issue in education including for example life education, behavioural education, skills for living, family life education, education for citizenship, and life-skills education.

■ We will follow the Dakar Framework and use the term 'life-skills'.

■ Several national and international initiatives are supporting the development of education in skills for life, or life-skills. These include communication skills, decision-making, preventive and health education, critical thinking, counselling, empathy, and coping with various issues such as stress.

Life-skills education requires appropriate methods for successful implementation.

■ Life-skills education does not moralise or use simplistic 'just say no' techniques such as in some drug abuse prevention programmes. Instead, highly-skilled educators use interactive and teaching strategies such as role-plays, dramas, discussion and questioning supported by the latest multi-media technology to reinforce learning of relevant skills and information that encourage non-use and safe choices among students. Educators may also use strategies that are in, and/or for, the community.

■ The debate is still open about the role of schools in society and to what extent they should be responsible for providing this type of education. Should this education be delivered by schools, and more specifically by Secondary schools, or should it be left to families only and other institutions, or should it be some combination? In some parts of the world, this question does not find an answer. There is still a debate on this subject in many countries such as France. The risk of schools having a strong impact on young peoples' opinions and thoughts is sometimes considered as politically and ideologically dangerous.

■ If schools are not coping with these issues, who else will – families, churches/religious institutions, other institutions?

The rapid changes of social, cultural and economic contexts and their impact on the life of adolescents are accentuating these educational requirements.

■ For example, drug abuse (including alcohol and tobacco), HIV/AIDS epidemic, violence and suicide among adolescents are rather recent social mass phenomena which pose real dangers for this group of the population. The deep roots of each of

these problems are complex and are certainly related to new ways of life, of globalisation, human behaviour and to rapid political and economic changes and social transformations.

■ Gender based discrimination however continues to be a major constraint. The pressure mounts for us to focus on ensuring girls full and equal access to achievement in education of good quality.

■ Another social factor is disaggregated families (mono-parental, nuclear families), lack of skills and inexperienced parents who find dealing with adolescents difficult.

There may be a new role for schools but whom in the schools is, or should be, skilled to provide life-skills education?

■ schools are optimal places to develop academic but also social/psychological competence and to coordinate efforts of families, teachers, and other school personnel to foster positive attitudes of children and youth, such as:
◇ assist teachers, parents and children to better understand the relationships between child development, academic performance, and social skills in promoting positive attitudes and behaviour;
◇ identify, promote and coordinate school and community services and resources that will enhance learning and positive student behaviour and attitudes, including through individual counselling.

■ However, many issues such as prevention of HIV/AIDS and drug abuse are still taught as disciplines in an academic way. Meanwhile there are issues related to psychological development and behavioural development of children and adolescents that require adequate training of school personnel and appropriate services and facilities or referrals.

■ Are teachers skilled to provide life-skills education? What about others such as mentors, tutors and psychologists - especially with the growing shortage of teachers in some countries and the opportunity to work across other sectors such as health and justice in a whole-of-government approach?

■ What will be the impact of using others on the school environment, facilities and other school personnel? What will be the costs?

These emerging trends are more and more taken into account in the research arena, in international organizations and in some country's national policies. However, their application remains limited. There is a need maintained Bahri for advocacy for a new vision of educational functions of Secondary Education in the twenty-first century that fully encompasses life-skills education.

### 3.2 Country Reports, Presentations, Discussion and Debate

Country reports, presentations, discussion and debate were quite animated on this issue with strong endorsement for the need to redirect our priorities in Secondary Education more to behavioural, life-skills education. Mexico, Lebanon and Russia provided examples. Mexico (Arancibia, 2001, p. 7) already has national educational objectives that include: "To allow stu-

dents to continue their education with a high degree of independence, in and out of school; To provide practical solutions to daily life problems; To promote active and reflexive participation of secondary graduates in social organizations and in political and cultural life of the country." Lebanon (Hamoud, 2001, pp. 4-8) is moving from a situation "that does not meet the needs of the twenty-first century" of the teacher controlling the class, textbooks as the only resource and teachers and students obsessed by official exams to a New Plan for Educational Reform that seeks citizens who are accepting, respectful, tolerant, work for the development of his society through an education system which includes building personality and developing potentials and abilities. Russia's (Barannikov, 2001, pp.1-2) "Strategy of Education Modernisation sees the main results in the graduates readiness and ability to be responsible personally for their own social welfare ... and readiness to co-operation and aptitude for creative activity, tolerance of other people's views, communicability, ability to search for and find a constructive compromise."

Useful distinctions were made for the civics area in life-skills education by distinguishing among one's identity as a result of one's heritage, one's ability to tolerate and celebrate differences through multiculturalism and what one values from being a citizen of a country through citizenship. Citizenship is in a constant state of being negotiated and thus values involvement.

However concerns were expressed that some schools were not structured for teaching life-long skills or values (Australia) and that some teachers were not capable in this area (Australia) or were not good role models (Guinea). In countries such as Bangladesh (Huque, 2001, p. 6) "Only 15.8 percent of the junior secondary school teachers and 36.7 percent of secondary school teachers have professional qualifications." Also, high student-teacher ratios were seen as militating against effective implementation of life-skills programs (Guinea). Other concerns included increasing advertising pressures (Guinea) and a materialistic youth culture (Russia).

Support was given to the importance of using the students' peers, linkages of the school with others, especially in a 'whole of government' approach, and the new role of teachers as facilitators, provokers, motivators, assessors, and resource centres (Lebanon, Canada).

The Chinese Joint Innovative Project on Raising the Quality of Secondary School Training (Ni Chuanrong, 2001, pp.5-6; see also, Yu Fuzeng, 2001) has among its outcomes many that are behavioural and/or involve life-skills, for example: "students have made great progress in moral, intellectual, physical, esthetical, labour and mind. ... students become highly motivated. They concern themselves with the community ... and know how to care for others ... they learn about team spirit and cooperation ... They are able to study on their own ..."

### 3.3 Conclusions

After an extensive and wide-ranging discussion and debate on the background and country papers and country presentations, consensus was reached that:

- There is recognition that traditional academically based education does not adequately address students' needs in terms of realising their full potential, especially in a context of rapid economic, cultural and social change and gender-based discrimination.

- Schools should take greater responsibility for helping learners acquire values, attitudes and skills (life-skills), given the declining role of other socialising agencies (families, religious bodies).
- The emerging role of teachers (notably as facilitators), their status, integrity and commitment are all essential for implementing life-skills education successfully. The quality of pre-service and in-service teacher training is critical in this regard.
- Teaching methods, school facilities and services should be developed and adapted to provide life-skills education and behavioural oriented education
- The role of Secondary school principals needs to be consistent with this new reality.
- Education decision makers need to be sensitised and made aware of the consequences of their choices, based on evidence of such factors as the links between academic success and personal / community well-being.
- A multi-sectoral approach involving government ministries, NGOs local communities, etc., is essential for successful implementation of this kind of education.

# 4. *Other*

## 4.1 Areas of Non-agreement on the Three Themes

Country participants were given numerous opportunities to provide areas where there was not agreement with the above three themes or dilemmas. None were forthcoming.

## 4.2 Other Themes

Country participants were given the opportunity to raise themes not related to the three dilemmas already discussed in depth at the meeting. After perusal of country reports and extensive discussion and debate the following additional themes were identified:

- Inclusive and compensatory education
  General Secondary Education should cater for learners who have physical, mental, psychological and social disabilities as well as past academic deficiencies. This means that general Secondary Education should provide for inclusive education and remedial or compensatory education for learners who require such support.
- Eliminating gender disparities
  Gender issues will need to be mainstreamed throughout the education system. Comprehensive efforts are needed to eliminate gender discrimination. Girls in particular will require full and equal access to and achievement in education of good quality. To make this possible, changes in attitudes, values and behavior are required.
- Holistic and participatory education
  Secondary Education is part of a holistic system of education that embraces all levels from pre-primary to university. This suggests that secondary education

should be engaged with other levels in a more constructive manner. It is also important for all cadres to be fully engaged in and accountable for the innovative policies, strategies and practices in Secondary Education. This suggests that Secondary Education should be fully participatory.

■ Strengthening equity

Any countries still experience regional disparities and equity gaps (especially between urban and rural areas) in terms of access and quality of education. It is important to explore the main issues of provision, organization and management of Secondary Education, in order to develop strategies that can reduce these disparities and bridge this rural/urban divide.

■ Information communication technology

Countries need to know about the most effective and efficient use of information communications technology, including for inclusive, compensatory, holistic, participatory, and equitable education. In this regard it may be important to document the Mexican (Arancibia, 2001) and the planned Chinese (Li Lianning, 2001) experiences in this area.

# Identification of resources and strategies to respond to the new objectives and functions of secondary education and to manage the themes or dilemmas

**1.** *Country Reports, Presentations, Discussion and Debate*

A number of resource needs and strategies to respond to the new objectives and functions of Secondary Education, and to manage the themes or dilemmas, permeated country reports, presentations, discussion and debate. The following represents just the flavour of this input.

There was very strong endorsement that, as the Guinea delegate stated (Kone, 2001, p. 7), "the learner and his/her future should be in the centre of concerns." In Lebanon (Hamoud, 2001, p. 7) the "New Education Reform" sees the learner as active, cooperative and a decision-maker. The new curricula emphasise a student-centred approach. The teacher "is no more the boss … the controller. … he is a provoker, motivator, an assessor, a facilitator, and a centre of resources." Similarly in China (Ni Chuanrong, 2001, pp. 2&6), "the students' major involvement" is increasingly seen to be at the core of Secondary Education and that "many teachers agree that students should not only be treated as objects of education, but ones to be served as well."

In Australia (Smith, 2001, p. 4) "the merging of General and Vocational Education has provided significant challenges" to schools, their staff and timetables, welfare structures, and industrial arrangements. These challenges arise because students move to the centre of the education system and they can, for example, attend part-time, be in paid employment and/or in work placements. In Russia (Barannikov, 2001, p. 5) there is an awareness that, "Severe structuring of basic curricula by a multitude of subjects is undesirable, for it actually blocks integration processes and multiplies subjects unreasonably." In the Chinese Joint Innovative Project on Raising the Quality of Secondary School Training (Ni Chuanrong, 2001, p. 3) "subject involvement has mobilised students' interests and initiatives and ensured their principal role in learning. As a result, their school work burden has been lightened with remarkable improvement in terms of academic records."

Mexico (Arancibia, 2001, p. 9) takes the position that a "fairness principle should

guide educational offerings in Secondary Education: … in access, … thematic content, teaching quality, student permanence, and graduation opportunities." To help achieve this fairness principle, the Mexican Government (Arancibia, 2001, pp. 8,4&5) "dares to dream and established a communications network based on satellites to be used to provide basic education for all." As well, a "Telesecondary courses started in 1966. It uses educative television and is for teenagers who, for different reasons, could not join a regular Secondary school. The curriculum at Telesecondary is the same as at the official Secondary school." "Distance Secondary Education … [was also] created for people over fifteen years old who want to start or finish their Secondary school but who are not able to attend regular daily classes."

Quality assurance constituted another area of agreement. As the Bangladesh (Huque, 2001, p. 7) submission pointed out, "The biggest challenge … is quality at all levels and in all meanings of the word. Top priority must be given to improving quality … . Acceptance of present quality levels … would be equivalent to intellectual suicide as a nation and as a people – and would ensure that Bangladesh could not survive and prosper beyond the first few decades of the twenty-first century in an open, interdependent and knowledge and skills-driven global economy."

Strong support was given to the need for (Kone, 2001, p. 8) "obtaining the engagement and support of the politically responsible" as well as having "competent administrative officials" who used evidence as the basis of their policy making. The Chinese Joint Innovative Project on Raising the Quality of Secondary School Training (Yu Fuzeng, 2001, p. 13) saw its success depending on three essential conditions: "Support from regional governments"; "the importance attached to it by school authorities and teachers"; and, "the combination of administrators, theory researchers and teachers in the forefront of teaching". Li Lianning (2001) also pointed out the requirement to supplement increased government spending on Secondary Education by a variety of approaches including tax incentives, partnerships, donations, sponsorships, and from private investment.

### Other points raised included:

■ The need to build on existing strengths, for example double shift schools in Lebanon, the Female Secondary Stipend Programme and Community Bank in Bangladesh, distance education in Mexico, and the linkage of General Secondary and Vocational Education and Training in Australia. Wright (2000, p. 142) concurs with this point when he states, "the first and most important advice for policy makers and professionals who make decisions in education is that they should recognise and appreciate what is positive about their existing education system."

■ The need to provide support for school principals and teachers for, as the Bangladesh report (Huque, 2001, p. 8) points out, a "bottom-up model of innovation is crucial to establishing the demand at classroom level for the necessary supporting inputs (eg. teaching materials, in-service teacher upgrading, etc.). This contrasts with the more typical top-down approach of merely providing better inputs for the schools on the assumption they will automatically be delivered and used effectively";

*Identification of resources and strategies to respond to the new objectives and*
*functions of secondary education and to manage the themes or dilemmas*

**35**

■ The need for managers to be held accountable for valued, measurable results;

■ The structure of the curriculum should not be so tight, either from overcrowding or tight sequencing of subject matter, that it results in students or local needs (such as agricultural education in rural areas) being excluded;

   ◇ The need to mainstream gender issues throughout the education system;

   ◇ The effectiveness of whole-of-government approaches that cut across existing Departments such as Education, Health and Justice - an example is the Chinese Community Activity Centres;

   ◇ The need for identifying an appropriate 'critical mass' in deciding the degree to which the education system can be decentralised, for example the Chinese move back from the town to the county level;

   ◇ The importance of international organizations such as UNESCO for both providing the ideal we can aspire towards and holding governments accountable for moving towards this ideal.

# 2. *Conclusions*

Participants from Australia, Bangladesh, Canada, Republic of Guinea, Lebanon, Mexico, and the Russian Federation discussed in general terms the resources and strategies needed to respond to the new objectives and functions of Secondary Education and to manage the themes or dilemmas. They agreed that:

■ Students are at the centre of any educational reform.

■ There are three components to support students' learning – the people, whether educational professionals, parents or community members, the educational policies that offer a framework for what students need to learn, and the infrastructure.

■ Member nations should

■ For learners

   ◇ Take into consideration the learners' diversified needs;

   ◇ Provide learners with knowledge and life-long skills which help enhance their interaction and productivity;

   ◇ Provide a 'seat' for each learner to guarantee equal opportunity;

   ◇ Consider learners as the main human resources for a nation's development;

■ In respect of resources

   ◇ Since education contributes to the quality of a nation's human resources, it should be appropriately resourced through adequate budget allocations;

   ◇ Work hard to provide suitable and adequate school buildings, equipment and material to enhance quality education;

   ◇ Provide human resources to develop, implement and evaluate curriculum;

   ◇ Consider the communities' socio-economic needs;

■ For teachers and the curriculum

   ◇ Give priority to pre-service and in-service teacher education;

◇ Ensure that curricula presents its main goals and instructional objective clearly and precisely;

◇ Support initiatives to ensure a locally available and professional curriculum development capacity.

Participants from the People's Republic of China discussed in specific terms the resources and strategies needed to respond to the new objectives and functions of Secondary Education and to manage the themes or dilemmas in one country, the People's Republic of China. They agreed on the following priorities and areas where UNESCO may assist:
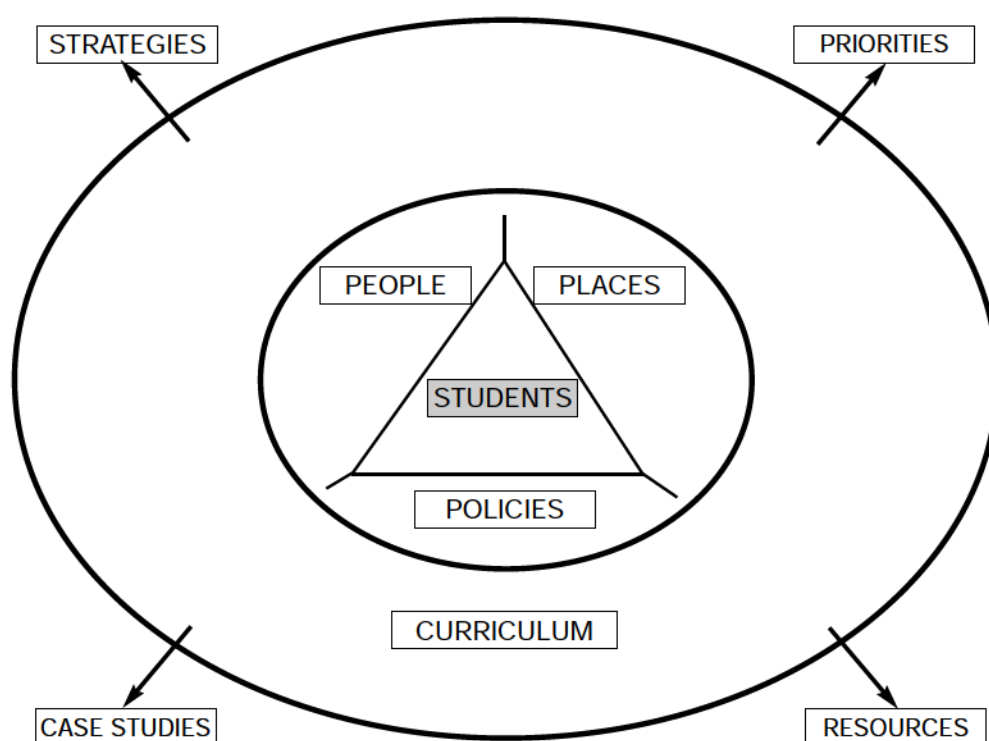
## Priorities

■ To ensure policy-makers put enough attention to and stress on the role of Secondary Education, in particular the role played in human resources development and of meeting individual's need of receiving education at a higher level after finishing basic compulsory education.

■ To increase the number of senior Secondary schools to satisfy the cohort's need of receiving more education after nine years of compulsory education and guarantee enough resource of enrolment into higher education in the process of China's mass higher education scheme.

■ To increase Vocational Senior Secondary schools to satisfy the requirements of the labour market.

■ Curriculum reform to enhance its relevance to students' life experience and the local economic and social development.

■ To train more qualified Secondary school teachers, especially Vocational teachers.

## Areas UNESCO may assist:

■ Organising a government forum discussing Secondary Education;

■ Providing successful cases and experience of Secondary Education around the world;

■ Reinforcing the building of information and data base to provide reference materials for considering and comparing the development, administration and implementation of curriculum in Secondary Education;

■ Consolidating international exchange and cooperation in specific areas such as the integrated curriculum and the learning and teaching style of 'exploratory and discovery learning' emerging in China's practice with the current curriculum reform.

## Finally, a joint working party of the two groups met and agreed that:

■ Students are at the centre of any education reform;

■ The following model is broadly representative of the process toward education reform

*Identification of resources and strategies to respond to the new objectives and*
*functions of secondary education and to manage the themes or dilemmas*

**37**

■ Member nations seek assistance in attaining the following:

◇ Ensuring that policy-makers stress and give enough attention to Secondary Education;

◇ Reconstructing Secondary Education to ensure a consideration of learners' diversified needs and provide them with knowledge and life-long skills including vocational learning;

◇ Providing access to Secondary Education by providing a place for all learners;

◇ Considering the communities' socio-economic needs (having considered local economic and social development);

◇ Offering appropriate resources for Secondary Education through adequate budget allocations;

◇ Giving priority to teacher training (pre-service and in-service);

◇ Ensuring that the curricula present goals and objectives clearly and precisely and reflect local needs;

◇ Ensuring schools both understand and have the ability to become learning organizations/ learning communities.

## 3. *Specific suggestions for future UNESCO activities*

Specific suggestions for future UNESCO activities were gathered throughout the Beijing Expert Meeting. The following three activities were mentioned numerous time and appeared to have the strong support of delegates:

- Provide written case studies and/or a data base of best/successful practice in Secondary Education with a focus on issues identified at this meeting
  - ◇ Vocational Education,
  - ◇ distance learning and information communications technology,
  - ◇ life-skills and life-long education,
  - ◇ discovery learning,
  - ◇ the changing role of teachers and the use of roles other than teachers in schools,
  - ◇ pre-service and in-service teacher education and increasing the status of teachers,
  - ◇ assessment literacy (ie, having and being able to use assessment with predictive validity) and evidence-informed policy and accountability,
  - ◇ capacity building or organizational learning/learning community,
  - ◇ whole-of-government approaches to policy and practice,
  - ◇ the balance between administrative, budgeting and curriculum centralisation and decentralisation,
  - ◇ complementary and alternative provision of resources.
- Organise forums and facilitating international exchange and cooperation in the area of Secondary Education leading to a major World Education Forum on Secondary Education;
- Continue to provide a vehicle for establishing the ideals for Secondary Education in the twenty-first century and for holding governments accountable for moving towards these ideals.

# Conclusion

Participants of the Beijing Meeting felt strongly that there is now a clear mandate encouraging UNESCO to focus more directly on Secondary Education. There is also a clear urgency in wanting Secondary Education to be treated as an area in its own right, not simply as an extension of Basic Education or as a filter for Higher Education.

The International Commission on Education for the Twenty-first Century (UNESCO, 1996) stated that, "It is now generally recognised that, for economic growth to take place, a high proportion of the population has to have received secondary education." The Dakar Framework (UNESCO, 2000) agreed stating that, "No country can be expected to develop into a modern and open economy without having a certain proportion of its work force completing secondary education."

In full understanding that education serves more than the economic needs, as well as to facilitate its focus on learning to know, do, be and live together, the Dakar Framework (UNESCO, 2000) also commits countries to "ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes." In order to achieve this and five other goals, the Dakar Framework (UNESCO, 2000, pp. 8-9) and countries and associations represented at the Word Education Forum have pledged twelve actions including to "ensure the engagement and participation of civil society in the formulation, implementation and monitoring of strategies for educational development", to "develop responsive, participatory and accountable systems of educational governance and management", to create safe, healthy, inclusive and equitably resourced educational environments conducive to excellence in learning", to "enhance the status, morale and professionalism of teachers", and to harness new information and communication technologies".

Recently the Ministers of Education of Latin America and Caribbean met and confirmed their commitment to these goals and actions. Secondary Education was seen as a priority and the importance of life-skills was stressed (Cochabamba Declaration, UNESCO, March, 2001, p. 4): "Secondary education should be a regional priority in those countries that have achieved full access to primary education. The option of encouraging new and flexible forms of learning represents one answer for adolescents and young people living in poverty and exclusion – those who have abandoned formal schooling without having access to quality education." Among their fifty-four recommendations these Ministers (UNESCO, 2001, p. 7) also asked that, "Special attention be given to affective an emotional factors, due to their great influence on the learning process."

Clearly there is a growing realisation that, as Leclercq (2001, p. 4) states, "we have to appreciate the need for secondary education to be expanded at a rate faster than some have previously felt necessary." This realisation arises not only as a result of the growing demand for

Secondary Education by those completing Basic Education but also because of the dramatic changes in our societies, economies and workplaces.

The Beijing meeting on General Secondary Education in the twenty-first century, which consisted of delegates and experts from ten countries in different regions and varying contexts, from the least developed and most highly populated countries to the developing and developed nations, and balanced in terms of gender, adds yet further weight to the argument by having come to consensus that Secondary Education should be given higher priority.

The Beijing meeting also came to consensus that the objectives and functions of Secondary Education need to be redefined. The meeting identified the contexts and educational trends facing us now and in the future and the implications of these contexts and trends for the objectives and functions of Secondary Education. It identified the main challenges and dilemmas arising from this analysis of the contexts and trends and commenced an identification of the priority areas (including vocational and life-skills education), the resources and the strategies required to respond meaningfully to the new objectives and manage the dilemmas. This work needs to be built upon.

What is important is that in responding to the challenges for Secondary Education in the twenty-first century, the Beijing Meeting saw a need to take a developmental approach and to build on strengths. This desire in consistent with the Dakar Framework's (UNESCO, 2000, p. 9) position that success is more likely when we build on existing mechanisms.

Wright (2000, p. 143) points out that "the shift to an era of knowledge and information has given rise to a renaissance in the ideology of education as the main repository of our hopes for the future" and that this "represents a unique opportunity." It is pleasing therefore to find an increasing desire on the part of governments and their educators to want to seek a preferred future for their youth, to differentiate between what is acceptable and what is not. It is the belief of participants at the Beijing Meeting that UNESCO has made a major difference to the provision of Basic Education in the world but it is now time to build on that success by becoming part of, and helping to shape, this desire by governments in Secondary Education.

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*UNESCO International
Meeting of Experts*

General Secondary-School Education in the Twenty First Century: Trends, Challenges and Priorities

**Working Document**

**Jean-Michel leclercq**

*I. Key Problems*

It is proposed that three key problems, which are not only fundamental but interdependent, be subjected to analysis: the impact of the new social and economic context, the ways in which attendance has been increased and the consequence of that increase, and the forms of modernization to be considered. There is justification on at least two counts for taking these as the key problems. First, all three correspond to deep-seated developments, which, if not already underway, are at least foreseeable – developments connected with essential issues of general secondary-school education, either in its aims or its modes of operation, elements which are almost always at issue when concern to adopt new directions and scenarios arises. Second, at the methodological level, the analysis of each of these problems simultaneously entails the assessment of current situations, the making of future projections or comparisons between the situations in the various education systems, and the foregrounding, in each case, of a particular perspective, given the nature of the object and its specific characteristics. In examining the impact of context, we may clearly expect to see assessments and comparisons accorded a leading role, whereas in examining efforts at modernization we shall rightly expect to see a forward-looking perspective, doubtless as a result of the disappointing assessments to which many attempts at innovation give rise.

### 1.1. The Impact of the New Economic and Social Context

We might consider the need to accord particular attention to the impact of developments in the economic and social context - developments which are, as we know, always crucial to any kind of education or training.

It is, however, beyond doubt that these developments have come to have an even more decisive impact on general secondary-school education, on account of the role this is expected to play both in training the personnel required for the economy and in training the citizens who have to form today's societies. The question of raising the skills level for entry into the labour market is not simply an issue for technical or vocational secondary education, but also for general education - not least because solid, broadly-based knowledge and also generic skills, such as the ability to communicate, now form the basis of all requisite work skills. It also falls to general secondary education to develop in young people those attitudes which contribute to the proper functioning of societies, such as civic sense or tolerance. These points were highlighted by the International Commission on Education for the Twentieth-first Century, which stated: "It is now generally recognized that, for economic growth to take place, a high proportion of the population has to have received secondary education".[1] It was also argued, at the Dakar World Education Forum, that: "No country can be expected to develop into a modern and open economy without having a certain proportion of its work force completing secondary education"[2] The same Forum's report on Europe and North America pointed out that: "with the development of knowledge and of its influence on the lives of people, basic education takes more time: in our countries, it covers at least lower secondary education."[3] It is, however, probable that this standpoint will soon cease to be the preserve of the most prosperous countries and that more and more regions will come to share it, given the deep and rapid changes the economic and social context is set to undergo.

As a result, there is need both of a forward-looking approach to the economic and social context and of a vision for general secondary education in the future. In particular, we have to appreciate the need for secondary education to be expanded at a rate faster than some have previously felt necessary. For example, a development of production techniques in which intellectual operations take precedence over manual operations on account of the massive introduction of new technologies may lead to questioning the wisdom of retaining vocational training within the lower secondary school, when this may deprive pupils of the requisite range of general knowledge. In time, vocational training in the upper secondary school may ultimately come to be questioned in a similar way, as happened in Japan in the 1980s.

It goes without saying, however, that the analysis of context cannot merely consist in identifying overwhelming trends to which we must necessarily submit. Among those trends, we have to differentiate between what is acceptable and what is not. Only if general secondary education stands impotently by, or colludes with the development, will unscrupulous productivism or unbridled consumerism result. And it must indeed show its determination to help young people to resist all the forms of excess or deviance in the surrounding environment.

We should not forget, too, that secondary education provides its own context. It is

1. *Learning: The Treasure Within* (Paris: UNESCO, 1996). *The Dakar Framework for Action* (Paris: UNESCO, 2000), paragraph 34.

2. *The Dakar Framework for Action* (Paris: UNESCO, 2000), paragraph 34.

3. "Regional Framework for Action. Europe and North America", February 2000.

always possible, through system effects or by the action of pressure groups, for the administrative and pedagogical organization of that education to set itself up as the equivalent of an external, independent reality, promoting certain conceptions or practices and thwarting others. This explains, for example, why thoroughly sound projects may fail for want of sufficient understanding of the attitudes and behaviour of education officers, teachers, families or pupils. It may be that this phenomenon applies more to general secondary education than to other sectors, on account of the importance society attributes to that sector or the importance it attributes to itself under the influence of a persistent elitism.

The relations between general secondary-school education and its context are, then, highly complex. There must be a concern to investigate and decipher these relations, both in order to be able to explain situations as products of natural, legitimate influences, and also to detect excesses or anomalies which may generate what are in some cases tragic misconceptions and illusions.

## 1.2. Mass Secondary Enrolment, Democratisation and Equity

In the operation of general secondary education over the last two or three decades the most striking phenomenon has been the very great increase in enrolment levels.

As can be seen from the statistics in the table below, in the Member States represented at this meeting the increase between 1970 and 1997 has been spectacular. In many countries, total enrolments have risen by a factor of two or three, and in some cases far more. It is evident that this process is universal among the countries concerned, since it occurs in both the richest and the most deprived of them. And it shows up even more clearly when we remember that, in the countries of Europe as a whole, enrolment figures in upper secondary education have virtually doubled since 1980.

This development has comparable causes in the sample of systems selected for examination at this meeting and on a much wider scale. One essential factor in the shift to mass secondary education has been the inclusion of lower secondary-school education in compulsory schooling. In almost all cases those countries concerned to make up for previous backwardness in this area, such as Bangladesh and China, have extended the length of compulsory education to nine years. However, a similar extension of compulsory schooling has also occurred in recent years in many industrialized countries, showing the same concern on the part of governments to provide young people with the basic education required by the changes in the economy and society. For identical reasons, in those years of upper secondary education which are not part of compulsory schooling, families – often encouraged by governments – choose to have their children carry on their studies. Though this trend is much more marked in the northern hemisphere, it also exists in the South.

In these conditions, it is quite clear that the profile and purposes of general secondary-school education change profoundly. It is no longer reserved, as in the past, for the minority of the most fortunate youth. Nor is it any longer the prime aim of secondary education to afford access to higher studies, even if that remains very much a goal. It must provide the skills with which to enter working life, and must in many cases do so for the majority of pupils. Many still begin their working lives at the end of lower secondary education, but increasingly often

they now do so at the end of upper secondary schooling. With the advent of mass secondary enrolment, we have seen a different form of secondary education established, with a new clientele and new missions to fulfil.

However, it is equally obvious that this – theoretically compulsory – enrolment in lower secondary, or voluntary enrolment in upper secondary, education is far from representing a merely utilitarian decision on the part of governments or users, dictated by the demands of the economy (and by a concern to escape unemployment, in particular). They are also looking for a more democratic, more equitable operation of the education system, in which access to secondary education no longer restricted to an elite or to the most privileged social groups. This is particularly the case with lower secondary education, which has become an integral part of a common core of education - something long called for in many countries across the whole political spectrum and within all social groups. But the attitude towards upper secondary education is not radically different. Access to "high school" is regarded as a symbol of social advancement virtually the world over. This explains the disaffection which may be felt with vocational training at the upper secondary level - that form of training not being seen as part of "proper high-school education". How else are we to explain the low enrolment figures in vocational education in the table below or the fact that enrolment figures for such training did not rise in Europe until the continent experienced a long period of very high unemployment among the 18-24 age-group?

We must, however, remind the reader that the actual situations produced by the expansion of general secondary-school education may be very far removed from the advances in democratisation and equity expected.

Certain groups are still frequently sidelined. As is well known, outside Europe, North America and Japan, access to general secondary-school education and, even more to technical education remains difficult for girls. And everywhere, irrespective of sex, children from economically deprived or socially stigmatised groups and those suffering physical or mental handicaps suffer overt or concealed forms of segregation. Conversely, the systematic provision of general secondary-school education to all youngsters may leave some facing patterns of study which expose them to failure, or bring them very limited opportunities for socio-professional inclusion. When this is the case, instead of providing a fairer distribution of opportunity, the expansion of general secondary-school education may produce new social divisions.

Furthermore, mass secondary enrolment has not always been accompanied by allocation of the necessary resources to provide adequate conditions for learning. There may not be a sufficiently close-knit network of educational establishments to prevent children from having to make long, inconvenient journeys to school. Some subjects may be neglected or ignored for want of sufficient staff, or staff with the necessary skills, to teach them. A shortage of buildings or teachers may mean classes are overcrowded. These are defects which would be harmful in any conditions, but they are particularly harmful for those we might term the "new pupils" of the secondary sector, who need the best possible school environment to adapt to a new world and achieve good results in it. Here, again, these problems mainly affect lower secondary education, and we know that the considerable difficulties sometimes experienced there relate largely to a lack of material and human resources being brought on stream to deal with the many

## Enrolment in Secondary Education 1970-1997

| Country | 1970 | 1980 | 1990-1991 | 1993-1997 |
|---|---|---|---|---|
| Bangladesh | | T. 3,156,119<br>F. 606,913 | T. 2,142,335<br>F. 1,070,000 | |
| Canada | T. 1,636,913<br>F. 799,141 | | T. 2,292,497<br>F. 1,118,112 | T. 2,505,389<br>F. 1,218,403 |
| China | T. 26,482,976 | | T. 52,385,600<br>F. 21,706,500<br>V. 2,150,400 | T. 71,883,000<br>F. 32,530,000 |
| Guinea | T. 59,918<br>F. 13,064<br>V. 2,013 | | T. 85,942<br>F. 20,929<br>V. 8,202 | T. 153,661<br>F. 39,449 |
| Lebanon | T. 159,871<br>F. 64,141<br>V. 2,590 | | T. 248,097<br>F. 131,352<br>V. 37,403 | T. 347,850<br>F. 179,629 |
| Mexico | T. 1,584,342<br>F. 609,969<br>V. 423,584 | | T. 6,704,297<br>F. 3,163,293 | T. 7,631,605<br>F. 3,407,756 |
| Russia | T. 11,351,000<br>F. 5,735,000<br>V. 1,399,000 | | T. 12,363,000<br>F. 6,300,000<br>V. 1,252,000 | T. 12,424,000<br>F. 6,399,000<br>V. 1,007,000 |
| South Africa | T. 542,194<br>F. 264,461 | | T. 2,742,105<br>F. 1,474,611 | T. 3,749,449<br>F. 2,039,551 |

*Key:*     T – total enrolment
     F – female enrolment
     V – enrolment in vocational secondary education

*Source: UNESCO Statistical Yearbook* (except in the case of Bangladesh, where the sources used are national statistics).

problems generated by the introduction of compulsory enrolment. Upper secondary education is, however, already facing the same problems, and will do so increasingly as rolls increase.

### 1.3. The Need for Modernization and Innovation

A third aspect of general secondary education with which we must concern ourselves is the modernization of that education through major innovations in its modes of operation and teaching methods. These are processes from which it cannot really remain aloof, given the many adaptations currently being required of it – adaptations it would hardly be possible to make without breaking with approaches which have often remained unchanged for many years. Modernization has to be brought about if the many adaptations required are to be achieved: adaptation to the development of knowledge and to technological advance; adaptation to sec-

ondary education's new clientele; adaptation to the new roles that education has to play in societies. Modernization and innovation must be achieved in practically every sector.

First and foremost, the syllabus needs to be modernized. The place of certain disciplines in the syllabus must be upgraded– disciplines which have always been taught, but which today require particular attention, either to update their content, as in the sciences and technology, or to raise their profile, as in the case of language-teaching. Room has also to be made for subjects which have until now been virtually ignored, such as the new information and communication technologies, civics, and inter-cultural or sexual education, not to mention increased provision for artistic culture or physical and sporting activities. But we have even to rethink the notion of syllabus or curriculum so that young people may benefit from teaching and education in which all the elements are inter-linked and related to all the components of their person and their existence. This is all the more necessary when preparation for working life has become as important in secondary education as preparation for higher studies. And this problem by no means relates merely to the countries of the South where a secondary qualification is supposed to open other doors than those of the university. In the North, at least 20% of pupils do not obtain a leaving qualification and have to face career paths which may often be complex and arduous. Secondary education must equip them too with other assets than a passport to university.

We are also increasingly aware that changes in content must be accompanied by changes in teaching methods. The methods which prevailed in the past were based largely on teacher authoritarianism and pupil passivity. The disadvantages of these methods are now clear for all to see. First, they are detrimental to a section of the school population which is poorly prepared to fit into a mould which favours theoretical and intellectualist styles entirely alien to the approaches prevalent in the social groups from which a large fraction of secondary pupils now come. But, most importantly, these methods are ill-adapted to the conditions for knowledge- and skills-acquisition as revealed by the cognitive sciences; they are also inappropriate in view of the possibilities opened up by the new vehicles of information and communication. There can be no passive reception. It is by active discovery and exchange that we learn. We can no longer be content with teaching through unidirectional messages, teaching focussed solely on the pupil's brain. We have now to concern ourselves with the whole person and his/her diversity.

We could not hope to do this either if secondary schools did not also radically modify their modes of operation. This involves, first, the adoption of new ways of working by teachers to impart the requisite dynamism and flexibility to learning - failing which, teachers and pupils alike run the risk of delusion, boredom and failure. Second, it involves the formation of educational teams which are open to the entire educational community, and hence not merely made up of teachers. This is one of the essential conditions for responding to pupil needs in all areas, giving them all the time they need and showing an ability to listen. It also involves a new governance of schools, in which democratically based rules of conduct - and, above all, rules of life - should prevail – rules adopted as far as possible through dialogue and participation. It is difficult to see how we can otherwise offer the requisite secondary education to people who are not the pupils of yesteryear, but young men and women determined to assert their independence and maturity.

It doubtless remains for us to ask whether lower and upper secondary education do not call for different approaches. Are there not still, particularly in lower secondary education, adolescents who ought to be shown a better lead (though this does not mean abandoning recourse, where necessary, to stricter forms of discipline)? A similar question arises with regard to what is taught. In so far as, in most education systems, lower secondary education now forms part of basic education, it seems natural that it should involve the assimilation of a single syllabus by all pupils. By contrast, as the Report of the International Commission on Education for the Twentieth-first Century stresses, upper secondary-school education must be highly diversified. It should "be the time when the most varied talents are revealed and flourish."[4] Yet it is increasingly questionable whether lower secondary education can continue to hold to an authoritarian model for its operation and a unitary model for its curriculum - features which are always likely to pose problems for some pupils. The recent measures in France to introduce more flexibility into its "common school" model are symptomatic in this regard.

Most aspects of modernization and innovation give rise to comparable degrees of hesitancy. Indeed, this is a field in which there are many more questions than answers. Modernization programmes have in many cases had to be redrafted in mid-stream, as all the Member States represented at this meeting will be aware. The outcomes of these programmes are often disappointing on account of the lengthy time-spans or unwieldy compromises involved. Teacher training has also seen many reform projects, but it is difficult to avoid an impression that little actual progress is being made. When an initiative leads to the conclusion that teacher training must "include, among other things… an input from other disciplines (than the one taught)… sensitisation to linguistic and cultural diversity … learning teamwork… discovering interactivity… and acquiring an awareness that pupils today are no longer willing to receive an education in the traditional sense,"[5] and when one finds a whole string of similar viewpoints expressed,[6] one is both convinced of the strength of identical concerns and yet uneasy about the actual effects achieved.

We are not, then, seeing at all clearly the emergence of those "learning organizations" which secondary schools ought, in the view of the OECD, to become if they are to meet the challenges of the new millennium, particularly as regards entry into lifelong learning. However, even more modest ambitions seem far from being satisfied. Educational teams exist more on paper than in reality. And few of their members are non-teaching staff or come from outside the school. More generally, secondary schools are not places where human resources are satisfactorily managed, even though the educational world might be thought a much more favourable setting than business for providing careers in which everyone, through the full and free deployment of their skills, would be recognized at their true worth and feel fulfilled by their work.

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4. *Learning: The Treasure Within* (Paris: UNESCO, 1996).

5. *La formation des enseignants* (Paris: La Documentation Française, 2000).

6. As in the Canadian report, *Enhancing the Role of Teachers in a Changing World* (Council of Ministers of Education, Canada, 1996), p. 37.

A further illustration of reticence and overcautiousness can be seen in the fate reserved for the self-government of schools. The idea that this is a timely development - and one which needs to be reinforced - is practically unchallenged. But self-government generally remains limited because it seldom extends to financial autonomy and, so far as the syllabus is concerned, when it comes to deciding timetables and the subjects to be taught, restrictive regulations usually apply. Conversely, self-government has only to increase for concern to surface immediately about the prospects of preserving sufficient coherence in the education system or avoiding disparities which generate inequalities in educational provision in the secondary sector.

Clearly, a vision for a secondary education modernized by thoroughgoing innovation still remains to be forged – innovation not merely confined to incorporating new resources, such as information technology, but actively employing those resources to change the practices and behaviour of teachers and pupils.


## II. Reforms and Reform Strategies

The foregoing thoughts lead on naturally to the view that a serious redesign of secondary education is necessary and that such projects are in danger of running into significant obstacles, such as the complexity of the problems to be tackled or the resistance posed by existing situations.

The difficult nature of educational reforms has, in fact, become a recurring theme among educational decision-makers and practitioners. One recent writer revealingly entitled a book on the subject: *Education: An Impossible Reform?*[7] Another, in a study on the question of educational reform in sub-Saharan Africa between 1960 and 2000, stressed the ineffectiveness of efforts at change made over almost half a century.[8]

It is probable too, however, that the weariness felt at failed reform projects has provided a stimulus to reflection on the conditions in which reforms may best succeed and, more precisely, on the processes and strategies to be adopted to that end.[9]

This reflection has highlighted the following points:

A reform always requires a detailed preparatory research phase, which may extend over several years. This may seem a major obstacle in situations where reform is urgently needed, but it would be better to resort, where necessary, to a number of temporary individual measures, amounting virtually to mere treatment of the symptoms, than hastily to launch a poorly prepared project of general reform which is likely to have very harmful consequences of a deep and lasting nature.

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7. Pierre Laderrière, *L'enseignement, une réforme impossible ? Analyse comparée* (Paris: L'Harmattan, 1999).

8. Amara Fofana, *La problématique de la réforme de l'éducation en Afrique subsaharienne 1960-2000*, unpublished study, BREDA/Dakar.

9. In this connection, see *Strategies for educational reform: from concept to realisation* (Strasbourg, Council of Europe, 2000).

This research phase must also be a phase of consultation with all the parties involved in the reform. The age of top-down reform is past. Today, there must be dialogue between the decision-makers and their partners (local communities, teachers, families and, increasingly now, the pupils - at least in the upper secondary sector). This process of arriving at a consensus through consultation may take a considerable time, not least because of the amount of information and communication required.

If time is needed for the preparation of reforms, it is also needed for their application, since gradual introduction of reforms is far preferable to immediate, across-the-board implementation, which may produce over-ambitious expectations or violent changes in practice of a kind likely to spark all manner of resistance.

This is also why, in the long process of implementing reform, one should not be afraid to review it or, indeed, to reform the reform itself if some of its elements seem to require revision because they are either ineffective or harmful. This, however, assumes a process of running evaluation of the reform, which is not always present.

The precautions which must accompany the preparation and implementation of reforms lead us also to ask what their pattern and scope should be? Should we consider reforming the whole of an education system at all levels and in all sectors? Or should we not have much more limited aims, relating to a well-defined area? Opinions on this question continue to differ, but some trends can be identified. Awareness of the complexity and difficulty of any reform suggests at least that reforms should be made in a particular sector and should be phased in gradually. This is preferable to launching a thoroughgoing reform at a stroke. Attention should also be given to the inevitable inter-dependency of elements. There is little sense changing teaching structures or syllabuses without a parallel reform of teacher training. But it is also becoming clearer that reforms relating to contents and methods seem to have much greater impact than reforms of the administrative or teaching structures. This explains why we are much more likely to find reforms of the syllabus or of teacher training in the secondary sector today than structural reorganizations of lower or upper secondary education. All in all, it seems to be accepted that the way of preparing and carrying out reform is as important as its content, and that a reform is, first and foremost, a strategy for change.

At all events, to be effective a reform has to meet two imperatives. It must set clearly defined, clearly prioritised objectives, which are not a shopping-list of measures but a systematic set of priorities, as few in number as possible. It must lay down the strategies to be implemented to achieve these objectives, with all that this involves in terms of the scheduling of successive interventions and permanent assessment to evaluate the results attained and those which remain to be achieved. There can be no doubt either that these demands are even more pressing in secondary education, where situations and issues have to be addressed in all their complexity, given the large numbers of people now involved and the interconnectedness of the many problems faced.