

# **Primary Education: Expectations and Provision**

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## **Introduction**

The basic philosophy underlying the International Review of Curriculum and Assessment Frameworks project is that context is crucial to an understanding of policy and practice. It was consequently felt that the issues of expectations and provision in primary education in the 16 countries targeted by the study could best be explored by means of focused discussions with educators from the countries concerned. An invitational seminar was therefore organised in January 1997 ('Primary education: expectations and provision'). This paper summarises relevant information from the Archive *and* presents the issues that emerged from the presentations and discussions of the seminar, which was attended by representatives from the majority of countries taking part in the SCAA/NFER study.

## **Diversity in curriculum and assessment frameworks**

The collection of information for the Archive has highlighted the many areas in which countries' primary curriculum and assessment frameworks differ. There are differences, for example, in national educational aims and values, alternative regulatory mechanisms, relationships between different levels of government and educational authority or control, educational funding, phase boundaries, curriculum content and coverage, breadth and balance, means of organising pupil progression, and assessment regimes. Three areas are of particular importance in shaping other differences: diversity in aims and values; diversity in funding and responsibilities; and diversity in regulatory arrangements.

## **Educational aims and values**

Differences in overall educational aims and values are extremely important. While building the Archive, the NFER team has become very conscious that curriculum and assessment frameworks are not readily understood outside the context of these stated national aims. Countries differ even in terms of how specific their aims are (see Appendix 1). Countries such as Australia, Italy, the Netherlands, New Zealand and Singapore specify many. Other countries are more economical. The most commonly articulated aims are in the areas of:

- developing the capacities of the individual
- promoting equal opportunity
- preparing young people for work
- establishing a foundation for further and higher education
- providing knowledge, skills and understanding

- promoting citizenship (sometimes in the form of promoting democracy or community)
- ensuring cultural heritage (or literacy)

Among the less frequently expressed aims are: to develop personal qualities (such as confidence and self esteem), to contribute to the national economy, and to contribute to lifelong education. Korea expresses its intrinsic educational goal as the 'education of Koreans as the prospective leaders for the 21st Century'.

Systems in fact reflect their deeply ingrained cultural aims and traditions, including cultural expectations of education. In Singapore, for example, there are two educational goals combined which help to explain much of their balance of class teaching and early selection: the goal of enabling all pupils to acquire high levels of proficiency, together with that of allowing pupils to reach their own capability; the latter goal is a matter for primary as well as secondary education and, hence, the early selection influence.

The definition of sound moral values in civics and moral education textbooks in Singapore is also of interest: hard work, dignity of labour, respect for elders and tolerance of racial differences are all contributors to their intended social harmony and progress.

### **Funding and responsibilities**

Differences in how responsibilities are held and delegated by governments within education systems, and in educational funding arrangements, are also very important. Of the 16 countries analysed, there have been five which have strong 'state' (as opposed to national or federal) influence or control concerning the curriculum: Australia, Canada, Germany, Switzerland and the USA.

In these countries, national direction is relatively problematic and national influence over curricula and assessment is only achieved with particular care, and with due emphasis on proceeding by consensus. In Australia, ten national 'common and agreed goals for schooling' have been described by the Australian Education Council and have offered a structure for cooperation between schools, states, territories and the Commonwealth. In Switzerland, cantonal agreement has been needed over, for example, duration of schooling and the structure of primary schooling, and such agreement has always tended to take considerable time.

The remaining countries have national educational systems, and national influence and control can be exercised through a variety of regulatory means - reflecting different balances between national, regional, local and/or municipal government. (See Appendix 2.)

The source of school funds also differs considerably between countries, and frequently drives - or reflects - these relationships between government levels. For example, in Japan's balanced system of roles for national government, prefectures and municipalities, there is a tradition of consensus policy-making working alongside detailed Ministry controls. Funding reflects the relationship: each of the three main levels of government provides for its own educational responsibilities from its own

taxes and other income, yet there are significant general and specific subsidies from national government.

In contrast, funding in the Netherlands comes entirely out of central government funds; schools are obliged to observe certain conditions to receive state financing. This helps to cement strong central policy alongside a recent policy of deregulation and devolved responsibility. In New Zealand, funding to schools comes directly from central government but schools, have relatively little operational control, although they can set voluntary contributions (which are in fact fees) from parents. In Sweden, national funds are provided to municipalities and are not directly linked to specific forms of school organisation; this is for the municipalities to resolve. In Switzerland, each level (Confederation, canton and borough) is autonomous fiscally and the financial burden for education is assumed in proportion to responsibility. Mostly, funding is therefore from canton and borough level, although the Confederation and industry largely fund vocational training.

### **Regulatory arrangements**

Further differences exist in how countries regulate their curriculum and assessment frameworks. There are examples of countries which adopt regulated syllabuses (e.g. Singapore), attainment targets (e.g. Hungary and New Zealand), basic standards (e.g. Spain), statements of outcome (e.g. parts of Australia), primary and lower secondary leaving certificates (e.g. Italy), published examination performance information (e.g. France), authorised or approved textbooks (e.g. Korea), school curriculum plans with national minimum standards (e.g. the Netherlands) and 'high stakes' national assessment (e.g. Japan, at 15). In several countries (e.g. New Zealand and Hungary), there is also national monitoring of performance by pupil samples.

There are also large differences in terms of the degree of precision or specificity adopted within such elements as statements of outcome or attainment targets. Some countries are more specific about defining inputs (for example, in specifying school hours in Italy, and in assigning pupils points according to courses followed in Sweden) than defining desirable outcomes.

There are also different degrees of authority assumed by government - with some countries adopting guidelines while others mandate localities or schools, through law and other regulation. In a few countries (for example in France and Japan), inspection is also used to ensure schools comply with curricular and assessment expectations.

### **Diversity in primary education**

Many differences in primary education have arisen because of the various aims and values to which countries aspire, the various approaches they adopt to funding and responsibilities, and the diverse approaches they have to regulatory arrangements. A range of these differences are described below.

## **Differences in breadth and balance**

### **Countries differ in their approach to curriculum range in primary schools and to the main subject (and other) content of the primary curriculum.**

The range of subjects covered differs considerably between countries and, sometimes, between states or districts within a country. Often, the differences are difficult to ascertain because subject titles frequently hide the detail of subject. In terms of the primary curriculum, Hungary apparently has a very broad subject coverage, including health, social/life skills and homemaking alongside more traditional subjects. Closer examination would be necessary, however, to discern just what content each subject addresses.

Conventionally, countries include their national language, mathematics, science (although not Spain), art/craft and physical education within their primary curricula. History, geography, a second language and music appear more frequently than not in nations' subject lists for primary. Technology and the environment appear slightly less commonly. Religious education is by no means common and is expressly forbidden in French public schooling.

Most of the countries in the study introduce the learning of a foreign (or second national) language during the primary phase. The exceptions are England, Japan and Korea. Strikingly, bilingualism is a cornerstone of the system in Singapore and a large part of the curriculum is taught through the medium of the second language (English) from an early age.

There are some unexpected differences too. England is notable for excluding 'society studies' or civics. Japan is one of several countries which, perhaps unexpectedly, includes homemaking. It is worth remembering, however, that at secondary level the diversity is far greater, and more complex, due to the different institutional, as well as course options available to pupils.

### **Occasionally, there are striking similarities between countries in the content of specific curricula they adopt.**

For example, on examination the content of the primary science curriculum, year by year, in Korea appears similar to that of the National Curriculum in England and Wales. The structure of the moral education content in early education in Japan is similar to that recently being debated in England, although there are significant differences in the degree to which the two countries emphasise this content within the primary curriculum as a whole. On the other hand, content analysis again suggests that labels could be misleading: in one case, the science curriculum proves to be relatively heavy in geography.

### **Pedagogic as well as curriculum labels occasionally hide profound differences.**

In different countries, subjects, educational concepts and teaching techniques or organisational approaches can mean quite different things. These hidden differences are in such realms as teacher discourse, teacher-pupil interaction, 'posture' towards learning, and the way in which subjects and knowledge are

constructed, conveyed and validated. These differences can be more profound even than the hidden differences in what subjects mean.

**Curricula appear to be more clear about the cognitive than the affective learning that pupils are expected to do.**

This is especially true of England and Wales, in which almost all aims and attainment targets reflect academic goals. In Italy too, cognitive rather than affective goals are set out. In Korea, there is an expectation that there will be affective objectives within each subject's objectives, although in practice this is not universal. In Canada, there is some definition of attitudes in provincial curricula, as well as knowledge and skills. In Sweden, they include definition of pupil responsibilities.

**Cross-curricular expectations are expressed quite differently.**

Some countries stress the importance of attitudes to learning and problem-solving. In the Netherlands there are core goals across the subjects. In Hungary there are 'cultural domains' such as man and society or man and nature or life management (which permit delivery through separate or integrated subjects) each of which also has cross-curricular objectives, which include such topics as homeland, integration into Europe and the world, and communication. In Singapore, civics, moral and health education are taught in different tongues. Additionally, the status of cross-curricular goals differs: the participant from the Netherlands referred to cross-curricular goals as being 'on a level higher than the subjects', and in Northern Ireland there has generally been greater emphasis on cross-curricular dimensions and integrated subjects than in England and Wales.

**In the Asian Pacific Rim countries, there is now considerable interest in improving the teaching of creativity, problem-solving and higher order skills.**

Notwithstanding the above comment, the National Curriculum in England and Wales contains relatively high expectations regarding the teaching and learning of understanding and the application of knowledge and skills (for example in mathematics and science). Similarly, the Netherlands' seminar representatives made many references to the importance of pupils learning to put purposeful questions, and to work in a purposeful problem-solving way. Italy too requires a balance of basic and higher skills. In this respect, the north European curricula may require greater study in depth: promoting the learning of investigative and problem-solving skills. The Pacific Rim countries targeted in the study (Japan, Korea and Singapore), although confident in their pupils' achievement in the more basic skills, now appear to be interested in bringing these dimensions of understanding, problem-solving and creativity in their intended curriculum in line with our aspirations.

**In many countries, extra-curricular classes, private tutors and second schools play an important part.**

Hungary ascribes much of its mathematical high performance, for instance, to its additional teaching. In Korea and Japan, there is a similarly strong emphasis on extra classes and parental follow-up at home.

**In some countries, breadth and depth is determined at school rather than national level.**

In the Netherlands, for instance, the national attainment targets still leave individual schools autonomous in terms of when and how teaching takes place, how it is organised, and how assessment is organised. Because goals are for the end of primary schooling and not at any intermediate stage, and there are no standardised tests, no grade-oriented assessment and no tests for selection, it is the individual school which therefore determines breadth and depth.

## **Differences in curriculum organisation**

**The organisation of the primary education stages also differs considerably.**

It is relatively common to find school curricula and assessment organised in key stages or 'cycles'. For example, primary education in Italy (6 - 11) has a first cycle of two years and a second of three years. This first cycle is multidisciplinary with a predominant role for the class teacher; the second cycle, however, is subject-divided with different teachers used. In New Zealand, there are two 'junior' years (from age five) followed by 'Standards 1-4'. In Singapore, there is a four-year foundation stage and then a two-year orientation stage. In Spain, there are two (optional) infant 'cycles' (ages 0-3 and 3-6) and three two-year primary 'cycles' (6-8, 8-10 and 10-12).

Some countries organise end-of-year assessments (in primary) for admission to the next year, although arrangements for repeating a year vary considerably. For example, it is exceptional to repeat in Italian primaries, and only at the recommendation of the Inter-Class Council (while in Italian post-compulsory education, pupils with too low a mark must pass a repeat examination in September, before progressing). In Japanese primaries, work is paced so as to be manageable by the large majority (while in Japanese upper secondary schools, where end-of-year assessments are used, obtaining a fail grade especially in mathematics or English is likely to lead to a pupil being asked to repeat a year).

**Only a few countries limit pupil progression from one year to the next.**

It is still possible in Italy to limit pupils' progression from one year to the next if teachers do not believe that a pupil has made sufficient progress. In the Netherlands, however, where pupils encounter continuous assessment, almost all primary pupils progress annually - whereas in secondary education, pupils need a sufficient mark (6/10) or they repeat a year and, if they fail again, they must change to another type of education. Similarly in Spain, assessment is continuous and comprehensive in primary schools, in accordance with defined objectives - repeat years are exceptional, and limited to one year in the phase.

In Sweden, in the 7-16 compulsory schools, most pupils progress annually. Some, their headteacher may decide to hold back or accelerate a year, with parental consent. In Singapore, pupils may repeat year 5 of primary education (i.e. part of their 'orientation' phase) and this tends to be the only occasion for a repeat.

## **Differences in early education**

### **Moral education was a significant component in many countries.**

The striking example is that of Korea which emphasises three 'domains': a disciplined life, an intelligent life and a pleasant life. Time allocations indicate that moral education features heavily in early education. The same is true for Singapore, where moral education is part of mother tongue teaching, and for Japan.

### **In most countries, subjects were organised into 'brigades' in the early years.**

It is common to find a narrower range of curriculum areas named in the early years than later in primary, and in secondary education. This does not just reflect differences in nomenclature. It suggests a greater emphasis in the intended curriculum on the integrated learning of, for example, the child's understanding of themselves with respect to their environment. It may be that, for single teachers of a class, 'brigades' are much easier to understand and plan by; the integration (which teachers have been criticised for doing badly) would be pre-ordained and not left to individual schools. SCAA may want to take a look at six or seven different options for the 'brigade'. For example, the Netherlands links geography, science, technology and environmental education as 'environmental studies'; and in the first two years of primary education (ages 6-8), France links sciences, technology, history and geography as 'discovering the world'. Hungary has eight areas from grades 1-6: mother tongue/literature, mathematics, man and society, man and nature, the arts, information, life management and practical subjects, and physical education and sports. The existence of a 'brigade' is a clearer signal of primary-secondary differences in expectations.

### **Several countries do not set goals for the early and intermediate primary years, but only for the later years.**

The Netherlands for example. Hungary's system of defined minimum competencies only starts at the end of grade 4; they have no yearly curriculum division and teachers are free to choose the timing and pace to suit their own structures and philosophies.

## **Differences in later primary education**

### **Moral education is a significant component in many countries.**

Moral education remains a part of later primary education in several countries, albeit with apparently a lower time allocation, for example in Korea.

### **There are different expectations of the primary curriculum in terms of its preparation for later years.**

There is early use of streaming and selection in Singapore, which is associated with its high expectation that the upper primary curriculum is a servant of the secondary curriculum. Certainly, expectations of selection at the end of the 'orientation stage' of grades 5-6 appears to define a lot of the curriculum in these two grades, and has led parents and primary schools to ensure that the primary curriculum prepares pupils in particular for the selection examinations. There are different types of schooling -and curricula - in the orientation stage, suited to

pupils progressing at three different rates. In Italy, the traditions of primary and secondary education are very different. The curriculum structure (of subjects) in England and Wales is much more obviously borrowed from secondary than is true in most other countries. Korea and Japan emphasise more subjects too in the later years of primary education.

**In some countries, the curriculum is gradually extended, up through the age range.**

In Singapore, for instance, the seven-area curriculum from grade 1 (mother tongue, English, arts/craft, physical education, civics and moral education, health education, and music) is supplemented by science from grade 3, and social studies from grade 4, with subjects increasingly being taught through the common medium of English as pupils progress - especially in the higher ability bands.

### **Differences in assessment arrangements**

**Few countries have done as much as England and Wales to document national standards to form a spine for criterion-referenced assessment at different stages in the system.**

The Korean seminar representative commented that the arrangements in England and Wales were particularly systematic. Hungary's recent developments had most closely followed an England/Wales model: defining knowledge and skills, and then minimum competencies at certain stages (starting at the end of grade 4). In Singapore, the following are defined: topics, skills, learning tasks and activities, and learning outcomes. Learning outcomes are highly emphasised, and enable assessment. In the Netherlands and Sweden, in contrast, there appears to be very little, or no grade-oriented assessment. The Pacific Rim countries seem to favour norm-referenced assessment against class/year performance.

**Several countries organise end-of-primary assessment or a primary school leaving certificate by examination.**

In Italy, for instance, there are two written papers (language/expression and logic/mathematics) and one oral (covering all subjects together), and the main examiners are the class teachers and two teachers nominated by the Teachers' Assembly for the school. In Singapore, pupils sit a national examination at the end of primary education to assess their suitability for appropriate secondary school courses.

Several countries, by contrast, have lower secondary school certificates. For example, Italy and Japan have such certificates for pupils aged 14/15 to secure entry to upper secondary schools. Italy has a primary leaving certificate too, whereas Japan has automatic movement from neighbourhood primary to neighbourhood lower secondary school. Entrance examinations for lower secondary education in Korea were abolished in 1969, but there are examinations to be passed to enter upper secondary. Sweden has adopted a compulsory school leaving certificate, to qualify pupils for upper secondary schools.

**There is evidence that changing (and clearly specifying) assessment expectations may be a particularly effective way of changing school and classroom practices.**

It could be argued that in England and Wales the effective years have been those most closely linked to an impending, clearly defined test/examination. In Singapore, there is a clear understanding that curriculum and classroom change (e.g. to promote more creative skills among pupils) would ensue from a specified change to what is to be assessed (i.e. they will test these skills in their high stakes examinations).

## **Understanding international differences in curriculum and assessment frameworks**

The diversity that is represented above leads to a number of recommendations for those involved in curriculum and assessment reform in this country, and abroad. These are:

**Changes in curriculum and assessment frameworks have to be planned or understood in terms of broader educational and cultural expectations.**

The extent of diversity between countries in their national curriculum and assessment arrangements is substantial. No two countries have proved to be alike. There appear to be some commonalities, whereby two or more countries have certain common features, but then important differences again emerge. In most cases, these differences appear to reflect either an educational inheritance, such as the constitutional protection of teachers' autonomy in Italy, or key differences in terms of what is expected of 'teachers-as-curriculum-developers-and-classroom-planners' (see below). The consequence is that in planning changes, each country must re-evaluate its inheritance and, especially, its expectations of the teaching profession. National characteristics and culture are also of significance: in Japan, schools' involvement in extra-curricular contests between pupils in areas such as music and sport reflects parental competitiveness and aspirations for their children.

**Teacher autonomy and the training and expectations of teachers differ hugely between countries.**

In primary education, Italy has a system which demands a relatively low level of qualification for practising teachers. Their education system also has high numbers of primary teachers, enabling a much higher teacher-to-pupil ratio than in most other countries. Subsequent decisions, for example on ministerial regulations about the minimum time per week for different subjects fits in with these expectations. In other countries, such as England, Canada and the Netherlands, there has been movement towards a graduate profession. Consequently in these countries, there are correspondingly higher expectations of the teacher in terms of interpreting curriculum guidelines and preparing both curricula and materials. Where there are higher qualifications for, and expectations of, teachers, there may be an even greater need to take into account how they perceive a curriculum change they are asked to implement, and how much they perceive it will change working practices (including workload). In many cases, this creates an additional obstacle to those seeking change. Are some

systems ill-equipped in terms of supporting teachers to turn primary ambition into practice, while others are structured to accommodate the capabilities of teachers?

Additionally, there are at least three dimensions on which expectations of teachers appear to differ: academic/pastoral (i.e. how much the role of the teacher is to teach subjects or provide care and growth for the individual child), professional/technical (how much the role of the teacher is to develop and interpret curricula, and how much to deliver them), and achievement/equity (how much the role is to ensure high achievement and how much to ensure integration and greater social equity). The greater the school or teacher autonomy, the greater the risk of large differences between schools and classes in different parts of the country (c.f. north and south Italy) - unless accountability is managed well.

**The impact of parental and employer expectations differs between countries.**

These can be important factors for the reformer to consider. Simplistically, in some countries employers' expectations are interpreted as requiring greater literacy and numeracy - the basic skills. In countries where there are good basic skills, like Singapore, the influence of employers has been to call for greater student creativity. In some countries, parents instil a sense of duty and obligation to the family and to one's elders; in other countries, there is greater emphasis on the freedom and rights of the child. Interestingly, globalisation may be precipitating tensions; for example, the Japanese and Korean seminar representatives spoke about a growing parent-child generation gap in their countries.

**In some systems, change appears to be much easier to implement than in others.**

For example, it may be possible to implement curriculum change more quickly in Singapore, Korea and Japan through rewriting curriculum expectations and textbooks because, in their context, there is a greater consensus over values and a readiness among teachers to adopt revised government materials. In some European countries, change needs to be negotiated in the context of the professional autonomy of teachers (see above). In Singapore, there is the additional advantage of being a relatively small 'city state' in which planning has largely proceeded on the basis of managed, systematic and concerted effort in identified and agreed areas of priority. In Japan, there is not a national curriculum as such but 'guidelines', which the Ministry and others expect to be adopted, so change is not so difficult to direct; additionally the Ministry sets time allocations for subjects. There is evidence that, in England and Wales, the last ten years of structural change have made our system much more susceptible to (further) change: we now have more policy, regulatory and other levers to pull in order to effect improvements in pupil performance. Of course, each lever has a different effect, and over a different period of time.

**It is recognised that it is hard to change education systems - unexpected factors can lead to perverse outcomes.**

Some countries appear resigned to accepting that they cannot fundamentally change their education systems through revising their curriculum and assessment frameworks (or their 'intended curriculum'). The Hungarian seminar representative, for instance, stressed the importance of focusing on teacher quality

and high expectations of children; recent reforms to the curriculum had not proved an effective agent of change for them. Additionally, community, parent and professional expectations and traditions frequently constrain change. For instance, the Japanese representative recalled the use in the 1960s of a spine of nationally specified levels in each subject, in a form like that of the National Curriculum in England and Wales. The system was abandoned, however, because parents were so highly interested in assuring that their children performed at the highest levels possible that 'teaching-to-the-test' became widespread, and the curriculum was unduly distorted. In the current system in Japan, high levels of parental and pupil motivation still lead to teaching-to-the-test, but it is perceived to be at an acceptable level in terms of curriculum distortion. In Italy, inspection has indicated that only about 30% of schools fully implement the national curriculum, while another 40% do a large part.

**Most countries have a formal or informal 'cycle of review' for their curriculum and assessment arrangements.**

In Japan, there is a ten-year cycle. In Korea, the ten-year cycle has recently been reduced to six years. In Hungary, it is three years currently; in the Netherlands, five years. In Sweden, there is a three-year development plan, while in Canada, the cycle of review is tied to subjects, and in other countries there are syllabus cycles.

## **Conclusions**

There is superficial evidence of convergence between different systems. International comparisons are probably increasing the dialogue between countries about curriculum and assessment options. There is evidence that, as one country moves towards a more regulated curriculum with a greater emphasis, say, on basic skills, it will encounter other countries with those same qualities, interested in de-regulating and trying to achieve a better balance with the extended curriculum or with higher order skills.

It would be ill-considered, however, to assume that a country like Korea would pursue the objective of engendering greater creativity by adopting strategies akin to those we associate with Plowden; they will find their own approach. Japan is also discussing topic work (for implementation in 1999) but the outcome is likely to be very different from the integrated topic work of the 1970s and 1980s in England and Wales; they are examining areas such as international education, IT education and environmental education but have not moved from a heavy reliance on authorised textbooks.

Further evidence of convergence comes in structural areas: for example Japan now anticipates (further) reduction in the length of the school week/year. In 1992, they moved to one Saturday off a month, in 1995 to two, and it is proposed to have all Saturdays off from school by the year 2000.

Whether systems are converging or not, those who plan to review and/or reform curriculum and assessment arrangements should benefit from reflecting on their purposes and from considering a number of key questions about the *design* of their own systems. Some examples follow.

### **Consistency between decisions affecting curriculum and assessment frameworks**

It may be that by examining other countries' practices, we can become more sensitive to the educational reasons behind adopting specific curriculum practices in our own country - and we may become aware of decisions which are not wholly consistent.

### **Flexibility versus inertia**

In England, for example, there has been considerable system-level change in the last ten years, which has certainly made the curriculum and assessment framework less inert than before - is this itself of benefit, or should greater stability be pursued?

### **The effect of secondary and higher education demands on primary curriculum and assessment frameworks**

In designing primary curricula, countries might differ in the extent to which they plan for the end of primary schooling, that is for how primary pupils are prepared for secondary education, as opposed to how they plan from the start of primary education, that is from the standpoint of the abilities and attributes that young children bring to school - are these important differences to understand?

### **The effect of new technologies on the design of curriculum and assessment frameworks?**

New information and communication technologies make it feasible to provide more education at a distance, to provide more curricula which are individually customised or controlled, and to manage assessments more efficiently across large populations. The full impact of these technologies has not yet been felt by curriculum and assessment frameworks, but how might different countries be affected?

These are some of the dimensions of more fundamental thinking that should underlie our future endeavour to understand and revise the curriculum and assessment framework that we have now established.

## Appendix 1 - National education aims

Educational aims , purposes, goals and principles, *as stated in documents consulted* (see the description for each country in the Archive).

	Eng	Aust	Can	Fran	Germ	Hung	Italy	Japan	Korea	Neth	NZ	Sing	Spain	Swed	Switz	USA <sup>1</sup>
Excellence	X	X	X						X		X	X				X
Individual development	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Social development	X	X	X				X	X	X	X	X	X		X	X	X
Personal qualities	X	X	X				X	X		X	X	X	X	X	X	
Equal opportunity	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
National economy	X	X	X			X	X	X	X		X	X	X			X
Preparation for work	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
Basic skills	X	X	X				X	X	X	X	X	X	X	X	X	X
Foundation for further education	X	X	X	X	X		X		X	X	X	X	X		X	
Knowledge/skills/understanding	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
Citizenship/community/democracy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cultural heritage/literacy		X	X				X	X	X	X	X	X	X	X		
Creativity		X	X				X	X	X	X		X				
Environment		X	X						X			X				
Health/physical/leisure		X	X				X	X	X	X		X	X	X		
Lifelong education		X	X						X		X	X		X		
Parental participation		X	X				X				X	X		X	X	X
	Eng	Aust	Can	Fran	Germ	Hung	Italy	Japan	Korea	Neth	NZ	Sing	Spain	Swed	Switz	USA

<sup>1</sup> **USA:** Although education is the responsibility of individual States, the United States Congress has enacted legislation, including the *Goals 2000: Educate America Act*.

## Appendix 2 - Levels of control and administrative organisation

(The levels indicated in bold are those which have major responsibilities for decision making.)

	National level	Second level	Third level	Institutional level	
England	<b>Ministry (DFEE)</b>	Approx. 150 local education authorities (LEAs)		<b>School governing bodies</b>	Devolved responsibility to schools
<i>Australia</i>	<i>Commonwealth</i>	<b>6 States and 2 Territories</b>	<i>Districts (Tas)</i>	<i>(optional) school councils (Tas)</i>	<i>Local school management being introduced on voluntary basis (Tasmania)</i>
<i>Canada</i>	<i>Confederation</i>	<b>10 Provinces and 2 Territories<sup>2</sup></b>	<b>School Boards</b> <i>(elected Members)</i>	<b>School councils (non-elected)</b>	<i>In Canada, federal control is informal, through Council of Ministers of Education (Toronto)</i>
France	<b>2 Education Ministries</b>	<b>22 régions</b>	<b>96 départements or communes</b>		Devolved responsibility to <i>régions</i> (post-compulsory), <i>départements</i> (secondary) and <i>communes</i> (primary)
<i>Germany</i>	<i>Federal Govt.</i>	<b>16 Länder</b>	<i>Local school districts</i>		<i>Länder set guidelines; local school districts recruit staff, determine curricular content and choose texts</i>
Hungary	<b>Ministry</b>	<b>3000 municipalities or counties</b>		<b>School</b>	
Italy	<b>Ministry</b>	20 regional <i>sovrintendenas</i>	<b>Provveditorato and communes</b>	School council	Centralised policy making. Some delegation of administrative powers from provinces to schools
Japan	<b>Ministry (Monbusho)</b>	47 prefectures (responsible for upper sec)	3246 municipalities (compulsory ed)		Ministry oversees; prefectures operate upper secondary and support municipalities
Korea	<b>Ministry</b>	15 Municipal/Provincial Education Authorities (MPEA)	179 regional offices of education	'School management committees'	Plans for devolution of school budgets to school management committees
Netherlands	<b>Ministry</b>	Provinces	Municipalities ( <i>Gemeente</i> )	<b>c 6300 Competent Authorities</b>	Devolution of financial and management responsibility to competent authorities. School plans from 1998
New Zealand	<b>Ministry and 7 Central Agencies</b>			<b>Board of Trustees (from 1989)</b>	Trustees develop a Charter - aims, purposes etc.
Singapore	<b>Ministry</b>			School/Principal	
Spain	<b>Ministry</b>	<b>17 Autonomous Communities</b>	Provinces and municipalities		
Sweden	Ministry	Municipalities		School principals	
<i>Switzerland</i>	<i>Confederation</i>	<b>26 Cantons</b>	<i>Boroughs</i>		
<i>U.S.A.</i>	<i>Federal Govt</i>	<b>50 States</b>	<i>Districts</i>	<i>School</i>	

<sup>2</sup> **Canada:** Territories have territorial government within federal framework, but exercise less autonomy than Provinces.

### Appendix 3 - Primary curriculum

**Australia:** *State/Territory variations but general support for eight Key Learning Areas:* the Arts; English; health and physical education; languages other than English (LOTE - not necessarily from Year 1); mathematics; science; studies of society and environment (SOSE); technology.

**Canada:** *Variations by Province/Territory, but most include:* language; mathematics; social studies; introductory arts; and general science.

**England:** English, mathematics; science; technology (design and technology and information technology); history; geography; art; music; physical education; religious education (parents may withdraw their children from religious education).

**France:** **Age 6-8** French; 'discovering the world' (sciences, technology, history; geography); civics; mathematics; physical education and sports; art. **Age 8-11** French; mathematics; history and geography (integrated); civics; technology; sciences and technology (integrated); physical education and sports; art; one modern foreign language is optional, for a maximum of 1.5 hours per week. Religious education is forbidden in State schools, except in the *départements* of Upper Rhine, Lower Rhine and Moselle.

**Germany:** German; mathematics; *Sachunterricht* (comprising: social studies, history, geography, biology, physics, chemistry); art; music; sport; religion. Increasingly, a modern foreign language is offered from Yr 3.

**Hungary:** 10 cultural domains: Hungarian language and literature and minority language and literature (Hungary has 13); modern foreign language; mathematics; man and society (social studies, civics, economics, human studies, history); man and nature (natural studies, physics, chemistry, biology, health studies); our earth and environment; arts (singing and music, dance and drama, visual arts, motion picture and media studies); informatics (computing studies, library use); life management and practical studies (technology, home economics, career orientation); physical education and sport. PLUS cross-curricular objectives.

**Italy:** Italian language; foreign language (from Yr 3); mathematics; sciences; history; geography; social studies; art education; education in sound/music; physical education; (taught as three interdisciplinary modules: linguistic-expressive; scientific-logical-mathematical; historic-geographical-social groupings); religion is optional for pupils.

**Japan:** Japanese language; arithmetic; social studies (Yrs 3-6); life environment studies (Yrs 1-2) or science (Yrs 3-6); music; drawing and handicrafts; physical education; and homemaking (Yrs 5-6). Moral education permeates all aspects of school life and involves theory and practice (through domestic work in school). Religious education is not taught in state schools.

**Korea:** **Yrs 1-2:** Korean language; mathematics; 'disciplined life' (moral education); 'intelligent life' (social studies and science); and 'pleasant life' (PE, music and fine arts). **Yrs 4-6:** moral education; Korean language; mathematics; social studies; science; physical education; music; fine arts; practical arts; and elective courses. All pupils participate in extra-curricular activities.

**Netherlands:** sensory coordination and physical exercise; Dutch; arithmetic and mathematics; English; geography; history; biology and natural science; social studies; grammar and use of language; drawing; manual dexterity; play and movement; physical and mental health. Schools in the province of Friesland must teach Frisian.

**New Zealand:** Seven essential learning areas: language and languages; mathematics; science; technology; social sciences; the arts; health and physical well being. 8 groups of essential skills: communication; numeracy; information; problem-solving; self-management and competition; social and cooperative; physical; work and study.

**Singapore:** English (includes health education and information literacy skills); mother tongue (Chinese, Malay or Tamil, includes civics and moral education); mathematics; arts; crafts; music; physical education; science (from Yr 3); social studies (from Yr 4); health education (from Yr 5) and assembly.

**Spain:** Castilian language and literature; knowledge of the natural, social and cultural environment; mathematics; artistic education; physical education; foreign languages (from Yr 3); Catholic religion (optional for pupils, who may instead undertake private study). Additional regional language where applicable.

**Sweden:** **Age 7-16:** Swedish (or Swedish as a second language); mathematics; English; practical arts subjects (art, domestic science, sport and health, music, craft); social sciences (geography, history, social studies, religious studies); sciences (biology, physics, chemistry, technology); a second foreign language; and electives.

**Switzerland:** *Local variations*, but teachers enjoy discretion beyond mathematics, foreign languages and some aspects of mother tongue. In some parts of Switzerland common curricula have been adopted.

**USA:** *Local variations*, but all generally include English grammar, reading and writing; mathematics; science and scientific method; US history and government; art; music; health and nutrition; practical arts; physical education; geography; and foreign languages.

The above subject listings are drawn from the documentation received from participating countries as forming the curriculum at primary level. The table ‘converts’ them into comparable subject headings to give an indication of the range of subjects covered without reflecting the content, the compulsory or elective status of a subject or the length of time for which the subject is studied. ‘*Opt’l*’ means that the subject is optional for students.

	Eng	<i>Aust</i>	<i>Can</i>	Fran	<i>Germ</i>	Hung	Italy	Japan	Korea	Neth	NZ	Sing	Spain	Swed	<i>Switz</i>	<i>USA</i>
National language	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alt national language			X			X				some	X	X	some	some	X	
Foreign language 1		X		opt’l	<i>some</i>	X	X			X	?		X	X	X	X
Foreign language 2																
Foreign language 3																
Mathematics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Science	X	X	X	X	X	X	X	X	X	X	X	X		X		X
Environment		X				X		X		X			X	X		
Technology	X	X		X		X					X			X		X
History	X			X	X	X	X			X				X		X
Geography	X			X	X	X	X			X				X		X
Society studies/civics		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Art/craft	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Music	X				X	X	X	X	X	X		X		X		X
PE/sport	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Health		X				X				X	X	X		X		X
Moral education								X	X			X				
Religious education	X				X		opt’l						opt’l	X		
Homemaking/domestic science						X		X						X		
Social/life skills						X				X						
	Eng	<i>Aust</i>	<i>Can</i>	Fran	<i>Germ</i>	Hung	Italy	Japan	Korea	Neth	NZ	Sing	Spain	Swed	<i>Switz</i>	<i>USA</i>