

THEMATIC PROBE. Primary Education: an International Perspective

Country Description: USA

This country description was compiled from the *INCA* Archive (www.inca.org.uk).

The United States of America (USA) is a confederation of states, each with considerable autonomy. Responsibility for education is devolved to the state level. It is therefore difficult to make general statements about national provisions. Readers need to be conscious of the fact that the following description aims to provide a general outline, and makes specific reference to the states of Kentucky, Maryland, Massachusetts and Wisconsin, but there are likely to be regional and institutional differences.

1. Organisation of school phases=

How are the early years and primary phases organised? (3-5yrs? 5-11yrs?)

General

Education is compulsory across the USA, usually for children from around the age of six to 16 years; that is, most states require at least ten years of compulsory education.

Primary level education in the USA is known as elementary education. Generally, when the term elementary is used, it refers to education from kindergarten Grade (the year before compulsory education begins, when children are usually aged between five and six years) to Grade 8 (students aged 13 to 14 years). However, an elementary school is any school, which is classified as such by state and local practice and composed of any span of Grades not above Grade 8. A pre-compulsory or kindergarten school is included under this heading only if it is an integral part of an elementary school or an established school system.

In addition to pre-compulsory provision in the kindergarten year, many states also offer a publicly-funded pre-kindergarten early years experience to children aged four to five years. Where such programmes do exist, they are often offered firstly to children with developmental difficulties, or to children identified as potentially at risk of failing in school.

Kentucky

Elementary education in Kentucky extends from kindergarten Grade to Grade 8 (children aged from five to 14 years), but is usually divided into primary, intermediate and middle level programmes. Primary level programmes serve children from the time they enter elementary school (usually in the voluntary kindergarten year, aged five, or at age six in Grade 1) until they enter Grade 4 (aged nine); intermediate level

education provides for children in Grades 4 and 5 (aged nine to 11 years); and middle level programmes are for those children in Grades 6 to 8 (aged 11+ to 14).

Maryland

Education is compulsory for children aged six to 16 years and, prior to this, a kindergarten experience (of one year, for children aged five to six years) is generally required, unless parents feel that it is not in a child's best interests to be in school at age five. In addition, a pre-kindergarten year is also available for four- to five-year-old children in Maryland.

Massachusetts

Each child must attend school beginning in September of the calendar year in which he or she reaches the age of six years. Each school committee may establish its own minimum permissible age for school attendance, provided that this age is not older than the mandatory minimum age.

Wisconsin

In Wisconsin, children must normally attend school between the ages of six and 18 years. A parent or guardian does, however, have the right to select a home-based private educational programme (HBPEP) for her or his child or children. No child may be admitted to the first Grade unless he or she is six years old on or before 1 September in the year that he or she proposes to enter school.

What are the points of transfer between phases?

As mentioned above, public schooling in the United States generally begins with a kindergarten year, prior to compulsory education starting in Grade 1 (or first Grade) and continuing through to around Grade 12. Most students enrol in kindergarten at around age five and the typical age for Grade 12 graduation is 18. In most states, attendance is mandatory between the ages of six and 16 years. Grades 1 to 12 are divided in various ways, dependent on the particular state. They may, for example, be divided into:

- Elementary school, catering for Grades 1 to 8, students aged six to 14 years, and high school for Grades 9 to 12, 14- to 18-year-olds (the model around which the *INCA* Archive is based).
- Primary school, incorporating kindergarten to Grade 2, five- to eight-year-olds; intermediate school for Grades 3 to 6, students aged eight to 12 years; junior high school for Grades 7 to 9, 12- to 15-year-olds); and senior high school for Grades 10 to 12, students aged 15+ to 18 years). (In some states, Grade 6 is included in junior high school.)
- Elementary school, for Grades 1 to 5, children aged six to 11 years; middle school for Grades 6 to 8 (11- to 14-year-olds); and high school encompassing Grades 9 to 12, students aged 14+ to 18 years.

Pre-kindergarten	Kindergarten year	Elementary school (or primary and intermediate school)	Junior high school or middle school	High school
4-5 years	5-6 years	6-14 years	-----	14-18 years
4-5 years	5-6 years	6-12 years	12-15	15-18
4-5 years	5-6 years	6-11 years	11-14	14-18

2. Locus of control

What degree of control over curriculum content and other aspects of primary schools exists at the national, regional, local and/or school level?

Control of education in general

The United States constitution does not mention education, which has historically been considered an individual state responsibility. However, the country provides universal general education and all states are required to operate schools meeting federal standards.

In this respect, the United States Congress has enacted several pieces of legislation affecting states, communities and schools. The main piece of education legislation - the *Elementary and Secondary Education Act (ESEA)* - is re-authorized every five years or so, under a specific title. In 1994, it was re-authorized as the *Goals 2000: Educate America Act*, in 1999 as the *Educational Excellence for All Children Act* and, most recently, following the 2001 election of George W Bush, as the 2002 Education Act - *No Child Left Behind*.

State legislation establishes the regulations by which public (state) schools operate and the criteria by which private schools are accredited. The day-to-day operation of schools is primarily a local matter, with state-level administration varying widely in its impact on local school boards.

Most states have a state Board of Education, either appointed by the state governor or elected by the citizens. The chief education officer of the state is either elected in a general election or appointed by the governor. Local districts have their own school boards of citizens either elected or appointed; school boards determine local educational policy and appoint a superintendent to administer the district's schools. School districts may be contiguous with the political jurisdiction, or they may be a portion of the jurisdiction. In some cases, districts serve more than one town or village.

States formulate policies on the allocation of funds, the certification of teachers, textbooks and library services, and the provision of records and statistics; some states also specify curricula. District school boards collect taxes, construct buildings and have traditionally purchased equipment, determined instruction policy and employed teachers and other staff.

All levels of government fund free public education: local, state and federal. To conform with the strong local interest in education, the bulk of the funding stems from local taxes, aided by state support to equalise opportunity throughout the state and to introduce or encourage specific programmes locally. Federal (national government) funds aid projects regarded by Congress as essential for the common good, for example, programmes for deprived children. In 1999, around nine per cent of education funding came from the federal Government.

Local districts were originally the principal funding source for education. The proportion of the budget provided by the state has, however, gradually increased, in part to compensate for deficiencies of schools in less economically prosperous areas, so that states now contribute the larger share. The states and districts between them contribute more than 90 per cent of the cost of school-level education in public schools.

Wisconsin

State law, adopted in 1965, requires children to attend school from the age of six to 18 years. Laws also set minimum expectations for each school district's educational programme. Known as *The 20 Standards*, these requirements specify that each district:

- has licensed professional staff;
- has a staff development programme;
- provides remedial reading services;
- offers kindergarten classes for five-year-olds;
- provides guidance and counselling services for all students;
- schedules 180 days of face-to-face instruction;
- provides emergency nursing services;
- provides library media services;
- provides safe and healthful facilities;
- provides health, physical education, art, and music instruction;
- uses a sequential curriculum plan;
- provides regular instruction in reading, language arts, social studies, mathematics, science, health, physical education, art, music and, in certain Grades, career exploration, vocational education and foreign language education;
- provides access to an *Education for Employment* programme;
- develops 'children-at-risk' plans;
- annually distributes a school performance report;
- complies with high school graduation standards;
- conducts performance evaluations of all certified school staff;

- gives the state standardised reading test to third-graders (aged eight to nine years);
- gives required standardised examinations; and
- provides programming for gifted and talented students.

Curricular control

There is no national curriculum for primary level education. Individual states have the right to establish curriculum guidelines. The intended curricula are then determined at the school district level in accordance with state guidelines. All US states have some form of statewide testing policy in place alongside some form of official curriculum documents and specific centralised learning standards for English, mathematics and science. Indeed, there is a move across the country to develop state-level core content standards, which provide some consistency across a state in terms of the curriculum content. Nearly every state has these standards in place, although they do vary in terms of specificity, areas covered, format, etc.

Kentucky

The *Programme of Studies for Kentucky Schools Grades Primary-12* aims to ensure that all students are provided with common curriculum content and have opportunities to learn at a high level. The document provides administrators, teachers, parents, and other stakeholders in local districts with a basis for establishing and/or revising their curricula. The *Programme of Studies* outlines the minimum content required for all students before graduating from Kentucky high schools. Schools and school districts are charged with identifying the content for elective courses and designing instructional programmes for all areas. Schools and school districts are also responsible for coordinating curricula across Grades and among schools within districts.

Maryland

The role of the Maryland State Department of Education in curriculum development is to establish rigorous standards in content, identify research-based best practices in instruction, and provide models for large scale and small scale assessment of students. As such, the state provides guidance to local school systems in determining goals and expectations for learning, for pre-kindergarten children, aged around four, to students leaving high school in Grade 12, aged around 18. The state assists local school systems in the articulation of comprehensive programmes in English language arts, mathematics, science, environmental science, social studies, foreign language, English as a second language (ESL)/bilingual education, health, physical education, and the arts.

Maryland Content Standards specify what students from kindergarten to Grade 12 (aged five to 18 years) should know and be able to do in English, mathematics, science and social studies. Maryland school systems currently use these standards as their principal guide when they are writing curriculum. This may change shortly in view of the fact that a voluntary, model statewide curriculum is under development. This aims to provide teachers with a clearer picture of the state's expectations for students. Further information is provided below.

Massachusetts

The Education Reform Act of 1993 required the state to establish educational goals, academic standards, curriculum frameworks across seven core subject areas (arts, English language arts, foreign languages, health/sport/PE, history and social science, mathematics, and science and technology) and a system for evaluating individual schools and school districts, as well as to develop academic standards in the seven core subject areas. Since the enactment of the Act, statewide curriculum frameworks have been developed for pre-kindergarten to Grade 12 education in Massachusetts (students aged from around four to around 18 years).

Each curriculum framework is always considered to be work in progress and, consequently, is subject to continual refinement and strengthening. The frameworks are also continually reviewed to ensure that they remain current. Local communities use the frameworks to develop more specific, locally-adapted curricula, and the Department of Education bases the statewide student assessment programme on the frameworks.

Wisconsin

The state of Wisconsin has a statewide core curriculum for kindergarten to Grade 12 (students aged from around five to 18 years). Linked Wisconsin Model Academic Standards have been developed. These describe the skills children are expected to have acquired in specific subject areas (mathematics, science, reading, language arts and social studies) by the end of specific Grades.

Are there any shifts in the distribution of control between these different levels? (Is it possible to assign percentages to each level, to reflect circumstances in each country?)

See above. No additional information is available via the *INCA* Archive.

At what intervals is the curriculum reviewed? (eg are there established review cycles?)

Curriculum review is a matter for individual states. However, when the federal *Elementary and Secondary Education Act (ESEA)* is reviewed and re-authorised (on average, on a five-yearly cycle), the national goals which this sets for education tend to be reflected in the educational and curricular frameworks of individual states.

Generally, individual states tend to regard curriculum frameworks as ‘work in progress’. Consequently, they are subject to ongoing review to ensure that they remain appropriate and current.

3. Curriculum content

What does the statutory curriculum consist of?

Elementary school education programmes throughout the USA generally include:

- English language arts (reading and writing);
- mathematics;
- social studies (which can include aspects of US and world history, US and world geography, literature, multiculturalism, ethics and values, economics, civics, government and contemporary issues);
- science
- health;
- art;
- music; and
- physical education.

Science is typically a required subject of instruction at all levels. However, at the elementary school level, students may have limited exposure to science depending on the proficiency of the classroom teacher and the class schedule. By Grades 7 and 8 (ages 12 to 14), almost all students take a required science course. Some schools have separate life, earth and physical science courses.

Religious education

There is no officially recognised state religion and, in accordance with the right of freedom of belief enshrined in the Constitution, no particular religion may be taught in publicly-funded schools. Private schools, however, may teach religious education.

Kentucky

Elementary education in Kentucky is usually divided into primary, intermediate and middle level programmes, with the primary level programme serving children from the time they enter elementary school (age six) until they are ready to enter Grade 4 (age nine), intermediate level education providing for children in Grades 4 and 5 (ages nine to 11) and middle level education serving those in Grades 6 to 8 (aged 11+ to 14).

The statutory subject areas, known as 'required content areas' throughout this period are:

- arts and humanities;
- English/language arts;
- health education;
- mathematics;
- physical education;
- science; and
- social studies.

Maryland

The key curriculum subject areas are:

- English/language arts;

- mathematics;
- science (including environmental science); and
- social studies (history, geography, literature, multiculturalism, ethics and values, and contemporary issues).

Foreign languages are also usually included, as are health and physical education and arts education. In addition, many schools provide English as a second language (ESL)/bilingual education courses.

Massachusetts

The statutory curriculum frameworks cover seven discipline areas:

- mathematics;
- science and technology;
- social science/social studies (includes US and world history, geography, economics, civics and government);
- English language arts;
- world languages;
- the arts (includes dance, music, theatre and the visual arts); and
- health (includes health education, physical education and family and consumer science education).

The foreign languages (world languages) curriculum framework recommends that the teaching of a second language should begin in elementary school.

Wisconsin

Under the Wisconsin educational standards, the state requires all elementary level schools to provide regular instruction in:

- English language arts (language, literature, reading, writing, listening, speaking, media, communications technology and research);
- social studies (history, geography, economics, political science, civic ideals and practices, global connections, anthropology and culture, sociology, technology and society);
- mathematics (number operations and relationships, geometry, measurement, statistics and probability and algebraic relationships);
- science (including physical science and life and environmental science);
- health;
- physical education;
- art; and
- music.

Religious instruction is not normally provided in publicly-funded schools in Wisconsin. However, school boards usually grant permission to those students who provide a written request from their parents, to be absent from school for at least 60

minutes, but not more than 180 minutes per week to obtain religious instruction outside the school.

***What other aspects of the curriculum/teaching in schools are statutory?
Are time allocations for subjects statutory?***

Kentucky - technology education

In addition to the 'required content areas', students in Kentucky are also expected to study technology. The focus of technology education in Kentucky is technology-enhanced curriculum integration, that is technology going beyond simply teaching students how to use computers. Schools' objectives for technology should be aligned directly with their objectives for educational improvement, and schools must decide how technology can best enhance, support, and extend learning in specific content areas. Students should use computers to, for example, conduct research; gather and analyse data; create spreadsheets, charts, graphs, and databases; and create multimedia presentations.

Massachusetts

Whilst the Education Reform Act of 1993 specifies the seven core compulsory discipline areas, academic standards may also be developed in the following areas (dependent on the local school district, the individual school and the age of the students concerned):

- nutrition;
- physical education;
- Massachusetts and labour history;
- violence prevention;
- drug, alcohol and tobacco abuse prevention;
- family life skills;
- basic career exploration and employability skills;
- technology education;
- computer science and keyboarding skills;
- environmental science and protection;
- global education and geography; and
- community service learning.

In addition, the Massachusetts curriculum frameworks for pre-kindergarten to Grade 12 education (four- to 18-year-olds) establish three broad goals that are critical to lifelong learning and that frame the learning, teaching and assessment process. These are:

- thinking and communicating;
- gaining and applying knowledge; and
- working and contributing.

Wisconsin

The Department of Public Instruction of the state of Wisconsin has developed five 'areas of applied knowledge'. These areas connect with what community members and employers consider that citizens and employees should know and be able to do and they go beyond the mastery of individual subject areas. Teachers in every class are expected to encourage the development of these shared applications, both to promote the learning of the subject content and to extend learning across the curriculum. The areas are:

- The application of the basics.
- The ability to think - e.g. problem solving; informed decision making; critical, creative and analytical thinking; imagining places, times and situations different from one's own; developing and testing a hypothesis; transferring learning to new situations.
- Skill in communication - e.g. constructing and defending an argument; working effectively in groups; communicating plans and processes for reaching goals; receiving and acting on instructions, plans and models: communicating with a variety of tools and skills.
- Production of quality work - e.g. acquiring and using information; creating quality products and performances; revising products and performances; developing and pursuing positive goals.
- Connections with community - e.g. recognising and acting on responsibilities as a citizen; preparing for work and lifelong learning; contributing to the aesthetic and cultural life of the community; seeing oneself and one's community within the nation and the world; contributing and adapting to scientific and technological change.

In addition, the Wisconsin Department of Public Instruction recommends that:

- Instruction specifically designed to strengthen reading and writing abilities should be integrated into other subject areas, such as health, science, and social studies.
- Environmental education should be integrated into Grades kindergarten to 12, with the greatest emphasis in the subjects: health, science and social studies.
- Computer literacy should also be integrated into Grades kindergarten to 12.
- An introduction to career education and planning should be provided in Grades 5 to 8 (aged 10 onwards).

Time allocation - Wisconsin

The Wisconsin Department of Public Instruction recommends minimum allocated instructional time for students in kindergarten to Grade 6 (aged five to 12 years), as follows:

Recommended allocations of time per week for a six-hour school day

	K*	1	2	3	4	5	6
Reading/English Language Arts**	30%	700	700	600	600	500	425
Mathematics	10%	250	250	250	250	250	250
Social Studies	10%	125	150	175	200	225	250
Science	10%	100	100	150	150	175	250
Health	10%	75	75	100	100	125	125
Physical Education	10%	150	150	150	150	150	150
Art	10%	90	90	90	90	90	90
Music	10%	75	75	75	75	75	75
Foreign Language	--	--	--	--	--	100	100
Environmental Education***	***	***	***	***	***	***	***
Computer Literacy***	***	***	***	***	***	***	***
Career Exploration and Planning****	---	---	---	---	---	****	****
Total Allocated Instructional Minutes		1565	1590	1590	1615	1690	1715

* Up to one-third of each day in the kindergarten schedule may be reserved for students' self-selected instructional activities. The allocated instructional time recommendations presented in column K apply only to the portion of the schedule planned for teacher-directed activities. The time allocations for kindergarten are expressed in percentages to facilitate planning for various kindergarten schedules.

** Instruction specifically designed to strengthen reading and writing abilities should be integrated into other subject areas, such as health, science, and social studies.

*** Environmental education should be integrated into Grades kindergarten to 12, with the greatest emphasis in the subjects: health, science and social studies. Computer literacy should also be integrated into Grades kindergarten to 12.

**** An introduction to career education and planning, through a one semester course, or the equivalent in instructional time and course content, should be provided in Grades 5 to 8 (aged 10 onwards).

Are there statutory timings for the length of the school day/week?

Throughout the United States, the minimum length of the school year for students is around 180 days. A five-day week is usual (Monday to Friday), with a school day of five to seven hours and a short break for lunch.

Individual states have the right to establish and regulate the length of the school term. Consequently organisation of the school year can vary considerably from state to state. However, most states operate the traditional school year, running generally from September to June, and consisting of three 12-week terms, with two or more weeks' break at Christmas and in the spring, and 10 to 11 weeks in the summer. There are usually no mid-term breaks, other than days for national holidays. Some systems also have a voluntary summer school.

In some states, year-round schools are also in operation. These operate on a 12-month schedule instead of the traditional 10-month one described above. A year-round school schedule (utilising a 45/15 plan, see below, which is common) requires students to attend school for 180 days with the vacations spread throughout the year. Students attend school for 45 days (nine school weeks) and then have a vacation for

15 days (three school weeks). There can also be a one-week winter vacation and one-week spring vacation with an additional nine days off for national holidays.

Kentucky

The minimum school year in Kentucky is 185 days, including no less than the equivalent of 175 six-hour instructional days.

What changes have there been to the statutory/non-statutory elements of the curriculum?

See above.

What government/other initiatives have been introduced? What has been their impact?

National initiatives introduced via the *Elementary and Secondary Education Act (ESEA)*

No Child Left Behind - 2002

The regular re-authorisations of the *Elementary and Secondary Education Act* involve the setting of national goals and targets, which have some impact on national and local education initiatives. The most recent re-authorisation under President George Bush - *No Child Left Behind* - includes provisions for:

- Increased statutory national testing at the elementary school level. It is intended that, with effect from autumn 2005, every student throughout the USA in Grades 3, 4, 5, 6, 7 and 8 of compulsory education (aged from around eight to 14 years) should take tests in mathematics and reading and, from 2007, in science.
- Improvements for failing schools. Measures proposed under the Bill include additional funds for improvement for failing schools; and, since September 2002, students attending schools identified as low-performing have been permitted by the legislation to attend higher performing schools within the district. Transportation costs to the new school are at the expense of the low-performing school.
- Increased spending on literacy programmes, such as *Reading First* - a focused nationwide effort to enable all students to become successful early readers. Through the programme, federal funds are provided to assist states and local school districts in establishing high quality, comprehensive reading instruction in kindergarten to Grade 3 (children aged around five to nine years) The *Reading First* website is accessible at <http://www.ed.gov/offices/OESE/readingfirst/>
- In addition, the Bill sets a 12-year goal to improve the academic proficiency of students who are poor, who speak limited English, or who have various disabilities.

The final shape of the *No Child Left Behind* legislation is determined at the state level, as states develop their responses to the legislation.

Previous re-authorisations of *ESEA* involved the following programmes:

Educational Excellence for All Children Act - 1999

This re-authorisation aimed to help all children achieve to challenging standards. It emphasised the need to move the reform effort from state to school, expanding efforts to improve teacher quality and ensure accountability for results, and aimed specifically:

- To raise student performance by increasing academic standards. Individual states were required to establish content standards, student performance standards, and assessments aligned with the standards by the 2000-01 school year.
- To implement continuous improvement and accountability based on challenging standards. States were required to hold all school districts accountable, and school districts to hold schools accountable, for continuous and substantial gains in overall student performance and in the performance of the lowest-performing students.
- To provide teachers with up-to-date training and support through a *Teaching to High Standards* initiative.
- Through the *Technology for Education Initiative*, to put useful technology into schools and classrooms to help teachers teach to high standards.
- To strengthen the teaching of reading and reduce class size (see below).
- To emphasise mathematics and science education.
- To improve foreign language instruction (see below).

Goals 2000 Educate America Act - 1994

The 1994 re-authorisation promoted "safe and disciplined schools that use best teaching practices and appropriate technology to ensure that all students are adequately prepared to meet the challenges of the 21st century".

The goals were that, by the year 2000:

- All children in America would start school ready to learn.
- The high school graduation rate would increase to at least 90 per cent.
- All students would leave Grades 4, 8 and 12 (aged 10, 14 and 18 respectively), having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography.
- Every school in America would ensure that all students learn to use their minds well, so they are prepared for responsible citizenship, further learning and productive employment in the nation's modern economy.
- The nation's teaching force would have access to programmes for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.

- United States' students would be first in the world in mathematics and science achievement.
- Every adult American would be literate and possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.
- Every school in the United States would be free of drugs, violence and the unauthorised presence of firearms and alcohol and offer a disciplined environment conducive to learning.
- Every school would promote partnerships to increase parental involvement and participation in promoting the social, emotional and academic growth of children.

National foreign language programme

There is a federal elementary school *Foreign Language Assistance Programme (FLAP)*, the main goal of which is for 25 per cent of all public elementary schools in the United States to offer high-quality, standards-based foreign language programmes by 2005 (50 per cent of elementary schools by 2010). The programme:

- promotes the goal that all students will develop proficiency in more than one language;
- emphasises the importance of early language learning;
- aims to increase the number of elementary school foreign language teachers;
- encourages new technologies to bring foreign language instruction to students in effective ways; and
- encourages programmes that emphasise foreign language fluency rather than cultural exposure.

Federal class size reduction programme

The class size reduction programme is an initiative developed to assist schools in improving their student:teacher ratios, particularly in the early years of compulsory education, by providing additional funds to schools to enable them to employ additional teaching staff. Since 1 July 1999, the federal Department of Education has issued specific class size reduction funds to all US states. School districts apply directly to their states for local sub-grants. Through the formula for school district grants, funds are targeted at high poverty communities, but it is intended that most districts should receive awards. The overall aim is to reduce class sizes in Grades 1 to 3 (children usually aged around six to nine years) to a nationwide average of 18.

Wisconsin

Democratic citizenship education (DCE) in Wisconsin

The state of Wisconsin established a Civics Action Task Force, the objective of which was to assess and report on the state of democratic citizenship education (DCE) in Wisconsin. The recommendations made in the final (2000) report of the Task Force were that:

- DCE should be integrated across the curriculum at all Grade levels;

- a one-semester course of instruction in state and local government should constitute part of the three social studies credits required for high school graduation;
- DCE curricula, resources, and websites, linked to the Wisconsin Model Academic Standards for social studies, should be developed;
- a statewide conference, training workshops, and a summer civics institute to help educators better understand and implement DCE should be organised; and
- funds should be targeted towards supporting staff development activities for DCE.

Wisconsin SAGE

The *Student Achievement Guarantee in Education* programme (*SAGE*) was introduced in 1995. Through the programme, additional funding is provided to certain school districts, to improve academic achievement through the implementation of four strategies:

- a 15:1 children:teacher ratio in kindergarten to Grade 3 classes, children aged five to nine years;
- family/community involvement;
- a rigorous curriculum (high standards and expectations); and
- staff development and evaluation.

As part of its contract with the state for this additional funding, each school is required to identify local academic standards in core subjects for each Grade covered by the programme and report annually on achievement.

What other trends are emerging in curriculum development? (eg new subjects/areas of learning being introduced)

See above also.

Maryland

A voluntary model statewide curriculum is currently under development in Maryland, following the recommendation of the Maryland Visionary Panel for Better Schools. This would replace the current system of content standards and learning outcomes - used as the basis on which individual schools develop their own, detailed curricula (see above), and represents a marked shift for education policy in the state. This curriculum framework would aim to provide teachers with a clearer picture of the state's expectations for students.

What other levers may be having an impact on curriculum content? (eg international studies: PIRLS, IEA, PISA, TIMSS)

No information is available via the *INCA* Archive.

4. Organisation of the curriculum

What are the common features of curriculum organisation in the primary phase? (single subjects? planning subjects as 'topics'?)

No information is available via the *INCA* Archive.

How are subjects labelled?

In **Kentucky** subject areas are known as 'required content areas', whereas in **Massachusetts** they are known as 'discipline areas'.

In **Wisconsin**, the cross-curricular skills which students are expected to acquire (in addition to having access to the compulsory core curriculum subjects) are known as 'areas of applied knowledge'.

What examples are there of 'areas' rather than subjects?

What examples are there of clusters of subjects (eg Humanities, made up of geography and history) being brought together?

In general in the United States, subjects are taught as 'subject areas'. English language arts, for example, can include language, literature, reading, writing, listening, speaking, media, communications technology and research; social studies often includes aspects of US and world history, US and world geography, literature, multiculturalism, ethics and values, economics, civics, government and contemporary issues); and science at the elementary school level is often taught as one subject area, although some schools do have separate life, earth and physical science courses.

In **Kentucky**, arts and humanities are combined as one core subject area ('required content area'). In **Massachusetts**, science and technology are combined as one discipline area; the arts includes dance, music, theatre and the visual arts; and health encompasses health education, physical education and family and consumer science education.

Wisconsin

The Wisconsin Department of Public Instruction recommends that:

- Instruction specifically designed to strengthen reading and writing abilities should be integrated into other subject areas, such as health, science, and social studies.
- Environmental education should be integrated into Grades kindergarten to 12, with the greatest emphasis in the subjects: health, science and social studies.

What are the common features of timetabling? (eg weekly lessons in each subject, English and mathematics taught daily)

No information is available via the *INCA* Archive.

5. Assessment

What is the purpose, nature and scale of assessment? (eg end of phase assessment, statutory, published test results, optional, national, local, timed tests, teacher-assessment)

National assessment programmes

The National Assessment of Educational Progress (NAEP)

NAEP is a regularly administered, congressionally mandated assessment programme, which assesses representative national samples of students attending public and private elementary schools, junior high schools and high schools. NAEP, which receives federal funding, is designed to make available reliable information about the academic performance of US students, nationally, in various learning areas, and to provide data and analysis on long-term national trends.

NAEP is directed by the National Center for Education Statistics (NCES) of the US Department of Education. The NCES currently contracts out (to the Educational Testing Service, ETS) the design of instruments and data analysis and reporting; the sampling and data collection activities; and the management of materials distribution, scoring, and data processing.

Since 1969, NAEP has tested a nationally representative cross sample of students in Grades 4, 8 and 12 (aged around 10, 14 and 18 respectively) across the USA. In addition, since 1990, states have had the option of surveying representative samples of their own students to yield state-by-state NAEP scores in addition to the national samples.

The 2002 Education Act - *No Child Left Behind* - requires that parents be informed that their children have been selected to take part in NAEP testing. If a parent does not want his or her child to be tested, the child can be pulled out of the sample.

NAEP assessments usually take place around every two years; they can be implemented throughout the school year, but usually take place during the period January to March. The academic subject areas assessed vary from year to year, but at the elementary school level (Grades 4 and 8) reading, writing, mathematics, and science are the most frequently assessed subjects. US and/or world history, geography, arts, foreign languages, civics, and economics are also sometimes tested for students in some Grades. To minimise the burden on students and schools, no student takes the entire assessment. Instead, assessment sessions are limited to one-and-a-half to two hours. In addition to traditional multiple-choice items (see below), recent NAEP administrations have included open-ended questions that allow students to produce their own answers.

Three achievement levels have been developed for reporting NAEP results - basic, proficient and advanced. Basic denotes partial mastery of the required knowledge and skills; proficient represents solid academic performance; and advanced signifies superior performance

NAEP test results are reported on a national basis. A multiple matrix sampling procedure allows for estimation of population characteristics from test results, which means that individual districts, schools, teachers or students are not identified. Results are reported for the nation as a whole, by region, gender, racial/ethnic group, parental education, community type and, on a voluntary basis, by state.

Voluntary National Tests (VNTs)

School principals were encouraged, during the period of office of the Clinton Government, to support Voluntary National Tests (VNTs) in Grades 4 and 8 (students aged nine to 10 and 13 to 14 years respectively). The proposed 90-minute tests, in reading in Grade 4 and mathematics in Grade 8, were developed with a view to introduction in 2002, and were intended to measure student performance against a uniform standard to determine where improvements could be made. The tests have never been introduced and faced extensive opposition from those who wanted less, rather than more, central (federal) government involvement in state education; those who did not wish test results to be used to compare state with state, district with district and school with school; and those who were opposed to testing being used to prevent students from advancing to the next Grade. The National Assessment Governing Board (NAGB) developed the Voluntary National Tests, based on the same content and achievement standards as NAEP.

Statutory testing under the 2002 Education Act - *No Child Left Behind*

President Bush, too, supports the introduction of statutory testing in reading, mathematics and science, in Grades 3 to 8 (students aged eight to 14 years). This forms part of his 2002 Education Act - *No Child Left Behind*. As a result, all states in the USA are expected to currently be developing, or already have in place, standards for children in all these Grades for mathematics and reading; standards identifying what children should know, learn and be able to do, against which they can be tested. In addition, standards must also be developed for science by the 2005-06 school year. Beginning in the 2002-03 school year, schools must administer tests in reading and mathematics in three Grade spans - Grades 3 to 5, Grades 6 to 9 and Grades 10 to 12. Most states comply already in view of their statewide testing programmes for given Grades. Further information is provided below. Beginning in the 2005-2006 school year, tests must be administered every year in all of Grades 3, 4, 5, 6, 7 and 8 in mathematics and reading and, starting in the 2007-2008 school year, in Grades 3 to 8 inclusive in science in addition.

Statewide assessment programmes

The overwhelming majority of US states have academic standards comprising:

- content standards, which refer to what students should know and be able to do;
- performance standards, indicating how students can show how they can meet the standards; and
- proficiency standards which indicate how well students must perform.

All US states now have some statewide testing policies in place to measure students' progress, along with some form of official curriculum documents and specific

centralised learning standards for English, mathematics and science. Many states also have mandatory promotion or graduation tests.

Standardised testing, in addition to teacher-administered assessments covering class material, is common as part of state-mandated testing programmes and school district testing programmes, and is about to become statutory in some subjects for all children in certain year groups as part of the *No Child Left Behind* legislation (see above).

Traditionally, the main statewide testing programmes - which usually take place in February of the academic year - have been dominated by multiple-choice, short-answer or simple comprehension-type questions and this remains a strong feature of most of them. Indeed, the most prevalent method of testing is still via machine-scorable multiple-choice answer sheets. However, there has been a significant move towards the assessment in greater depth of a variety of types of writing, and the inclusion of problem-solving activity in some of the mathematics tests. Many tests also now include provisions for more 'authentic' assessment techniques, also called performance assessment or alternative assessment, that require students to construct answers, perform or produce something for evaluation. Such practical tasks and/or portfolio work, which were previously only really used in assessment at the classroom level, are increasingly becoming part of statewide assessment programmes.

Reporting the results of statewide testing

Results of the main statewide assessment programmes are aggregated at state, district and school levels. In some cases, they also yield data about classes and individual students. Public reporting of school and district performance in such tests is a substantial undertaking in most states, although the reporting procedures vary in the style, format, detail and quantity of documentation. Some may identify state-mandated targets year by year and include, for example, statewide results and progress made on the various indicators along with detailed breakdowns of attainment sub-sets in subjects, showing relative strengths and weaknesses in relation to the average scores of a school's reference group. This latter information is intended for school and curriculum development purposes and is used by principals to identify in-service and resource needs for their schools.

Use of such 'league tables' has increased in recent years, due in part to demands from parents, businesses and the taxpaying community for more accountability.

Continuous teacher assessment

Continuous classroom assessment is the prerogative of the teacher and this is an area where there is much staff development undertaken. This reflects the emphasis on the local control of education, so that community standards and priorities can take precedence.

In addition to producing their own forms of assessment, many teachers use the, often multiple-choice, assessment tests or worksheets provided by textbook publishers with virtually all programmes. There has, however, been an expansion of the available options with portfolio, performance and project assessment becoming increasingly standard in commercial programmes.

Progression

Student performance in statewide assessment programmes and continuous teacher assessment is used to determine Grade promotion or placement in remedial programmes. To enter high school, students need to complete elementary school.

However, in many states, the practice of 'social promotion' - moving students on regardless of their ability - does take place. Children often progress through the Grades simply by 'putting in time' because of pressure from parents, determined their child will not suffer the stigma of staying down a year, and because many principals are reluctant to halt their progress and make the school look bad.

A small but growing minority of districts are, however, acting to reduce this practice. Chicago, for example, with 425,000 students, required 42,000 to enter summer courses in 1997 in reading or mathematics or face being failed. The city of Cincinnati expressly banned social promotion; where before 95 per cent of students automatically moved on, nearly a third were held back in the early elementary school Grades in 1996.

In New York, since 2000, any student aged over nine who has not reached the required standard to proceed to the next year, has been required to attend summer school until they meet minimum academic standards. In order to be promoted to the next Grade, the student is then required, at the summer's end, to pass a proficiency examination and demonstrate a 90 per cent attendance record. Those who then fail the end of summer exam have to repeat their last Grade, and spend an extra hour in class after school or attend evening classes.

It is estimated that between 15 and 20 per cent of American students are held back in the same Grade in any year. In urban districts, more than 50 per cent of children will be retained at least once.

Use of test results

Not only has testing grown in the United States, the uses to which test results are put have also changed dramatically. The National Commission on Testing and Public Policy (NCTPP) has noted that the growth in testing since the 1950s accompanied a trend of greater reliance on test results to make critical decisions about children such as:

- entry to and exit from kindergarten;
- promotion from Grade to Grade;
- placement in remedial programmes; and
- graduation from high school.

Further, there was a dramatic increase in the use of students' scores to hold school systems, administrators and teachers accountable. In 1992, for example, the National Council on Education Standards and Testing (NCEST) endorsed the use of assessments to monitor individual and system progress towards national education standards and to:

- exemplify for students, parents and teachers the kinds and levels of achievement that should be expected;
- improve classroom instruction and improve the learning outcomes for all students;
- inform students, parents and teachers about student progress towards the standards;
- measure and hold students, schools, districts, states and the nation accountable for educational performance; and
- assist in education programme decisions to be made by policy makers.

Indeed, some US states provide additional financial assistance to low-performing schools in statewide assessments; others operate sanctions against schools revealed to be chronically failing through such tests; and some provide monetary rewards to high-performing schools.

In many states there is a general expectation (in some a requirement) that school development planning will ensue from the reporting process. The approach, in principle, is to monitor schools, present them with performance data and then leave it to principals, together with parents and general administrative guidance from the district, to take the school forward. Advice is available in a variety of forms, often through state-employed curriculum consultants. There are moves in some states towards more corporate strategies, sharing good practice, building up advisory services and changing assessment objectives in an effort to bring about curriculum improvement.

Reporting to parents and publishing results

Students generally receive report cards at least twice a year (in some school districts, up to six times), which indicate the grades received in each of the subjects studied. These grades (usually based on an alphabetical A to F scale, where A is excellent and F, failing) are based on assessment of performance in tests given at intervals throughout the school year, participation in class discussions and completion of written and oral assignments.

In cases where course programmes are modelled on commercially published textbooks or work schemes, and tests are provided in the form of tear-out pages in the scheme's workbooks, these completed test assignments, graded by teachers, can be taken home by students as an indication to parents of their children's work and progress.

Many US states issue report cards which rank schools' performance in statewide testing. However, only some of these states release such information publicly; fewer still currently require such report cards to be sent home. Under the new *No Child Left Behind* legislation, it is intended that the official publication of state/school report cards should become statutory.

Kentucky

Kentucky's integrated testing and accountability programme - the Commonwealth Accountability Testing System (CATS) - is closely linked to the Kentucky core curriculum, and includes:

- the Kentucky Core Contents Tests: a mixture of multiple-choice and open response questions in reading, science, mathematics, social studies, arts and humanities, and practical living/vocational studies;
- the Comprehensive Test of Basic Skills (CTBS/5 test): a multiple-choice test intended to enable national comparison of the performance of Kentucky students;
- a writing portfolio: a collection of a student's best work from various subjects over time;
- writing prompts: writing tests that measure skills gathered from writing instruction; and
- for students with moderate to severe learning disabilities, an alternative portfolio: a portfolio of student work.

Kentucky Core Content Tests take place in Grades 4 to 12 (students aged from nine to around 18 years) as follows:

Assessment in	Grade/Year group										
	3	4	5	6	7	8	9	10	11	12	
Reading		X			X			X			
Mathematics			X			X			X		
Science		X			X				X		
Social studies			X			X			X		
Arts and humanities			X			X			X		
Practical living and vocational studies			X			X			X		
Writing on demand		X			X					X	

These tests aim to assess a student's understanding of core curriculum content. Students in specific year groups are tested on specific subject areas as indicated above. To ensure that the Core Content Test provides complete coverage of the core curriculum content each year a matrix design is used, which means that six different, equivalent test forms are administered each year. The advantage of this approach is that it allows broad coverage of the core content, providing maximum information to schools regarding their instructional programme, but keeps test time reasonable for the individual student. In most content area tests, a student answers only 24 multiple-choice items and six open-response questions. An additional four multiple-choice and one open-response items are included in each test booklet. These are pre-test items, which are being 'tried out' as potential items for future tests. They do not count in student scores or the school accountability index (see below).

The Core Content Test is not timed.

As mentioned above, the Kentucky Core Content Test employs both multiple-choice and open-response items. Either type of item can be written to elicit factual (recall) or higher-order thinking. In the Kentucky Core Content Test, open-response items are always designed to elicit higher-order thinking. Multiple-choice items present the student with four options, only one of which is correct. Open-response items request specific information but students are free to organise and present the information as they choose, usually within one page. Copies of the test booklets are available on the Internet at http://www.kde.state.ky.us/comm/commrel/cats/test_day99/taketestday.asp

Students' results are assigned one of four performance levels: novice; apprentice; proficient; or distinguished, and the Kentucky Board of Education has set a goal for schools to have the average of all of their students reaching the proficient level by 2014.

The Kentucky Core Content Tests are developed by an appointed contractor in collaboration with a Content Advisory Committee (CAC) composed of Kentucky teachers. Essentially, the teachers draft test items which are edited by the contractor. In their final form, following piloting and pre-testing with students, test items are reviewed by the same CAC that generated them and either selected or rejected for use as future test items. Teachers draft test items to address every bulleted statement in the Core Content (the Kentucky state curriculum).

Students leaving Grade 3, Grade 6 and Grade 9 (aged nine, 12 and 15 years respectively) in publicly-funded schools in Kentucky also participate in the **Comprehensive Test of Basic Skills** (CTBS/5) in reading, language arts and mathematics. These tests are multiple-choice and are nationally norm-referenced with a view to providing a score ranking showing how an individual student compares with other students in the nation. Results of CTBS/5 assessment are published by district and school. Parents also receive individual student reports detailing their child's performance in the Kentucky Core Content Tests and the CTBS/5 assessment.

In addition, as part of CATS assessment, students are required to provide a **writing portfolio** - a collection of their best work from various subject areas over time; and take **writing prompts**, which are written tests that measure skills taught in writing instruction. Normally, for their writing portfolio, students in Grade 4 (aged nine to 10 years) are expected to provide four pieces of work, whilst those in Grades 7 and 12 (aged 12 to 13 and 17 to 18 respectively) are required to provide five pieces of work. The writing portfolio pieces must normally be provided at the start of the test period, which is in April for all forms of CATs testing. Writing portfolios are scored by individual school staff using a scoring guide.

Scores received by students under CATs are intended to be used for the purposes of student and school accountability. A student's results from the tests are combined with results from a student's writing portfolio, his/her longitudinal assessment measure and several non-academic measures to compute the school accountability index.

Maryland

Maryland Content Standards specify what students from kindergarten to Grade 12 (aged five to 18 years) should know and be able to do in English, mathematics, science and social studies. Maryland school systems use these standards as a guide when they are writing curriculum and preparing students for the Maryland School Performance Assessment Programme (MSPAP, see below). The Maryland Content Standards represent what should be taught in Maryland schools. However, not all of the Content Standards are tested by the state. The Maryland Learning Outcomes (for kindergarten to Grade 8, children aged five to 14 years) specify the knowledge and skills to be tested at the state level during these Grades.

At the elementary school level, children's readiness to proceed from the (pre-compulsory) kindergarten year (aged five to six years) to Grade 1 of compulsory education is often assessed using the Maryland Model for School Readiness. In addition, children in elementary education are assessed under the **soon to be discontinued** statewide Maryland School Performance Assessment Programme (MSPAP).

Maryland Model for School Readiness

This initiative is designed to support local school systems in their efforts to enhance school readiness among young children. It consists of:

- a state definition of 'school readiness';
- a vision and belief statement for primary level assessment;
- primary assessment outcomes and indicators for the end of kindergarten 'readiness' expectations;
- staff development modules for a two-year training programme;
- a primary assessment planning guide which matches curriculum, instruction, and assessment for pre-kindergarten and kindergarten (children aged four to five and five to six years respectively) with the primary assessment outcomes and indicators; and
- a systematic assessment method which supports classroom instruction.

The Maryland Model for School Readiness has been operational since September 1997, following a two-year field test. In the 1998-99, school year 20 of Maryland's 24 local school districts took part in the initiative.

Maryland School Performance Assessment Programme (MSPAP)

Until the start of the 2002-03 school year (September 2002), local school systems were required to administer MSPAP tests to students in Grades 3, 5 and 8 (aged eight to nine, 10 to 11 and 13 to 14 years respectively), usually in May of the academic year.

The primary purpose of MSPAP was to provide information that could be used to improve instruction in schools. MSPAP aimed to measure the performance of Maryland schools by illustrating:

- how well students solved problems cooperatively and individually;
- how well students applied what they had learned to real world problems; and

- how well students could relate and use knowledge from different subject areas.

MSPAP consisted of criterion-referenced performance tests in reading, mathematics, writing, language usage, science and social studies, which were based on learning outcomes developed by Maryland educators, specifying what students should know and be able to do as a result of their educational experiences.

MSPAP tests, which were intended to measure school improvement rather than individual student performance, were related to real-life situations and typically required students to write extensively; they were not multiple-choice questions that could be answered by simple rote learning and memorisation of facts. For example, one Grade 5 task (students aged 10 to 11) required students to work out if the school could raise \$200 for a school banner in a six-week time frame. Using a chart on aluminium can recycling and responding to a number of specific questions, the student was required to work out the conditions necessary to reach the fund-raising goal, then to write a brief feasibility statement to present to the student council.

Basic skills and knowledge - such as reading for a general understanding, writing to communicate clearly, making accurate arithmetic calculations, understanding key scientific concepts, and identifying historical and geographic information - were assessed in MSPAP tests/tasks. However, the tests also aimed to emphasise higher order skills such as supporting an answer with information; predicting an outcome and comparing results to the prediction; and comparing and contrasting information.

In each content area, MSPAP results were reported through five numerical proficiency levels, with level 1 being the most proficient.

Performance standards/targets were also set for schools and local systems. Satisfactory meant that 70 per cent of students were scoring at proficiency level 3 or above; excellent that 70 per cent of students were scoring at level 3 or above, with at least 25 per cent of students at level 2 or higher.

In order to keep MSPAP administration time to a minimum, each student was given only a portion of the assessment. Consequently, a complete MSPAP score did not exist for any individual student. This sampling technique did, however, provide the performance assessment information required at the school, system, and state levels. School systems made student test results available to parents, but student MSPAP data were useful only in context with all the measures and observations available for an individual child.

From March 2003, MSPAP testing will begin to be replaced by a system which complies fully with the requirements of *No Child Left Behind*. The new testing programme will be known as the Maryland School Assessment, and will measure student achievement from kindergarten to Grade 8 (aged five to 14 years) in reading and mathematics and, additionally, in reading in Grade 10 (16-year-olds). In the first year of introduction, students in Grades 3, 5 and 8 (aged nine, 11 and 14 years respectively) will be tested in reading and mathematics, and students in Grade 10 (aged 16) in reading.

Continuous teacher assessment

In addition, all Maryland students are continually monitored by their teachers. In continuous assessment in schools, a variety of assessment types are used. Many local districts use portfolios.

Massachusetts**Massachusetts Comprehensive Assessment System (MCAS)**

The Massachusetts Comprehensive Assessment System (MCAS) is designed to:

- test all public school students across the state, including students with disabilities and students with limited English proficiency;
- measure performance based on the Massachusetts curriculum framework learning standards;
- report on the performance of individual students, schools, and districts; and
- serve as one basis of accountability for students, schools, and districts (for example, from 2003, students in Grade 10 will have to pass the Grade 10 MCAS tests as one condition of eligibility for a high school diploma).

The stated goals of the assessment system are:

- to measure student performance; and
- to improve the effectiveness of curriculum and instruction.

Originally, when MCAS testing was introduced, all public school students in Grades 4, 8, and 10 (aged nine to 10, 13 to 14 and 15 to 16 respectively) had to take part in annual MCAS testing. Since the start of the 2001/2002 school year, students in other Grades have been involved in addition, as follows:

MCAS tests in:	Grade 3 (8-9)	Grade 4 (9-10)	Grade 5 (10-11)	Grade 6 (11-12)	Grade 7 (12-13)	Grade 8 (13-14)	Grade 10 (15-16)
English language arts	X	X			X	X	X
Mathematics		X		X		X	X
Science and technology			X			X	X
History and social sciences			X			X	X

It is generally intended that the MCAS tests should be administered to all students in the relevant Grades, including those with disabilities and to students with limited English proficiency. The tests may, however, be adapted to suit the needs of students with disabilities who meet eligibility requirements.

Parents may not legally refuse their child's participation in MCAS.

MCAS testing involves the following types of assessment:

- Multiple-choice questions. These are used in all content/subject area tests, and students select an answer from four options.

- Short-answer questions. These are used in mathematics tests only. Students generate a brief response, for example, a short statement or computation leading to a numeric solution.
- Open-response questions: used in all content area tests. Students create a one- or two-paragraph response in writing or in the form of a narrative or a chart, table, diagram, illustration, or graph, as appropriate.
- Writing prompts. These are used in English language arts tests only. Students write a composition based on a writing prompt.

Detailed examples of MCAS test questions can be accessed at

<http://www.doe.mass.edu/mcas/testitems.html>

It is expected that MCAS will soon also test the learning standards in the foreign languages curriculum framework.

MCAS testing usually takes place in late spring (April/May), with scoring taking place in July/August.

The Education Reform Act of 1993 specifically directed that any standardised tests used for assessment should be criterion-referenced in order to assess whether students are meeting the academic standards set out in the curriculum frameworks. For students whose performance is difficult to assess, the statute recommends the development of alternative methods such as work samples, projects and portfolios.

MCAS results are reported for individual students, schools and districts according to four performance levels defined by the Board of Education: advanced, proficient, needs improvement, and failing. Details of these performance level definitions are available online at <http://www.doe.mass.edu/mcas/mcaspld.html>

For students scoring in the 'failing' and 'needs improvement' categories above, additional help is available via the Academic Support Services Programme (ASSP). ASSP allows districts to offer intensive small group instruction and innovative programming to provide expanded opportunities for students with the greatest need to improve their knowledge and performance. School districts primarily use ASSP funds to extend student learning time before and after school, on weekends and school vacations and during the summer.

Use of MCAS results

The State Board of Education establishes regulations that define a process and criteria to determine whether a school or school district has "chronically failed to improve the educational programme provided to students served by the school district or an individual school". Whatever other considerations the Board of Education chooses to include in its regulations, the law requires that the Board consider student assessment results in determining whether or not a school district is under-performing.

Statewide, district and school results in Massachusetts Comprehensive Assessment System (MCAS) testing are published. These provide details of percentages of students at each performance level by subject, and are available online at

<http://www.doe.mass.edu/mcas/results.html> However, the Massachusetts Department of Education does not rank cities or town based on MCAS scores.

Wisconsin

Wisconsin Student Assessment System (WSAS)

Wisconsin defines its academic standards in three parts: content standards, defining what students should know and be able to do; performance standards, detailing how students will show that they are meeting a standard; and proficiency standards, indicating how well students must perform.

Performance standards were first implemented in Wisconsin in 1993, when students in Grades 8 and 10 (aged 14 and 16 respectively) took statewide assessment tests, known as the Wisconsin Student Assessment System Knowledge and Concepts Examinations. These were introduced for children in Grade 4 (aged nine to 10 years), in addition, in 1996. The tests cover five subject areas - mathematics, science, social studies, reading, and 'enhanced language'.

Assessment consists of mostly multiple-choice and some short-answer questions in reading, mathematics, science and social studies. In 'enhanced language', the student answers some multiple-choice questions, some short answer questions and performs a writing task. In elementary Grades 4 and 8 this is an informative composition (compared with a persuasive essay in Grade 10).

Schools report WSAS test results to parents by providing norm-referenced scores (comparing children with each other) and by one of four proficiency levels (advanced, proficient, basic, or minimal) which indicate how well children have learned the knowledge and skills tested when compared to a set proficiency standard.

The state tests are produced by an independent company, but developed in collaboration with advisory panels of teachers, curriculum specialists, administrators, content specialists, special education experts and parents. School boards may administer their own Grade 4, 8 and 10 examinations instead of the state test.

Wisconsin Reading Comprehension Test

Children in Grade 3, aged eight to nine years, also take a statewide reading test. This was introduced in 1989, with the aim of identifying a child's reading level, compared with statewide proficiency standards for Grade 3 children. The test is taken during a three-week period each spring. It is given in three sessions and is not timed, although most children finish each session in about one hour. Scores in the reading comprehension test are reported at one of the four proficiency levels described above. If a child does not score at or above the 'basic' level, his or her parents and teachers can decide that remedial reading instruction is required. Additionally, the results of such tests assist school districts in judging the effectiveness of their reading programmes and may result in the district changing strategies.

Progression

In June 1998, the Wisconsin Legislature passed a student assessment statute regarding Grade promotion. This was scheduled to enter into effect on 1 July 2002. As a result,

all students in Grades 4 and 8 (aged 10 and 14 respectively) taking the Wisconsin Student Assessment System tests are now required to achieve a proficiency level of 'basic' or above in each subject area tested in order to be promoted to Grades 5 and 9 respectively.

If, as is possible, instead of the state WSAS tests, the school board administers its own Grade 4 and Grade 8 assessment tests, students must achieve a passing score in these tests in order to be promoted. In addition, some students may be exempted from taking the Grade 4 and Grade 8 tests. In such cases, the school board must develop alternative criteria for evaluating students and students must satisfy these criteria in order to be promoted.

A certificate or diploma or other written evidence issued by a school board showing that a student has successfully completed the course of study in elementary school is usually a condition of admission to high school in Wisconsin.

How far is the curriculum driven by assessments? (eg evidence of teacher preparation for testing, 'booster' or 'catch-up' classes in schools)

The statewide testing programmes have a significant impact on the curriculum. Many of the curriculum objectives set by the states are challenging and wide-ranging, but these are frequently translated into test items and closely related learning experiences which many experts believe to be narrowing and limiting in their effects. The tests are usually of a multiple-choice type, very dependent on language skills and requiring mostly low-level comprehension type responses from students. Since they provide important public measures of success, they have a clear impact on pedagogy, on teacher expectations of students and on the choice of programmes and textbooks. In some states such choices are limited to a range of publications pre-selected for their compatibility with the tests. This domination of learning by tests is broadly recognised in schools and by administrators and politicians who, particularly at state levels, see the development of new assessment strategies as a priority in securing educational improvement.

6. Teaching profession/training

What changes can be identified in initial teacher training programmes?

What kinds of continuing professional development/on-going training are provided?

Continuous classroom assessment is the prerogative of the teacher and, as such, this is an area where much staff development is undertaken.

No specific further information is available via the *INCA* Archive. Recent re-authorisations of the federal *Elementary and Secondary Education Act (ESEA)*, see above, have, however, set some targets for improved initial and continuing teacher education and support.

To what degree are teachers'/schools' planning subject to scrutiny?

No information is available via the *INCA* Archive.

To what degree are teachers using electronic formats to plan?

No information is available via the *INCA* Archive.

7. Pedagogy

Which teaching approaches are dominant or developing a higher profile, and which are receding? (eg collaborative work, whole-class instruction)

Teaching groups are organised at the local level, and vary widely in structure. In elementary schools, students are usually grouped by age, regardless of ability, although (differentiated) smaller groups may be formed for skill development within the classroom.

The general philosophy in **Kentucky** is that children develop at different rates, with different needs and learning styles. As a result, in Kentucky's primary classrooms (children aged six to nine years) and in the kindergarten year for children aged five to six, students are grouped at least part of the time based on their skills and abilities rather than solely by age. Primary teachers typically guide children through lessons that are appropriate for their skills and abilities, then assign them to hands-on learning centres around the room that reinforce what is being taught. For example, one group of five- and six-year-olds might work on spelling words, while a more advanced group of five- and six-year-olds writes sentences, and another group works on paragraphs.

What is the impact of ICT in teaching practice? (eg use of electronic whiteboards, intranets, managed learning environments/local grids)

No information is available via the *INCA* Archive.

To what degree are teaching approaches focusing on developing thinking skills, creativity and building on children's learning styles?

No information is available via the *INCA* Archive.

8. Resourcing

How far are resources to support teaching made available via government/central/local agencies?

In most states, textbooks are provided to students free of charge - certainly at the elementary school level.

Kentucky

Textbooks for students in elementary education (Grades 1 to 8, aged six to 14 years) are usually provided free of charge.

Massachusetts

Textbooks are usually provided to students free of charge.

Wisconsin

In accordance with state law, schools may charge for textbooks, either by selling or renting them to students. Needy students must, however, be provided with textbooks free of charge.

How far, and in which subjects, are resources statutory/ recommended/ subsidised? (eg textbooks, courses, lesson plans for teachers, web-based materials)

About half of the states recommend textbooks at the state level after some process of review against state curriculum guidelines, and have a state-level textbook adoption process. Most of these states are located in the south. Texas and California also have state textbook adoption programmes. Indeed, the fact that both California and Texas have large student populations and therefore buy many textbooks, and also have state textbook adoption processes, allows them to have substantial influence on textbooks across the United States. Since the textbooks that are produced for California and Texas are also sold in other states, the guidelines that those states establish for textbooks have an impact nationally.

Textbooks are produced by private corporations/independent publishers, with about ten such corporations dominating the industry.

In all cases, specific textbook selection is a local decision, although, in some places, this selection may be limited to among those approved by the state. In California, for example, schools may only opt out of the state-recommended textbook system with an official waiver. In some cases, state education funds may only be used for the purchase of books approved at the state level.

Kentucky

The Kentucky Department of Education publishes a State Multiple List. This is a list of state-recommended textbooks and printed and electronic instructional materials, which is developed based on the recommendations of a statewide review team comprising parents and educators. The State Multiple List is adopted in accordance with a six-year schedule and the review team, selected each year, designs an evaluation instrument for reviewing bids, evaluates bids from publishers and recommends items for adoption to the State Textbook Commission. The approved State Multiple List is then sent to each district. A district adoption is required. Most districts now adopt the State Multiple List in its entirety. The district list is then issued to all local districts, and subsequently to schools.

Each school has the responsibility for reviewing, selecting and purchasing instructional resources, usually through a school committee. Members can include teachers, parents, students and administrators.

In addition, there is also a state list of electronic instructional materials (EIM), which is developed by the Kentucky Educational Technology System (KETS).

The Kentucky Department of Education also produces and sells a number of tools and resources for use by educators, parents and others who are interested in the state's education system. These include a variety of publications, CD-ROMS and videotapes. Their focus includes curriculum, instructional techniques, best practices, school and district governance and other topics. As a standard practice, each school and district receives at least one free copy of every new publication or CD-ROM when it is issued. Additional copies are available to schools and districts, typically at a reduced price.

Maryland

Maryland does not use a state adoption process. Each district makes its own decisions about textbooks and other curricular materials.

The Maryland State Department of Education has, however, produced guidelines to assist local school systems in their assessment of the multicultural appropriateness of various textbooks and other materials used in schools for students. These guidelines have been developed according to criteria emphasised in the *Maryland State Education That Is Multicultural Regulation*, and apply to all 'instructional materials'. These are defined as a variety of materials in any format which influence a student's learning and the instructor's teaching. They include, but are not limited to, textbooks, library books, periodicals, pamphlets, art prints, study prints, pictures, transparencies, films, filmstrips, slides, video-cassettes, video-discs, audio cassettes, sound recordings, compact discs, computer software, CD-ROMS, and electronic resources.

Massachusetts

In accordance with state law, the principal of each school, subject to the direction of the district superintendent of education and at the expense of the school district, purchases textbooks and other educational materials and supplies to be used by students in school. The purchases must be within the budget approved by the school committee, and must also be purchased in accordance with any procurement or purchasing guidelines adopted by the municipality.

The superintendent's involvement in the process is to ensure that the books and materials selected for any particular school are consistent with the educational goals and policies established by the school committee. The school committee, in approving a budget for the district, establishes the budgetary limits within which the principal and superintendent must operate.

In addition, there is a statewide organisation - Educational Technology Integration Services (ETIS) - which aims to ensure that publicly-funded schools and libraries can

easily procure technological goods and services under the state procurement law. ETIS approves certain manufacturers of computing hardware as vendors, and also establishes a separate approved vendor list for providers of online instructional content.=