

THEMATIC PROBE. Primary Education: an International Perspective

Country Description: Sweden

Note: This country description was compiled from the *INCA* Archive (www.inca.org.uk). Additional comments were received from Mr Tommy Lagergren of the Swedish National Agency for Education (*Skolverket*).

1. Organisation of school phases-

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

There are three phases in the Swedish educational structure:

- pre-compulsory, for one- to seven-year-olds;
- the compulsory phase, seven- to 16-year-olds; and
- the upper secondary phase catering for students aged 16 to 19 years.

Nine-year compulsory education (primary and lower secondary) is provided in one, all-through compulsory phase school, known as the *grundskola*. Consequently, many children receive the whole of their compulsory schooling in one and the same school. However, it is also common for children to change schools when entering Year 6 or Year 7 (aged 12 or 13 onwards). Most children have the same class teacher for the first four years of the *grundskola*, and then change. In Years 1 to 6 (children aged seven to 12-13 years), the class teacher takes them for nearly all subjects, although they have specialist teachers for craft subjects, physical education, art education and music. Children in the senior compulsory school years (Years 7 to 9, aged 13 onwards) are taught by a larger number of teachers, many of them specialising in two or three subjects.

Children may be enrolled in compulsory education from the age of six years if places are available. Consequently, such children complete their nine-year compulsory education at age 15. In the 1997/98 school year, 7.1 per cent of all children in Year 1 of compulsory education were six years old. However, this figure varies significantly between municipalities. It is also possible to postpone entry to the *grundskola* until an individual child is eight years of age; he or she will then remain in compulsory education until they complete Year 9, aged 17 years. Despite the above, most children still commence school in the autumn of the same year as their seventh birthday.

Grundskola is non-selective, full-time and co-educational.

Municipalities also have a duty to provide publicly-funded pre-compulsory education, either in a pre-school class in the *grundskola*, where possible, or in pre-school or childcare institutions otherwise, for all six-year-olds who wish to attend. This provision is for 15 hours each week or 525 hours per year.

Since the introduction of this statutory duty to provide pre-school classes for six-year-olds, the proportion of children aged six in Year 1 of compulsory education (see above) has decreased from just over seven per cent in the 1997/98 school year to 3.5 per cent in 2000/01. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

In addition, there is a long tradition of pre-compulsory welfare care for children below six years of age. Attendance is optional for the child, but provision is mandatory for the municipal authorities for all children over the age of one whose parents are working or studying, or because of a child's particular needs. Provision includes day nurseries or pre-school centres for children aged one to five/six years; registered childminders; part-time playgroups for children aged four to six years; and parent and toddler groups for children below school age. Parents contribute towards the costs.

What are the points of transfer between phases?

Early years education	Age range		
	1-7 years		
Compulsory phase	Usual age range	(Age range if child starts at 6)	(Age range if child starts at 8)
	7-16 years	6-15 years	8-17 years
Upper secondary phase	16-19 years	15-18 years	17-20 years

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?

Ministry

Education in Sweden comes under the general jurisdiction of the Ministry of Education and Science (*Utbildningsdepartementet*), and the two Ministers (one for Schools, Education and Science; the other for Pre-School and Adult Education). The Ministry of Education and Science is responsible for matters regarding pre-school education and childcare for schoolchildren, pre-school classes, compulsory school education, upper secondary schools, independent schools, adult education, post-secondary education, universities and university colleges, research, student support and student social issues.

Skolverket

The National Agency for Education (*Skolverket*) is the central administrative authority for the pre-school and schools sector. Its responsibility is to ensure that the national objectives for childcare and the pre-school and school system - set by the Ministry of Education and Science - are achieved. As such, it is tasked with monitoring and evaluating the school system, supervising educational activities, research, making proposals to ensure the continued development of the education

system, and with the provision of in-service training programmes for headteachers, teachers and other school staff.

Municipalities

Although curricula, national objectives and guidelines for public sector schooling in Sweden are defined by the Ministry of Education and Science, subject to this framework, each municipality is free to decide how its schools are run. In other words, each municipality has responsibility for school organisation, staffing and resources. A municipal education plan (*skolplan*) has to be adopted by each municipality or local authority, describing how school activities are to be funded, organised, developed and evaluated.

Schools

The headteacher of each school, in consultation with teachers and other staff, must then draw up a school plan (*arbetsplan*), which is based on the national objectives and curricula and the municipal education plan (*skolplan*).

Curricular control

There are three overarching national curricula in Sweden: one for the pre-school; a second for the *grundskola*, which also covers the pre-school class for children aged six to seven, where this is provided in the *grundskola*, and after school centres; and a curriculum for the upper secondary school. The aim is that the three curricula should link into each other and take a common view of knowledge, development and learning.

Through the national curriculum for the *grundskola*, the Ministry of Education and Science defines the underlying values and basic objectives and guidelines of the school system, and determines the minimum teaching entitlement for children (in terms of teaching hours over the nine years of compulsory education). In addition, there is a national syllabus for each individual subject, which defines the subject's general orientation and nature, and the goals and targets to be achieved by Years 5 and 9.

Curriculum goals specified are of two kinds: aims, which indicate the direction of the school's work and the general development of the desired standards; and attainment targets, which are an expression of the minimum achievements required on leaving school. It is the responsibility of the school and the school authorities to ensure that children are given the opportunities to attain these goals.

Subject syllabuses are binding regulations which clarify what all children should learn in terms of basic and relatively unchanging knowledge. Syllabuses do not specify school organisation or teaching methods, but they do determine the content of teaching and thus define the conditions governing teachers' choice of methods and materials. Syllabuses are developed by the National Agency for Education (*Skolverket*).

Municipalities are responsible for the implementation of national curricula. They must state, for example, in their municipal education plan (*skolplan*), how they intend to achieve the national goals for schooling. In addition, each individual school's school

plan (*arbetsplan*) must specify how the goals are to be achieved and how the activity is to be organised. Teachers and children together establish learning goals which, in combination with the needs and circumstances of different groups of children, provide the basis for selecting different teaching methods.

The State sets national objectives for schools and develops nationwide curricula and syllabuses. At the local level, municipalities and schools need to interpret these documents and make them into working documents. The national documents do not prescribe contents or method. The syllabuses only define what goals should be reached at the end of Year 5 and at the end of Year 9 (the end of the compulsory school) (and for each of the different courses in the upper secondary school system). (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

Teaching method

There is no control from the national level over teaching method; this is a matter for local control. Headteachers have overall responsibility for pedagogical development in individual schools. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

Some national quality reviews of teaching method have been carried out. There has, for example, been a review of the teaching and learning of reading and writing skills. The review concluded that there are three main environments for teaching reading and writing skills. In the most favourable environment - the A-environment - the school works systematically to encourage children to participate in communicative processes and actively take part in a dialogue about their own reading and writing in a developmental perspective. In a B-environment, this is not systematically done. In a C-environment there is almost no sign of this kind of awareness. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

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?)

In 1991, the division of responsibility for schools between the State and municipalities was changed with the result that the municipalities were given full operating responsibility for running schools. Each municipality has to set goals for local school development. However, national objectives are set by Parliament and Government.

One of the main reasons for this shift of responsibility was the conviction that school development needs to take place as far down in the system as possible. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

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

Extensive curriculum reviews do not occur very often and there is no formal time plan for curriculum review. A revised pre-school curriculum was introduced in 1998; the previous one ran from 1987 to 1998. The current curriculum for the compulsory school began to be introduced following publication of the revised curriculum in 1994

(implementation was complete by the 1997-98 school year). Prior to this review, the curriculum dated from 1980. A partial review - in the form of a five-year pilot scheme in one third of schools, which began in 1999 - is currently underway. This enables the pilot schools to abandon the national subject timetable (see below) and determine their own timetable over the nine years of the *grundskola*, providing that the minimum 6,665 hours of instruction is provided over the nine years.

Syllabus reviews are more frequent, however. For example, all subject syllabuses, both for the compulsory school and for the upper secondary school, were revised in 2000 with a view to improving progression between courses and school forms. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

3. Curriculum content

What does the statutory curriculum consist of?

Core (basic) subjects

The core subjects of the statutory curriculum:

- Swedish,
- English, and
- mathematics,

are given prominence in the subject timetable for the *grundskola* (see below for full details of the minimum framework timetable).

English occupies an important position as the mandatory, first compulsory foreign language in Sweden and, as such, is regarded as a core subject of the statutory curriculum. Although each municipality determines when teaching in English should begin (this tends to be in Year 3 or 4, children aged nine or 10 years respectively), the goals to be achieved by Year 5 (children aged 11 to 12 years) are the same for all. Currently, around one third of children begin studying English in Year 1.

Other statutory subjects

The other statutory curriculum subjects in the *grundskola* are:

- Practical arts subjects: art, domestic science/home economics, sport/physical and health education, music and dance, and craft (textiles, woodwork and metalwork).
- Social sciences: geography, history, religious education and civics.
- Sciences: biology, physics, chemistry and technology (these can be studied as individual subjects or as one integrated subject; individual subjects is the most common form).

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

Foreign or mother tongue languages

In addition to English, which is a core subject of the statutory curriculum (see above), the study of another foreign language becomes compulsory in either Year 6 or Year 7 of *grundskola*. Schools themselves decide in which of these two years to introduce the additional language. Increasingly, children are beginning to study a second foreign language in Year 6 (aged 12 onwards). The most common choice is German, followed by French and Spanish. Some schools also offer Finnish, Sami, Italian, Chinese, Portuguese and Russian or a combination of these. Schools must offer at least two of German, French or Spanish. Some children are advised to study extra English or Swedish instead and immigrants may study their mother tongue instead of a second foreign language. Some children may study sign language. A third foreign language may be offered as an additional option.

Mother tongue language tuition aims to enable those who speak a language other than Swedish at home to maintain and develop it. Children must be given the opportunity to become bilingual and familiarise themselves with their cultural background. The mother tongue language may be studied as an alternative to the second foreign language, as a school option or outside normal lessons. The right to tuition in the home language is, in principle, restricted to seven years, if the teaching is organised outside normal lessons, but exceptions are made for the Nordic languages.

Values education

There is a programme of basic values entitled *About This You Must Tell*. Schools are expected to teach this programme, which aims to combat racism and focuses on modern history and a multicultural society.

Study and vocational guidance (syo)

The *grundskola* must also provide study and vocational guidance (syo). Many schools have special syo staff to inform and instruct children, and to provide them with personal guidance on the different educational opportunities and vocational options available to them after the compulsory school.

School health care

All children have to be offered school health care. This has to be provided by a school doctor and school nurse. The purpose of school health care is to observe the child's development, preserve and improve their physical and mental health, and encourage healthy living habits. This health care is intended to be mainly preventative and includes regular health checks and elementary nursing. Children are entitled to school health care free of charge

Optional subjects

In addition, all children are allocated a minimum of 382 hours during the nine years of the compulsory school to study optional subjects.

Time allocation

The Government sets a minimum teaching entitlement - in terms of the minimum guaranteed time for which children are entitled to receive teacher-supervised instruction - and a syllabus for each subject in the compulsory school. Each school's board of governors is free to decide how the amount of teaching time specified by this timetable - provided below - is allocated over the nine years of schooling. Some schools, for example, allocate more hours to the teaching of Swedish and mathematics in the early years of the *grundskola*. (The individual teacher determines the topics to be covered in lessons, the teaching methods and the materials to be used.)

Ministry of Education and Science-determined minimum guaranteed teaching time

SUBJECT	Total minimum teaching time (in hours) for the nine years of the compulsory phase school (<i>grundskola</i>)
Core subjects	
Swedish/Swedish as a second language	1,490
English (mandatory as the first compulsory foreign language. Schools decide when instruction begins but all require the same level of knowledge by Year 5. In most areas, the teaching of English commences in Year 3 or 4. In 1999, around one third of children began studying English in Year 1)	480
Mathematics	900
Practical arts subjects	
Art	230
Domestic science/home economics	118
Sport/physical and health education (increased from 460 to 500 hours on 1 January 1998)	500
Music	230
Crafts (textiles, woodwork and metalwork) (increased to 330 from 282 hours on 1 January 1998)	330
Social sciences	885
Geography, history, religious education and civics	
Sciences	800
Biology, physics, chemistry and technology (can be studied as individual subjects or as one integrated subject; individual subjects is the most common form)	
Plus	
Language options	320
Individual options	382
TOTAL	6,665

School options

Of the total guaranteed number of hours (6,665), schools may use 600 hours for their own options. They may 'take' hours from all subjects in the compulsory school curriculum, but no subject or group of subjects may be reduced by more than 20 per cent. A common choice in this respect is music, but time allocated to art, sport, science and languages is also often reduced. By allowing schools these 600 hours of flexibility, the Government is aiming to provide schools with enhanced opportunities to organise education in closer rapport with local needs and interests. The aim is also to promote interdisciplinary teaching and thematic studies.

Pilot scheme

A five-year pilot scheme was introduced in one third of schools in 1999. The pilot schools are permitted to abandon the national subject timetable above and determine their own timetable over the nine years of the *grundskola*. The only constraint is that schools must provide a minimum of 6,665 hours of instruction over the nine years.

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

The school year normally begins at the end of August and ends early the following June. The exact dates vary from year to year and from one municipality to another. The working year comprises 40 weeks (not less than 178 working days and not more than 190), divided into two terms by the longest holiday in the academic year which is usually from around 20 December to the beginning of January. Within the 40 weeks there are also 12 occasional days' holiday during autumn and spring, a one-week winter sports holiday in February or March, and a one-week Easter holiday.

Schools have a five-day week from Monday to Friday. Schools decide the opening and closing hours, provided the school day does not exceed six hours for children in the first two years and eight hours for older children. Usually schools open for the whole day with a break for lunch.

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

The 1994 revision of the compulsory school (*grundskola*) curriculum aimed to ensure that the revised curriculum was inclusive. Consequently, this curriculum is common to mainstream (standard) *grundskola*, compulsory schools for Sami-speaking children (Sweden's principal minority ethnic group), compulsory schools for those with learning difficulties, and special schools.

The 1994 revision of the compulsory school curriculum also introduced major changes to the number of hours of study allocated to certain subjects. A number of subjects were allocated fewer hours to make it possible to reinforce 'foundation knowledge'; to provide more scope for the study of a greater range of languages; and to provide children with more opportunities to make their own subject choices. This changed the balance between different subjects and resulted in a significant reduction in the number of hours allocated to handicrafts in particular, as well as to sports and health. To redress the balance, the hours allocated to the latter two subject areas were increased slightly in 1998, largely at the expense of individual options (see the table above).

The minor changes introduced to the compulsory school subject syllabuses in 2000 aimed to ensure clearer progression throughout the school system and between school forms. For languages, the Swedish syllabuses were strongly influenced by the *Common European Framework of Reference for Languages (CEF)*. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

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

Information and Communications Technology - *Tools for Learning* programme
As part of a programme to train teachers in information and communications technology (ICT) and to promote its use in schools, Sweden is providing 60,000 teachers with a multimedia computer. The programme, entitled *Tools for Learning*, is intended to provide training on using ICT in the classroom for about 40 per cent of Sweden's teachers, to improve Internet access for schools, and to give e-mail addresses to all teachers and children. It aims to create a greater variety in the work of teachers and to transform schools into more exciting workplaces for both children and teachers. Introduced in accordance with the Government's belief that teachers required help if they were to teach ICT in the classroom, the training is optional for teachers.

Pilot timetable scheme

As previously mentioned, a pilot scheme is also underway in some schools, in accordance with which the pilot schools can disregard the subject timetable detailed above.

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

In recent years, there has been a shift towards developing children's democratic competence and their capability for self-assessment. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

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

Tommy Lagergren of the Swedish National Agency for Education (*Skolverket*) comments that it is not possible to state whether or to what extent international studies have influenced development. However, the results of international studies have influenced the debate about schooling and opened channels of communication nationally as well as internationally. Additionally, as previously mentioned, the foreign language subject syllabuses are influenced by the *Common European Framework of Reference for Languages (CEF)*.

4. Organisation of the curriculum

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

At compulsory level, topic-based and interdisciplinary teaching is becoming more common. Indeed, one of the aims of allowing schools to use 600 hours of the statutory minimum 6,665 teaching hours for their own options, is to promote interdisciplinary teaching and thematic studies.

How are subjects labelled?

'Core subjects' (or 'basic subjects'); 'other subjects'; 'subject blocks' (see below); 'individual options'; 'school options'.

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?

Science in Sweden encompasses biology, physics, chemistry and technology. These subjects can be studied as individual subjects or as one integrated subject - known as a 'subject block'; individual subjects is the most common form in science.

Social studies, too, is sometimes taught as a subject block which includes geography, history, religious education and civics.

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

A time frame (minimum number of teaching hours) is provided for the whole of the nine-year compulsory school: for example Swedish 1,490 hours, English 480 hours, and mathematics 900 hours. How these hours are distributed throughout the compulsory school is a local decision. There is an increasing tendency to work thematically and teach and learn with a cross-curricular perspective. It is also becoming more common for teachers, especially those working with children in the early years of compulsory education, to work in teams. That is, a group of teachers works together focusing on a group of learners. This teacher team often takes significant responsibility for schedules and for some aspects of the school budget. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

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 testing

Alongside ongoing teacher assessment of a child's performance in school, common national tests in Swedish, English, and mathematics are given at the end of Year 5 and Year 9, but are only compulsory, in both state and independent schools, at the end of Year 9. In addition, there is a system of national voluntary diagnostic testing. See the table below.

Year/age range	National assessment regime
Pre-school Year to Year 5 Aged 6-12	Voluntary diagnostic test materials for reading, writing and arithmetic are provided for public sector compulsory phase schools, to assist teachers in determining the measures required to support individual children in their development.
Year 5 Aged 11-12	Criterion-referenced voluntary tests in Swedish, English and mathematics.
Years 6-9 Ages 12-16	Voluntary diagnostic test materials are provided for Swedish, English and mathematics. These are intended to highlight individual strengths and weaknesses in the subjects concerned, and to provide an indication of the child's chances of achieving the objectives for Year 9.
Year 9 Age 15-16	Criterion-referenced compulsory tests in both state and private schools in Swedish, mathematics and English. Although the tests are compulsory for schools, they are not compulsory for individuals. That is, if a child is absent or ill on the day of a particular national test, the school does not have to ensure that he or she takes the test at a later date. A passing final grade in Swedish, English and mathematics is required for children to receive the school leaving certificate (<i>grundskolabetyg</i>) and be able to continue to post-compulsory upper secondary school. Results of the Year 9 tests are collected nationally.

The above system of criterion-referenced national testing was introduced in the 1995-96 school year.

Grades in national tests and teacher assessment

Three levels of grade are awarded for the Year 9 tests and, at the end of Year 9, for the other curriculum subjects via teacher assessment. These grades are:

- pass (*godkänd, G*);
- pass with credit (*väl godkänd, VG*); and
- pass with distinction (*mycket väl godkänd, MVG*).

Although the Swedish National Agency for Education (*Skolverket*) is responsible for the development and administration of the national tests, the tests themselves are conducted and the grades awarded by a child's teacher. In their assessment of the level of a child's knowledge at the end of Year 9, teachers use the 'objectives to achieve' section in each subject syllabus. These objectives correspond to a 'pass' grade. For the 'pass with credit' grade, there are nationally agreed criteria (see below), developed by *Skolverket* with the assistance of teachers. Teachers themselves currently determine the qualitative level for the grade 'pass with distinction'. However, there are moves towards introducing national exemplification of grading standards for this highest grade in the national tests.

To be awarded the grade 'pass with credit' in any particular subject, children should have fulfilled all the criteria for that grade. In special cases, and with reference to a particular child's personal circumstances, the occasional criterion may be disregarded. Well-developed abilities in one or more of the criteria may compensate for weaknesses in one or two other criteria.

If a child has not fulfilled the requirement for a 'pass' grade, no grade at all is awarded in that subject. Instead, he or she receives a written assessment which may, for example, discuss his or her aptitude for further studies.

Grades are awarded in the subjects taught in the *grundskola*. If tuition has primarily been organised in subject-related (cross-disciplinary) blocks (known as 'subject blocks'), the teacher may decide to award a collective grade for that block (social studies, or sciences for example).

Progression

Normally, children progress automatically from one class to the next during compulsory education. However, after consulting a child's parent(s), the headteacher may decide not to move the child up to the next class. The headteacher may also decide, part-way through an academic year, to transfer a child to a higher class if he or she is considered able to cope and his/her parents give their consent.

In cases where ongoing teacher monitoring and assessment reveals that children are experiencing difficulties in their school work, they are entitled to support in school. Sometimes a special programme of measures is necessary. This is designed by school staff in consultation with the children and their parents/guardians.

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

Tommy Lagergren of the Swedish National Agency for Education (*Skolverket*) comments that the way the national tests are constructed (based on the relevant syllabuses) undeniably influences teaching and learning in schools. However, the tests aim to be broad and multifaceted in a bid to avoid the problem of 'teaching to the test'. The National Agency for Education (*Skolverket*) evaluates the tests, reports on results and analyses the effects.

6. Teaching profession/training

What changes can be identified in initial teacher training programmes?

Swedish teacher training programmes were revised in 2001. There is now one common programme with a core for all teacher categories, and the trend in initial teacher training is towards better links between research, theory and practice. There is "more theory in the practical parts, and more practice in the theoretical parts". There is now also only one teacher certificate. Although, after some time in the programme, there are possibilities for specialisation, where student teachers can, for example, focus on different age groups and/or different subjects. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

This new teacher training programme aims for better integration between the different parts of teacher education, and to better prepare students for working in schools. That is, it aims to better prepare them for dealing with the many situations that may arise in the everyday school situation, at the same time as catering for students' varying needs. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

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

Specific ICT training for teachers is provided under the *Tools for Learning* ICT programme (see above).

Annually, around 13 days are set aside for each teacher for in-service training. Goals for in-service training are set locally, and the headteacher usually has significant influence in deciding on priority areas, in cooperation with the teachers. There is a local budget in each school for in-service training, which is offered by universities and teacher training departments. In addition, the National Agency for Education (*Skolverket*) also offers in-service training in national priority areas. In 2002/2003, for example, there is a training programme for teachers working with young learners of English, with a focus on learners with different mother tongues. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

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

The headteacher has overall responsibility for overseeing teachers' planning; teacher colleagues also have an important role to play in this. The National Agency for Education (*Skolverket*) has some responsibility for quality assurance and review through national evaluations, national assessments, international studies, supervision and quality reports. In March 2003, the National Agency for Education will be split into two authorities. *Skolverket* will, in its new form, focus more on quality review and supervision. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

To what degree are teachers using electronic formats to plan?

Tommy Lagergren of the Swedish National Agency for Education (*Skolverket*) reports that information in response to this question is not readily available.

7. Pedagogy

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

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

Schools are free to make their own decisions regarding the organisation of the school, the teaching arrangements, size of classes etc. Children may be taught in mixed-ability groups of the same age or as mixed-age groups. Topic-based and interdisciplinary teaching is becoming more common.

Although many schools choose to group children by ability in English, Swedish and mathematics, this does not really commence until around the age of 12.

Sometimes children are grouped by sex for some subjects, particularly physical education and Swedish.

The key principle, in the nine-year compulsory school for all, is to ensure that schools, in their teaching approaches, respond to the need for individualisation and meet children's varying needs. Among teachers, there is a growing awareness of individual learning styles, and this is an area increasingly covered by in-service training and courses offered to teachers. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

There is a general tendency towards less 'teaching from the front' and more individualisation and group work, with teaching teams often also using cross-curricular teaching and learning, and problem-based learning. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

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

Computers and the Internet (ICT) are more commonly used now than ever before. Municipalities have spent considerable funds on computers and developing resource centres. The Government has also allocated extra funds to ICT provision. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].) (See above regarding the *Tools for Learning* programme.)

National and international video-conferences are used in some schools as a way of enabling learners to meet, but also as a discussion forum for teachers. (Tommy Lagergren, Swedish National Agency for Education [*Skolverket*].)

8. Resourcing

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

As compulsory schooling is free of charge, no fees may be charged for teaching materials, such as textbooks. These are provided by the municipalities or the State. Indeed, neither children nor their parents usually incur any costs for teaching materials, school meals, health care, or school transport.

The National Agency for Education (*Skolverket*) provides some resources for schools. It provided teaching resources for the values education programme *About This You Must Tell*, for example, and also provides the *Swedish Schoolnet*. This is a website for teachers, educators and children, which aims to stimulate the use of information and communications technology (ICT) in schools, by providing both a practical guide for teachers on integrating ICT into a practical classroom setting, and a source of information for teachers. It is a "portal for schools, by schools, and about schools", which aims to offer an extensive choice of services and information. The contents are selected and checked for both quality and functionality; they must be relevant to schools and be directly applicable in an educational setting. *Swedish Schoolnet* is accessible at <http://www.skolverket.se/skolnet/english/index.html>

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

Textbooks are not approved by the State and are usually published by commercial firms. Teachers choose whether to use a textbook in the subject they are teaching and teachers in all subjects are free to select whichever textbooks they need.=