France

Country Report on ICT in Education

Available on http://insight.eun.org

Contact: Nathalie Terrades, Ministère de l’Éducation nationale

2009/2010
# TABLE OF CONTENTS

1 THE EDUCATION CONTEXT .................................................................................................................. 2  
  1.1 Education Reform ...................................................................................................................... 2  
  1.2 Key challenges /priorities for education .................................................................................. 2  

2. ICT POLICY .................................................................................................................................... 3  
  2.1 Responsibilities ......................................................................................................................... 3  
  2.2 ICT policies for schools ............................................................................................................ 3  
  2.3 ICT priorities ........................................................................................................................... 5  

3. THE CURRICULUM AND ICT .......................................................................................................... 5  
  3.1 The curriculum framework ....................................................................................................... 5  
  3.2 ICT in the curriculum ............................................................................................................... 5  
  3.3 Students’ ICT competence ....................................................................................................... 5  
  3.4 Assessment scheme .................................................................................................................. 5  
  3.5 ICT based assessment ............................................................................................................. 5  
  3.6 Quality assurance of the use of ICT in schools ...................................................................... 6  

4. DIGITAL LEARNING RESOURCES AND SERVICE ........................................................................ 6  
  4.1 Content development strategies .............................................................................................. 6  
  4.2 E-content development ......................................................................................................... 6  
  4.3 User - generated content ....................................................................................................... 6  
  4.4 Web 2.0 ................................................................................................................................. 7  
  4.5 Content sharing .................................................................................................................... 7  
  4.6 Learning Platforms ................................................................................................................. 7  

5. TEACHER EDUCATION FOR ICT ................................................................................................. 7  
  5.1 ICT competence targets ......................................................................................................... 7  
  5.2 Assessment Schemes ............................................................................................................. 7  
  5.3 ICT in teacher education ........................................................................................................ 8  
  5.4 Training the Teacher Trainers .............................................................................................. 8  
  5.5 Incentives ................................................................................................................................ 8
1 THE EDUCATION CONTEXT

1.1 EDUCATION REFORM

A reform of upper secondary schools will be launched in September 2010. The reform aims at providing more guidance to students in their three years of upper secondary school. In their first year (age 15), along with basic compulsory subjects, all students must follow an economics course and can choose an extra subject. They also have two hours of guidance and two hours of tutored work. Languages and cultural knowledge are also emphasised. More information on the reform can be found at: www.education.gouv.fr.

1.2 KEY CHALLENGES /PRIORITIES FOR EDUCATION

The following initiatives can be regarded as top priorities for education:

Common base of knowledge and skills

The common base of knowledge and skills was launched in July 2006. It has been defined as the body of knowledge and skills which the French system is committed to imparting to children in the course of compulsory education. The text is based on seven major skills or pillars. Each pillar is divided into knowledge, abilities, and attitudes. The seven pillars are:

1. Mastering the French language
2. Speaking a modern foreign language
3. Acquiring basic knowledge in mathematics and science
4. Developing a humanist culture
5. Mastering common ICT
6. Acquiring social and civic skills
7. Developing autonomy and initiative

Deployment of virtual learning environments

France aims to provide 100% of French teaching institutions with internet connections and to give all members of the educational community access to a virtual learning environment.

Plan for the development of ICT in rural schools

A new plan for the development of ICT in 6,700 rural schools was launched in February 2009. 67 million euros are being allocated to schools in rural communes (with fewer than 2,000 inhabitants) for the acquisition of laptops, interactive whiteboards and software. This measure aims to reduce the digital divide between rural and urban schools. The 6,700 “rural digital schools” will be equipped with high-speed internet access. Teachers will be trained to use digital resources from a national platform to which they are also expected to contribute1.

The 6,700 schools will receive €1,000 each to buy digital resources. A dedicated portal provides information on the digital resources, that can be ordered from a portal2.

The “Digital textbooks available on virtual learning environments” experiment

Since September 2009, the Ministry of Education has been carrying out an experiment in 12 académies (local education authorities – there are 30 académies in France). Digital textbooks have been made available on virtual learning environments in order to reduce the weight of pupils’ schoolbags, develop the use of ICT, and help create tomorrow’s multimedia digital textbooks.

The project has been established in partnership with textbook publishing companies who have developed new online textbooks. Ten publishing companies now offer full web textbooks on two platforms.

The 65 lower-secondary schools that are concerned by this experiment are already equipped with a virtual learning environment and have access to online teaching resources. More than 8,000 pupils in 6ème (age 11) and their teachers, from 21 départements (county-size local authorities) and 12 académies, have online access to the new digital textbooks via six different virtual learning environments and pupils leave their traditional paper textbooks at home.

The départements, which already finance the ICT equipment of lower secondary schools, are completing it and ensuring that internet connection speeds are

---

1 http://www.educnet.education.fr/primaire/ecole-numerique-rurale
2 www.catalogue-ecolenumerique.education.fr/catalogue/viewCatalog.html
high enough to allow the use of such online textbooks in class.

The state, which finances paper textbooks for all lower secondary schools, also contributes €430,000 towards the cost of acquiring the 4-year rights to use those digital textbooks. The académies, through their bodies of inspectors, help ensure the success of the experiment which is to be carried on to the next school level of 5ème (age 12) and is to last five years.

**The PrimTICE portal (November 2009)**

The portal presents and advertises digital resources and pedagogical scenarios for primary education. It integrates the contents already available on the PrimTICE platform (a directory of several hundred teaching scenarios involving the use of ICT, from reception classes to Cycle 3 – the third stage of primary education in France) on the USB keys given to all new teachers and on SIALLE, the educational software information and analysis service. It also provides information on other aspects of ICT actions at the primary level of education such as training, equipment, the C2i (ICT certificate) and the ENR plan (plan for the development of ICT in rural schools): http://primtice.education.fr/

## 2. ICT POLICY

### 2.1 RESPONSIBILITIES

**Responsibilities of ICT integration**

**National level**

The Department of Information and Communication Technology in Education (SDTICE) is in charge of coordinating IT development in education. The mission of the department is:

- Encouraging teaching practices using ICT;
- Developing school equipment;
- Creation of networks;
- Teacher training;
- Helping production, distribution and creation of multimedia resources;
- Supporting the product and services industry

**Regional level**

The académies, regional structures of the Ministry of Education, are in charge of implementing national directives and policies. The regional education authority gives impetus to the development of Information and Communication Technology. It coordinates the different levels of teaching and establishes partnerships with local and regional authorities, companies, other administrations and organisations.

The ICT advisor (CTICE) oversees the actions related to ICT in regional education authorities and coordinates the various networks of people and partners involved in educational policy, notably the network of subject leaders and the network of persons dedicated to primary education. The ICT advisor is engaged by the recteur, who has the overall responsibility for the académie. Each académie covers several départements.

**ICT in schools**

In France, primary schools (for age 2 to 11) are linked to the town council, whereas lower secondary schools (age 11 to 15) are dependent on the department council and upper secondary schools (age 15 to 18 plus some post-baccaulaureate sections) come under the regional council’s authority. Primary school buildings, equipments, and digital services are funded by town councils. “Colleges” (lower secondary schools) and “lycées” (upper secondary schools) buildings and equipments are respectively funded by départements (territorial subdivisions) and “regions” (territorial divisions). As concerns digital services, the responsibilities are shared between local governing authorities and the central government.

### 2.2 ICT POLICIES FOR SCHOOLS

**Overall ICT policy in education:**

- Propose and implement measures for increasing the use of the internet and ICT;
- Provide training for families, children and the general public;
- Streamline the measures already established by government and public institutions;
- Support regional authorities and private partners;
- Maintain and coordinate public internet access areas;
- Encourage the distribution of information and exchanges between public and private players.
• Prepare and implement the guidelines for the development of information and communication technologies for educational purposes in schools and higher education;
• Monitor higher education establishments, particularly during the assessment of the ICT sections in the context of the four-year contracts;
• Steer ICT training schemes;
• Support the production of digital resources;
• Establish partnerships and agreements with regional authorities and companies;
• Supervise all ICT sections of the SCEREN/CNDP (National Centre for Educational Documentation and its network) and the National Distance Learning Centre (CNED).

Current national programmes

The SDTICE (Department of Information and Communication Technologies) belongs to both the Ministry of National Education and the Ministry of Higher Education and Research. It runs the following programmes:

“Infrastructure and Services” Programme

The programme aims to provide the educational community with the infrastructures and services necessary for supporting the development of ICT practices. Its objective is to ensure that everyone, and in particular every student and teacher, can benefit – whether in teaching or learning – from a work environment adapted to their needs (virtual offices or electronic school bags) and within the scope of their activities, and can receive assistance as and when required. To reach these objectives, local education authorities (académies) and local governing authorities (“communes”, “départements”, “régions”) are invited to establish partnerships and adopt a global approach taking into account all the actions deemed necessary to ensure the development of the use of ICT, and set up agreements defining their respective parts and responsibilities. The education authorities retain full responsibility for and control of learning contents and teacher ICT training.

“Digital Resources for teaching and learning in schools and in higher education” Programme

This programme supports the production and distribution of quality digital educational content for pupils, students and teachers. Its aim is to strengthen the place of France – and by extension, that of Europe – in the knowledge industries.

“ICT Uses in Education” Programme

The objectives of this programme are to:

• Develop ICT use that is adapted to needs, in all school subjects, at all educational levels
• Encourage the production and sharing of educational uses
• Organise the transformation of French digital campuses into “areas of excellence”: the Thematic Digital Universities (UNT).

1. “ICT Training and Support” Programme

This programme aims to broaden and systematise ICT training, and to support actions targeting the entire educational community: trainers, teaching staff and support staff. These actions are also directed at young people through the general adoption of the IT and Internet Proficiency Certificate (the B2i) in schools and the introduction of the C2i in higher education.

The aim is a real integration of ICT in different subject areas and educational activities, which presupposes acquiring a command of both the ICT tools and the proficiencies specifically linked to the new professional skills that are being developed.

This programme is intended to experiment with and promote new training environments, thereby allowing the individual or group projects organised by teachers to be more readily and effectively implemented.

“Quality, Awareness and Promotion” Programme

This is a cross-sectional programme designed to support the management of projects and to assist the initiatives launched by the SDTICE.
2.3. ICT PRIORITIES

3. THE CURRICULUM AND ICT

3.1. THE CURRICULUM FRAMEWORK

The general national curriculum framework in France is centralised. It is defined at central level and it is goal oriented. It is defined for study cycles (2 years for instance). Within the curriculum framework, teachers are relatively free to choose their own pedagogical approach.

3.2. ICT IN THE CURRICULUM

ICT is not taught as a separate subject. It is embedded in all subjects, at both primary and secondary levels.

3.3. STUDENTS’ ICT COMPETENCE

See 3.4

3.4. ASSESSMENT SCHEME

ICT skills assessments have been part of final examinations for lower-secondary schooling since 2007-2008: B2i level 2 (brevet des collèges). ICT skills assessment will be part of final examinations for upper-secondary schooling: B2i level 3 in final exams (baccalauréat). The IT certificate C2i (level 1) at bachelor level is mandatory to enter teacher training institutes.

ICT competence targets for students

The B2i (IT and Internet Certificate) was created by an official memorandum issued by the Ministry of Education’s directorate for primary and secondary education to test students’ competence in ICT use ((BOEN no. 42 of 23/11/2000, updated in 2006: (BOEN no. 42 of 16/11/2006). It certifies:

- Knowing how to use a ICT based working environment
- Awareness of the legal and social constraints entailed in judicious use of these technologies
- Data processing
- Searching the web efficiently
- Communicating using technologies

3.5. ICT BASED ASSESSMENT

The ASSR School Road Safety Certificate – Highway Code test (level 1 (age 14) and level 2 (age 16) is compulsory. Pupils take the exam on a computer with the ASSR software. A few science exams (biology and

---


http://eduscol.education.fr/pid23391/programmes-ecole-college.html
physics) for the baccalaureate can be taken on computers.

3.6. QUALITY ASSURANCE OF THE USE OF ICT IN SCHOOLS

ETIC (Enquête sur les Technologies de l’Information et de la Communication) is a regular annual national survey of ICTE (SDICTE). It is conducted in primary and secondary schools. It aims at providing indicators on equipment, infrastructure, human resources, digital services, safety, teacher training, and more. The indicators are used:

- to organise information about ICT in schools
- to analyse the evolution of the situation regarding ICT
- to compare ICT policies at different levels (regional, etc.)
- they are used by the local authorities, when they need information before equipping schools.

A report commissioned by the government to help schools enter the digital age was published in February 2010: [http://www.reussirecolenumerique.fr/](http://www.reussirecolenumerique.fr/)

4. DIGITAL LEARNING RESOURCES AND SERVICE

4.1. CONTENT DEVELOPMENT STRATEGIES

In France there are agreements with publishers to license the development of commercial products. The Ministry of Education has adopted a policy of support for the development of multimedia educational resources with the aim of providing the educational community with quality products that meet their needs and the aims of the education system. A system designed to support the production of digital content for teaching was subsequently outlined in the Official Education Bulletin (BOEN) of 10 September 1998 and updated in BOEN no. 9 of 10 August 2000.

The procedures provide for the establishment of a multimedia commission to advise on projects eligible for Ministry support and products submitted for consideration for “Recognised as having educational value by the Ministry for Education” (RIP) status.

Since the system was set up in September 1998, 225 digital resources and service development projects have been provided with assistance (for schools and for higher education). The average grant per project was €75,000 in 2008. More than 750 products were recognised as having educational value and subject to targeted distribution activities.

16 products received the RIP label in 2009 (31 in 2008 and 36 in 2007). 6 projects were provided with assistance in 2009 (12 in 2008, 6 in 2007). As regards open-source initiatives, the Ministry has set up a website called SIALLE.

This website gives information on open-source software. First, it is analysed by a commission of experts. Then, teachers can download the software, use and test it, and give it a mark (based on pedagogical and technical aspects and content). Finally, only the software products that have obtained a good mark are integrated into the information system of the Ministry, together with a tutorial.

4.2. E-CONTENT DEVELOPMENT

EDUbases are resource banks for secondary education, containing pedagogical scenarios. They are dedicated to disciplinary and multi-disciplinary teaching. The scenarios are written by teachers, for teachers. Before publication, they are validated by the Inspectorate.

The primTICE portal is dedicated to primary education. Teachers can find pedagogical scenarios on this portal: [http://primtice.education.fr/](http://primtice.education.fr/)

4.3. USER-GENERATED CONTENT

There are blogs/spips (Système de Publication pour l’Internet Partagé or Participatif) in some schools.

---

5 [http://www.educnet.education.fr/plan](http://www.educnet.education.fr/plan)  
7 [http://www.educnet.education.fr/secondaire/edubases](http://www.educnet.education.fr/secondaire/edubases)
These arise from schools’ initiatives and are encouraged by the local education authorities. Blogs and their rapid expansion are seen as having educational value, allowing young people to express themselves on a multimedia basis and also exchange information using RSS channels.

4.4. WEB 2.0

See 4.3

4.5. CONTENT SHARING

See 4.2

4.6. LEARNING PLATFORMS

The Ministry promotes the deployment of digital workspaces or ‘virtual offices’ that offer a consistent set of digital services: collaborative work, school and student life issues, the provision and management of digital resources, and more. The deployment is based on a public-private partnership.

Since the start of the 2009 school year, all the académies have had a Virtual Learning Environment project. The projects are more or less advanced and they include: feasibility study, experiment, or generalisation (organised deployment over a determined period). About 2/3 of the académies are now deploying. The most important initiatives to make projects successful are to encourage partnerships with local authorities, and the management of change. These partnerships are based on the sharing of responsibilities between local education authorities (académies) and local governing authorities concerning the funding of solutions, the hosting, maintenance, support and management of change.

5. TEACHER EDUCATION FOR ICT

5.1. ICT COMPETENCE TARGETS

Distance- and self-training are to be used along with on-site training to help achieve the objective of ensuring that existing school staff, including teachers, management and supervising staff, become ICT literate with minimal disruption to the school. The main goals for teacher training are:

- Embed the use of ICT in the training and specifically the pre-service training of teachers since there will be a high level of renewal of teachers in the coming years;
- Everyday professional help for all staff to provide coherence among all actions in B2i and C2i teacher training, infrastructure and equipment;
- Promote and experiment with new online training;
- Show the possibilities of self- and distance training;
- Present the training offers online

The “C2i level 2” for teachers, published in the BOEN of 11 March 2004, aims to validate the professional skills required by all teachers for performing the pedagogical, educational and societal aspects of their job.

5.2. ASSESSMENT SCHEMES

The IT certificate C2i (level 1) at bachelor level is mandatory to enter teacher training institutes. ICT is also part of all initial training, which is provided by IUFM (Institut Universitaire de Formation des Maîtres – Academic Institute for Teacher Training). The government sets training areas and framework, while Rectorat and Inspection Académique are in charge of in-service training, sometimes together with IUFM. ICT training is cross-sectoral, and is provided as distance- and self-training along with onsite training in order to ensure minimal disruption to the school. There are several levels of action:

- the “ICT training and support programme” of the SDTICE aims to broaden and systematise ICT training, as well as to support actions targeting the entire educational community;
- the “C2i level 2” for teachers aims to validate the professional skills required for performing the pedagogical, educational and societal aspects of their job;
- the “Training and support for trainers” project aims to ensure that ICT is fully integrated into the various subject areas and cross-disciplinary pedagogical activities;

6 http://www2.c2i.education.fr/sections/c2i2e/referentiel/
the “Training and support of training personnel” certificate is intended to promote the professional use of ICT on a daily basis by all training personnel in order to give consistency to the full range of actions already in place (B2i, teacher training, equipment projects, etc.);

the “New training environment” project should promote the use of online training programmes, explore the many different types available (self-learning, learning communities, tutorial systems, etc.), develop procedures for sharing the production of digital resource training, and encourage the introduction and adoption of new training strategies.

5.3. ICT IN TEACHER EDUCATION

ICT is fully integrated in initial teacher education; it is compulsory.

5.4. TRAINING THE TEACHER TRAINERS

Pairform@nce scheme

The goal of the Pairform@nce scheme is to promote the development of the use of ICT in schools and, more generally, to foster the development of professionalism in teaching based on personal experience and that of teaching colleagues. This scheme is aimed both at primary and secondary teachers.

The Pairform@nce scheme is based on the collaborative production of teaching sequences and activities using a variety of resources. This approach is implemented via a dedicated national remote working platform offering a variety of tools and resources (http://national.pairformance.education.fr).

5.5. INCENTIVES

A USB key for teachers

A project called “a USB key for teachers”: six thousand keys were produced during the first year of the project (2006-2007) in three subject areas (History & Geography; Physical & Chemical Sciences, Basic & Applied Sciences; Life and Earth Sciences) and for primary teaching in several départements on an experimental basis. For 2008-2009, other subject areas were covered (technology, maths, languages, etc.) and all the départements were concerned for primary education. These keys were offered to the teachers in their first year of work. They contain: institutional links, teaching resources, examples of uses, a personal space, a toolbox. USB keys are no longer provided but the contents are available on a website.9

Coordinator: Anja Balanskat (European Schoolnet)
Author: Nathalie Terrades, (Ministère de l’Education nationale)
Editors: Anja Balanskat, Valentina Garoia (European Schoolnet)
Coordinator: Anja Balanskat (European Schoolnet)