Presentation

As in previous editions, this 4th edition of *The State of Higher Education and Research* presents a detailed overview, backed up by figures, of current developments within the French system, the resources it deploys and its outcomes, situating it, wherever data permit, in relation to its international counterparts. Each of the 35 themes comprises a double page with graphs, tables and notes, featuring the latest available overall data on each subject. These data are derived from the statistical departments of various ministries (MoR, MEN, MEFI...) but also other organizations such as CEREQ, CNOUS, INSEE, OST or the OECD (see appendix for acronyms).

Net increase in higher education expenditure

The nation spent €26.3bn on Higher Education in 2009, an increase of €1bn compared to 2008. This expenditure has multiplied by 2.5 since 1980 (at constant prices). In 2009, average expenditure per student amounted to €11,260 — 41% more than in 1980. It is now equivalent to the average expenditure for a student of general or technical secondary school (€11,400). This cost differs substantially according to the various courses of study: ranging from €10,220 on average per year for a public university student to €14,850 euros for a student in the CPGE (*Classe préparatoire aux grandes écoles*: preparatory class for the *Grandes Ecoles*). The difference is explained largely by the teacher-student ratio.

Three-quarters of this higher education expense goes on personnel costs. As of September 2009, the teaching and research force in public higher education under the supervision of Ministry for Higher Education and Research was 93,000, including 56,000 teaching researchers and faculty members of similar status: 60% of the total. Secondary school teachers and non-permanent teachers constitute 14% and 25.8% of this total respectively. In ten years the number of teachers in tertiary education has increased by 9.4%. Overall, nearly 90% of these staff are deployed in universities.

The state is the principal funder of higher education, around 72% in 2009, while household contributions have risen to 9%. In September 2009, the number of students receiving assistance rose sharply following the raising of the income ceilings for the award of grants: just over 626,000 students, representing 36% of the population, benefited from direct financial assistance. In total, financial and social assistance for such students exceeds €5.4bn, as against €3.5bn in 1995 (at constant prices).

By devoting 1.4% of GDP in 2007 to Higher Education, France is positioned one tenth of a point above the average for OECD countries (1.5%) and in thirteenth place overall, far behind the United States (3.1%) and Canada (2.6%).

Rising numbers of students thanks to the steady attractiveness of provision, especially for foreign students.

The *baccalauréat* success rate continues to increase and reached 88.9% in 2009, with 539,000 holders. The percentage of a given generation holding the *baccalauréat*, which surpassed 60% in 1995, has now reached 66%. While differences in terms of pursuing further education based on the kind of *baccalauréat* obtained continue to prevail, they are tending to diminish. For the 2008 *baccalauréat* graduates of the "Panel '95" (a generation of students monitored since they joined Year 7 in 1995), the proportion of general and technological *baccalauréat* holders pursuing further education has stabilised at a high level (95% and 85% respectively), while that of vocational *baccalauréat* holders has increased significantly: 47% of them go on to higher education (nearly half through apprenticeships) — a nearly 20-point increase since 1996. In total, 53% of young people per generation go on to higher education.

In 2008, general university courses remained the primary destination of new *baccalauréat* graduates, attracting 30% against 40% in 1996. The share of traditional selective courses CPGE, IUT, [University Institute of Technology], STS {Undergraduate-level technicians preparing a BTS) remains stable. Conversely, new *baccalauréat* holders are more likely to turn to specialist schools recruiting post-*baccalauréat* students (business, engineering, arts, cultural or paramedical schools).

With 2,316,000 students enrolled for autumn 2009, enrolment in higher education showed a very marked increase (+3.7% in one year). Numbers have never been so high. This is a reflection of the increased attractiveness of higher education, including for foreign students (+4.8% between 2008 and 2009). The increase in health-related training has been particularly strong over the last five years: +22.9% in medicine, dentistry and pharmacy +11%.

Numbering 278,000, foreign students now constitute 12% of enrollees as against 7% in 1998. Students from Africa represent 44% of the foreign student body while those from Asia, whose numbers are increasing, now constitute 24%. Foreign students are proportionately more numerous on Master's and PhD courses than at Bachelor's degree level.

An improving rate of success, therefore, but progress is uneven across sectors

For certain qualifications, success in higher education is strongly influenced by the student's academic background. This is true of general Bachelor's degrees, DUT (*Diplôme universitaire de technologie*: Technological University Diploma) and BTC (*Brevet de technicien supérieur*: Higher vocational diploma.): general *baccalauréat* students have higher success rates than those taking the technological or vocational *baccalauréat*: among general *baccalauréat* students, those "on schedule" are more successful than those who are "behind schedule." By contrast, the original *baccalauréat* has little influence on success in vocational degrees, which is robust: 89% of students graduate in one year. For general 3-year Bachelor's degrees, the graduation rate is 38%, while for the two-year DUT and BTS courses the rate was 66% and 57% respectively. As for students in scientific or commercial preparatory classes, 80% of them join a *grande école* after two or three years in CPGE.

Holders of a BTS and especially a DUT increasingly go on to study at least until Bachelor's degree level, particularly thanks to the existence of vocational degrees. 45% of BTS holders and 81% of DUT holders continue their studies after this initial qualification. After a general Bachelor's degree, 63% of students go on to study at Master's level Variations between disciplines are significant: in science, law and economics, continuation rates exceed 70%: in arts, languages and humanities, they do not exceed 57%. In these disciplines, as well as basic science and STAPS (*sciences et techniques des activités physiques et sportives* - physical education and sports science and techniques), the proportion of Bachelor's degree holders preparing for teaching recruitment exams is higher than average. Among those enrolled in the first year of a Master's course (M1), 49% obtain their Master's in 3 years.

In 2009, 44% of young people born between 1979 and 1983 were higher education graduates, thus approaching the target of 50% set for 2012. While 53% of a generation has access to higher education, 19% of *baccalauréat* graduates entering higher education leave without a Bachelor's degree — around 70,000 young people per year and 9% of a given generation

Higher education open to different population groups, but differences remain across training courses

The democratisation of access to higher education continues: over half of young people aged 20 to 24 had access to higher education in 2009 against 34.5% in 1991. Access rates have doubled for children of workers and employees, though a discrepancy of 31 points with the children of management-level parents persists. On leaving higher education, inequalities between these two social groups have decreased slightly: in 2009, the children of managers were 1.9 times more likely to graduate than the children of workers, against 2.2 times more in 1999. While short technological diplomas, such as BTS and DUT qualifications, are socially very selective, universities and *grandes écoles* are much more so: 23% of the children of managers graduate from senior *lycée* or university (*baccalauréat*+5 or more) against 6.5% of workers' children.

The proportion of girls varies widely across courses. While they constituted in the vast majority on university arts and humanities courses and in IUFM (Institut universitaire de formation des maîtres: Teacher training college) (70%), as well as on paramedical or social science courses (8 out of 10), they formed the minority in more selective courses (CPGE, IUT) and particularly on science-based courses: they accounted for just over a quarter (26%) of those enrolled in engineering schools.

A higher education diploma remains an employment and career asset

For decades, possession of a *baccalauréat* +5-level qualification has proven a greater asset in terms of access to employment, employment contracts, or professional or salaried positions, than possession of a *baccalauréat* +2. The choice of training programme is nevertheless important. In terms of both employability and salary, given equal results on leaving, the advantage clearly lies with vocational courses: IUT, vocational degree, Master's and vocational Master's, business, engineering, medical or pharmacy schools.
Disparities are also substantial across the various fields of study. In 2007, arts and humanities research Master's graduates had an above-average unemployment rate (13% against 8%) and a median wage close to that of industrial BTS or DUT graduates (€1,450).

A similar situation applies to the employability rates of Master's students In 2009, two and a half years after qualifying, the employment rate for Master's graduates is 91.4%. Among those employed, 80% have management jobs or intermediate professional roles.

It is graduates in law, economics, management, science, technology and medicine — especially information technology — who best integrate the labour market, with a rate of 92%, as against 90% in humanities and social sciences and 87% in arts, humanities and languages.

Since 2000, research training has been carried out in graduate school doctoral courses via three-year thesis preparation courses in principle, with the number of doctoral students, the breeding ground for research, growing by 9% between September 2000 and September 2009, while the number of PhDs awarded between September 2000 and September 2009 rose by 44%; the majority of these doctorates (59%) being in the sciences.

A robust research campaign in the context of heightened global competition

Domestic expenditure on research and development (GERD) in France rose in 2008 to €41.1bn, double 1981 levels (at constant prices) and representing 2.11% of Gross Domestic Product (GDP). France occupies 5th place amongst the 5 most important OECD countries behind Japan (3.42%), South Korea (3.37%), the United States (2.77%) and Germany (2.64%) and ahead of the UK (1.77%). In 2009, GERD reached €42.1bn (2.21% of GDP).

Research is mainly undertaken by companies, who carried out 63% of R&D in France in 2008, and financed 54% of the work. Domestic expenditure on public sector R&D amounted to €15.3bn in 2007 and was provided mainly by research organisations and higher education institutions. GERD within companies accounted for €25.8bn in 2008, over 50% of which was focused on five research sectors: automotive, pharmaceutical, aerospace, chemicals and electronic components. Moreover, companies devoted a significant part of their GERD to cross-cutting areas such as software or new materials development, nanotechnology, biotechnology and the environment.

The companies receive State support for their endeavours in the form of direct aid, cooperation with government agencies in civil or military domains and tax measures such as the Research Tax Credit (RTC) or the status of Young Innovative Company (YIC). In 2008, 12% of the R&D conducted internally by companies was financed by public resources and total RTC reached €4.3bn. From this point of view, France is no different from other OECD countries, where tax measures to support private research are increasing, reflecting a greater competitiveness between countries in terms of attracting business R&D.

Between 2003 and 2008, the number of researchers grew rapidly (+19%) totalling 229,100 in full-time equivalent (FTE) positions, taking France to third position in the EU after Germany and the United Kingdom. This increase was stronger in companies (+29%) than in public administration (8%); in 2008, 56.7% of researchers were in companies. Women constituted 31% of research staff in 2008. They were less numerous in companies (24%) than in administration (40%). They also constituted a smaller proportion of researchers (27%) than of support staff (38%). Researchers and support staff totalled around 388,300 FTE in 2008.

International competition is evident in the field of publications and patents. In 2008, France's share in world production of scientific publications was 4.2%, as was its share of citations over two years. Both rates have declined since 1999, notably due to the arrival of new countries on the international science scene. France occupies 6th place in the world share of scientific publications. The breakdown by discipline is a balanced reflection of the global situation, apart from a strong specialisation in Mathematics.

France ranks 4th worldwide in the European patent system with a specialisation in "machinery/mechanical engineering/transport" and 8th in the world in the U.S. system of patents, with a specialisation in "pharmacy/biotechnology" and "chemistry/ materials". In both systems, France's global share has been declining since 1994, due to the emergence of new countries.

At European level, French research is involved in 53% of the projects of the 7th Framework Programme for R&D (FP7) and coordinates over a fifth of these projects. France is very active in the aeronautics, space and nuclear fields. It thus has the third country strongest presence in FP7 projects, behind Germany and the United Kingdom.

Clusters in 2010

Competitive clusters

- Global clusters
- Internationally-oriented clusters

Key higher education institutions

- Universities
- Multi-polar universities
- Autonomous universities
- Autonomous Universities of Technology
- Autonomous National Polytechnic Institutes
- *Grands établissements*

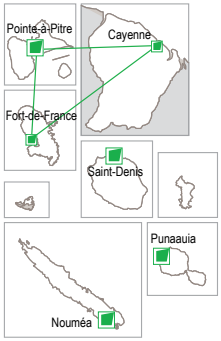
Competitive Clusters, PRES, RTRA, CTRS and the main teaching institutions fall under the urban unit in which their head offices are located.
(or under the relevant commune in the case of Ile-de-France)

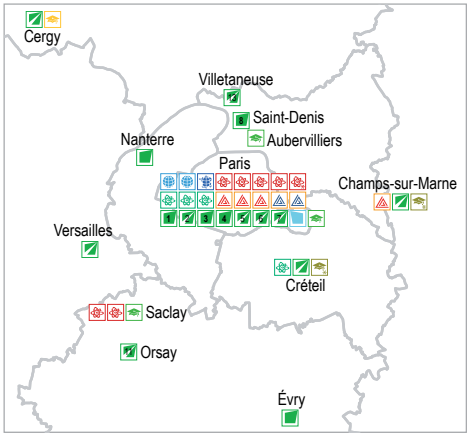
Scientific cooperation schemes

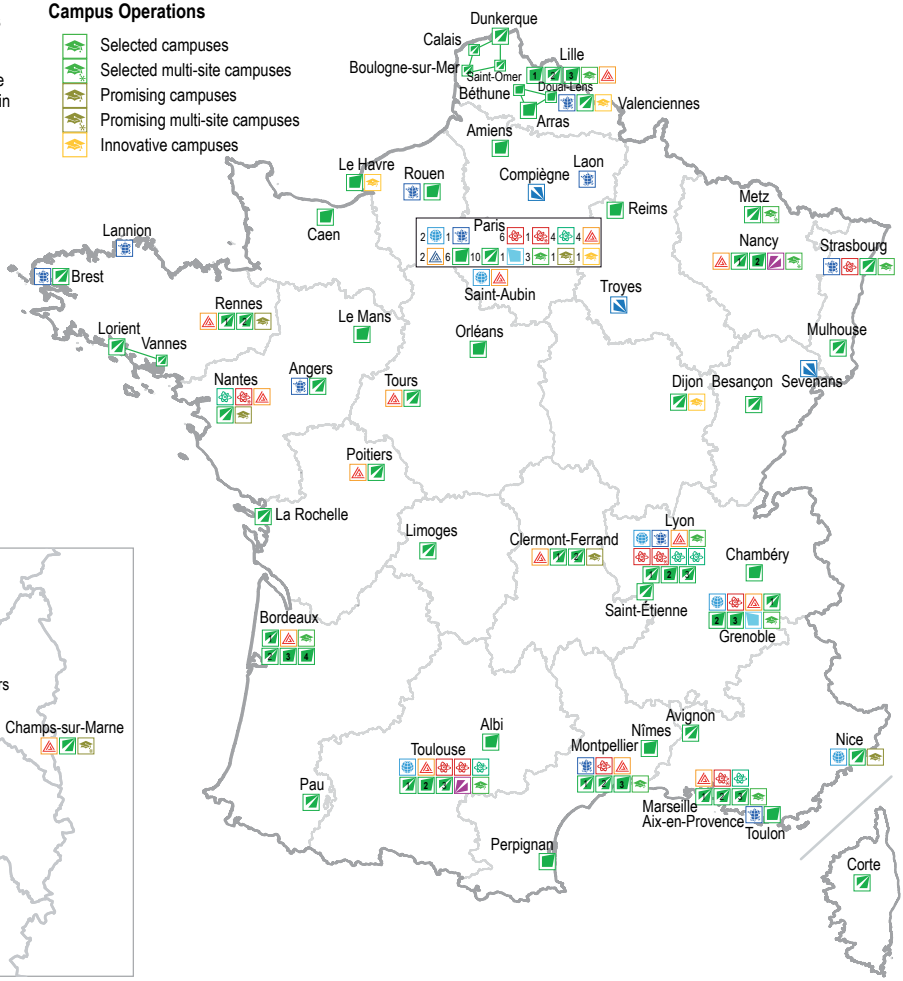
- Advanced Thematic Research Networks - RTRA
- Multi-polar RTRA
- Thematic Centres and Networks for Research and Medical care – CRTS and RTRS
- Centres for Research and Higher Education with EPCS status - PRES
- Centres for Research and Higher Education with FCS status - PRES

Campus Operations

- Selected campuses
- Selected multi-site campuses
- Promising campuses
- Promising multi-site campuses
- Innovative campuses

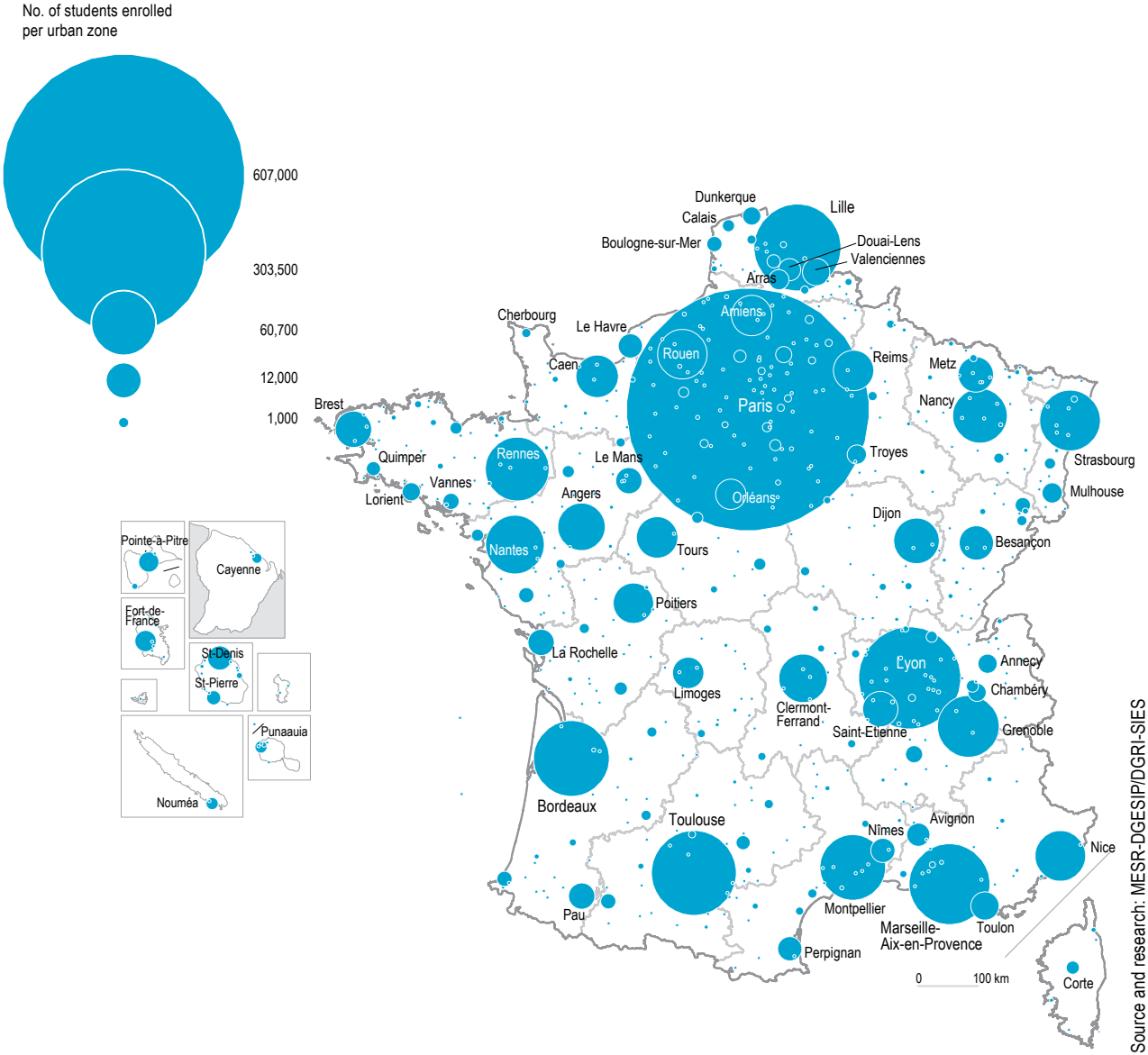




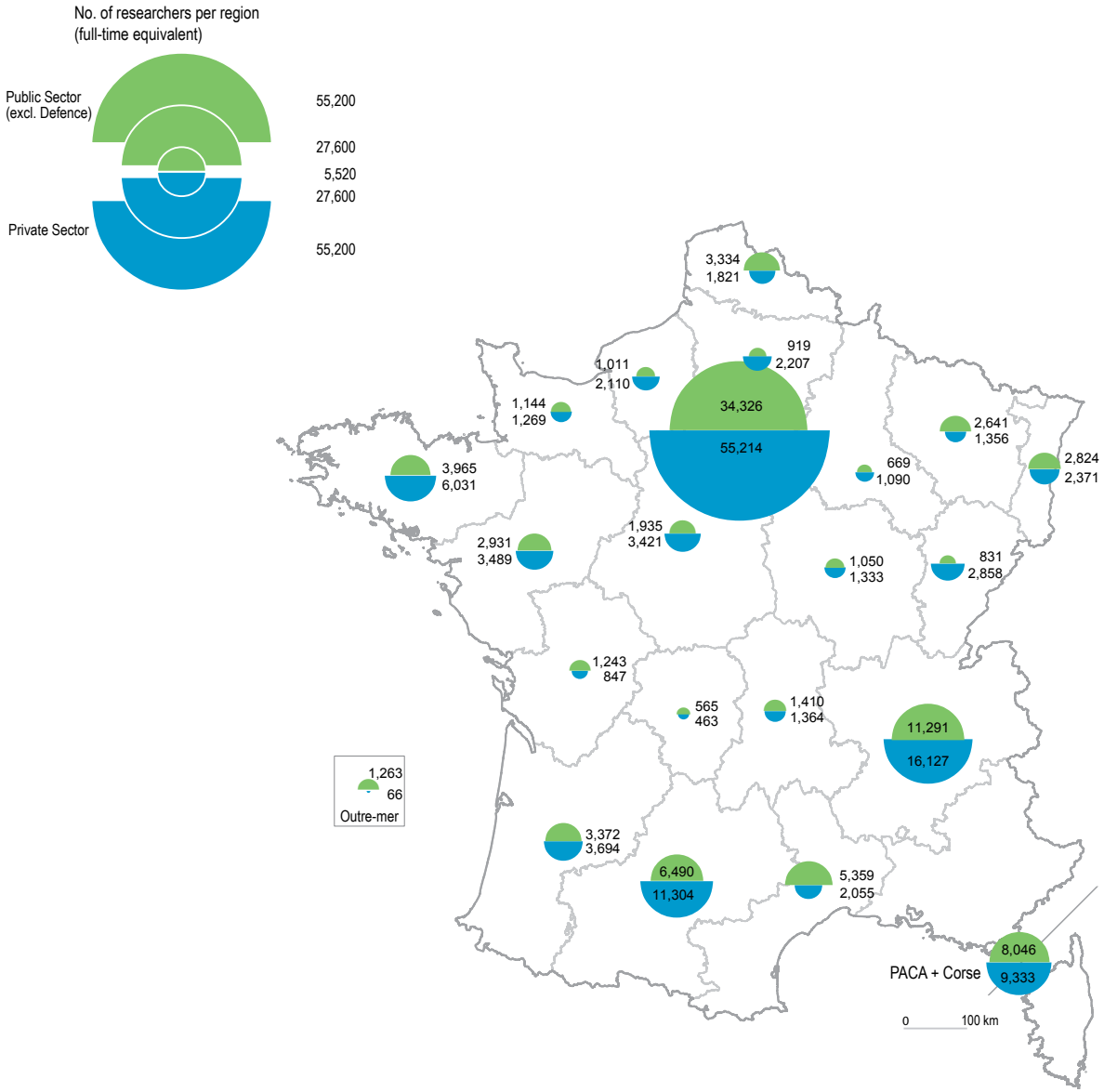


Source and research: MESR-DGESIP/DGRI-SIES

Students enrolled in higher education in 2009-2010



Numbers of researchers in 2008



Source and research: MESR-DGESIP/DGRI-SIES

Appendix

Students enrolled in higher education since 1960

Metropolitan France + DOM

	1960-1961 (3)	1970-1971 (3)	1980-1981	1990-1991	2000-2001	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Universities (excl IUT and IUFM)	214.7	637.0	804.4	1,085.6	1,277.5	1,309.1	1,285.4	1,247.5	1,223.7	1,267.9
Annual trend (%)					0.4	- 0.2	- 1.8	- 2.9	(1) - 1.3	3.6
IUT		24.2	53.7	74.3	119.2	112.6	113.8	116.2	118.1	118.1
Annual trend (%)					1.6	0.2	1.0	2.2	1.6	0.0
STS	(2) 8.0	(2) 26.8	67.9	199.3	238.9	230.4	228.3	230.9	234.2	240.3
Annual trend (%)					0.0	0.1	- 0.9	1.1	1.4	2.6
of which CGPE (4)	(2) 21.0	(2) 32.6	40.1	64.4	70.3	74.8	76.2	78.1	80.0	81.1
Annual trend (%)					- 0.8	2.2	1.8	2.5	2.5	1.4
Other institutions and courses	(2) 66.0	(2) 130.0	215.0	293.4	454.3	556.4	550.2	558.8	578.2	608.6
Annual trend (%)					4.1	2.7	- 1.1	1.6	3.5	5.3
All	**309.7**	**850.6**	**1,181.1**	**1,717.1**	**2,160.3**	**2,283.3**	**2,253.8**	**2,231.5**	**2,234.2**	**2,316.1**
Annual trend (%)					1.1	0.6	- 1.3	- 1.0	0.1	3.7

(1) Trends at constant coverage, i.e excluding IUFM students in 2008-2009 and those from 17 engineering schools leaving the university domain in 2007-2008. Evolution between 2008-2009 and 2007-2008 for universities (except IUT and IUFM) is- 1.3% instead of- 1.9%.
(2) Estimate.
(3) Metropolitan France figures for 1960-1961 and 1970-1971.
(4) Numbers of students enrolled in accounting and finance courses were included with CPGE before 1990 and with other institutions and courses afterwards.
Sources: MESR-DGESIP/DGRI-SIES SMIS information system, surveys conducted by the SMIS in engineering schools, higher education institutions not affiliated to universities, information on STS and CPGE collected by the MoR-MEN-DEPP, surveys specific to departments in charge of agriculture, health, social affairs and culture.

Trends in number of students enrolled in higher education

Metropolitan France + DOM

	1990-1991	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Universities	**1,159,937**	**1,425,665**	**1,424,536**	**1,421,719**	**1,399,177**	**1,363,750**	**1,404,376**	**1,444,583**
General and health-related disciplines	1,085,609	1,311,943	1,312,141	1,309,122	1,285,408	1,247,527	1,223,717	1,267,926
of which: university engineering courses (1)	*10,545*	*24,855*	*25,759*	*25,606*	*25,983*	*26,414*	*20,429*	*20,299*
IUT	74,328	113,722	112,395	112,597	113,769	116,223	118,115	118,139
IUFM							62,544	58,518
Grands établissements	**15,536**	**18,655**	**25,603**	**25,944**	**25,776**	**29,726**	**31,121**	**31,398**
IUFM total (2)		**85,808**	**83,622**	**81,565**	**74,161**	**70,100**	**64,037**	**59,953**
STS (3)	**199,333**	**234,195**	**230,275**	**230,403**	**228,329**	**230,877**	**234,164**	**240,322**
Public MEN	108,262	151,023	149,688	149,849	147,948	147,305	147,592	149,832
Public other ministries	9,343	12,881	12,482	12,202	11,826	11,543	11,079	11,388
Private sector	81,728	70,291	68,105	68,352	68,555	72,029	75,493	79,102
CPGE	**64,427**	**72,053**	**73,147**	**74,790**	**76,160**	**78,072**	**80,003**	**81,135**
Public MEN	52,572	59,160	60,407	61,938	62,904	64,157	66,021	66,652
Public other ministries	1,419	1,715	1,772	1,708	1,677	1,680	1,694	1,747
Private sector	10,436	11,178	10,968	11,144	11,579	12,235	12,288	12,736
Non-university accounting courses	**5,587**	**7,643**	**7,788**	**7,499**	**7,430**	**7,871**	**8,377**	**9,076**
Public MEN	3,951	4,875	4,909	4,979	4,910	5,151	5,280	5,557
Private sector	1,636	2,768	2,879	2,520	2,520	2,720	3,097	3,519
Integrated preparatory classes	**3,965**	**3,271**	**3,309**	**3,058**	**3,162**	**3,835**	**4,066**	**4,352**
Universities of Technology	**3,157**	**6,974**	**6,962**	**7,375**	**7,604**	**7,931**	**8,248**	**8,557**
INP (National Polytechnical Institute)	**8,250**	**12,794**	**12,514**	**12,478**	**12,445**	**7,743**	**6,763**	**7,055**
Engineering courses (1)	**57,653**	**105,007**	**107,219**	**108,057**	**108,846**	**108,773**	**114,086**	**118,341**
University	10,545	24,855	25,759	25,606	25,983	26,414	20,429	20,299
TUs	1,689	4,321	4,511	4,838	5,118	5,450	5,795	5,903
INPs	5,091	9,600	9,494	9,532	9,483	5,989	4,992	5,161
Public MEN	15,461	22,550	23,525	23,431	22,342	24,290	33,553	35,990
Public other ministries	10,865	17,270	17,178	17,458	18,420	17,357	16,922	16,813
Private sector	14,002	26,411	26,752	27,192	27,500	29,273	32,395	34,175
Business, management, sales and accounting schools & colleges	**46,128**	**80,619**	**83,176**	**88,437**	**87,333**	**95,835**	**100,609**	**116,303**
Private institutions for university education	**19,971**	**18,058**	**19,820**	**21,306**	**21,024**	**22,225**	**23,219**	**26,138**
Primary-school teacher écoles normales	**16,500**							
Ecoles normales supérieures	**2,675**	**3,104**	**3,122**	**3,191**	**3,658**	**3,680**	**4,122**	**4,339**
Legal and administrative colleges	**7,328**	**10,858**	**10,750**	**10,477**	**10,425**	**8,617**	**7,707**	**8,378**
Arts and cultural écoles supérieures (4)	**41,988**	**61,444**	**62,864**	**64,598**	**64,531**	**61,834**	**61,617**	**66,479**
Paramedical and social schools (5)	**74,435**	**119,456**	**124,201**	**131,654**	**131,100**	**134,407**	**137,165**	**137,165**
Other schools and courses (6)	**7,515**	**29,322**	**30,653**	**30,692**	**33,255**	**34,072**	**38,242**	**42,410**
Metropolitan France + DOM (7)	**1,717,060**	**2,256,150**	**2,269,797**	**2,283,267**	**2,253,832**	**2,231,495**	**2,234,162**	**2,316,103**

(1) Including engineering courses in partnership. **(2)** A From 2008-2009, IUFMs were integrated into their universities of affiliation, except those of Guadeloupe, French Guyana and Martinique. **(3)** Including post-BTS and DSAA in 1990-1991. **(4)** Including écoles supérieures for architecture, journalism and communication. **(5)** Temporary data in 2009-2010 for paramedical and social courses, 2008-2009 data in 2009-2010, estimate for health data in 2001-2002. **(6)** Non-homogeneous group (veterinary school, other schools affiliated to other ministries.) **(7)** Without duplication of engineering courses dependent on universities, INP, universities of technology and integrated in a university IUFM.

Sources: SMIS information system, surveys conducted by the SMIS in engineering schools, higher education institutions not affiliated to universities, information on STS and CPGE collected by the MoR-MEN-DEPP, surveys specific to departments in charge of agriculture, health, social affairs and culture.

Appendix

Socio-economic objectives selected for the evaluation of R&D expenditure on the environment

1st step	2nd step	3rd step
ENVIRONMENT	ENERGY	INDUSTRIAL PRODUCTION AND TECHNOLOGIES
Environment objective - Monitoring and protecting the global environment: – Control and protection of the atmosphere and climate; – Other measures for monitoring and protecting water, soil and subsoil, noise and all elements related to pollution including research on clean technologies and products **Exploration and exploitation of the earth and sea objective:** – Production and exploitation of the sea (not including living resources and research on marine pollution): physical research, chemical and marine biologies – Other programmes of exploration and exploitation of the Earth: Mining, Oil and gas exploration and exploitation of underwater plateaus, crust and mantle, hydrology, general research on the atmosphere (excluding pollution) and other research on exploration and exploitation of the Earth **Natural environments objective:** Earth, ocean, atmosphere, space	**Production, distribution and rational use of energy objective. (Excluding production and distribution of energy):** – Fossil fuels and derivatives, nuclear fission, nuclear fusion, radioactive waste management including retirements, renewable energy sources and other research on the production, distribution and rational use of energy	**Land and water transport equipment industries and aeronautical transport equipment industries (excluding space) objective**

Education levels

French classification of education levels established by the *Commission statistique nationale de la formation professionnelle et de la promotion sociale* (Office for National Statistics on Vocational Training and Social Development)

Level VI: Left education after the middle years of the first cycle of secondary education (Years 7)-9 and one-year pre-vocational training

Level Vb: Left general year 10, year 9 and 10 technology and classes of the second short cycle before the terminal year.

Level V: Left education after short-cycle, professional-course final year or dropped out of long-cycle secondary education before Year 13.

Level IV: Left education at the end of long-cycle secondary education Year 13 or dropped out of post-*baccalauréat* courses before reaching Level III.

Level III: Left education with a "*baccalauréat* +2 years" qualification (DUT, BTS, DEUG, training colleges in Medicine and social services, etc.)

Level II and I: Left education with a second or third-cycle university diploma, or a diploma from a *Grande Ecole*.

International Standard Classification of Education (ISCED)

ISCED 1: Primary education

ISCED 2: Lower secondary education

ISCED 3: Upper secondary education

ISCED 4: Post-secondary education not included in higher education (practically non-existent in France): basic legal studies, DAEU preparation)

ISCED 5: First and second-cycle higher education

ISCED 5A: also called "university-type" higher education = preparing for Bachelor's degree and master's
(General university disciplines, engineering and business school diplomas etc)

ISCED 5B: Vocational higher education (DUT, BTS, Paramedical and social courses, etc.)

ISCED 6: Third-cycle higher education (PhD research)

This classification aims to produce comparable statistics on education and training in different countries.
It results from an international agreement under the auspices of UNESCO. Based on this classification, student numbers, graduate flows and funding can be broken down according to the different education cycles. It is also used to classify the population by education level; the criterion used is successful education certified by a diploma. The 1987 classification is currently being revised. The three "LMD" levels should be defined in the 2011 classification.

List of acronyms and abbreviations

ACOSS: *Agence centrale des organismes de sécurité sociale* – Central agency of social security organisations.
ADEME: *Agence pour l'environnement et la maîtrise de l'énergie* – Agency for the environment and energy.
AERES: *Agence d'évaluation de la recherche et de l'enseignement supérieur* – Evaluation agency for research and higher education.
AES: *Filière Administrative, Économique et Sociale* – Economic and Social Administration option.
ALINE: *Allocation d'installation étudiante* – student settling-in allowance.
ALS: *Allocation de logement à caractère social* – Social housing benefit.
ANR: *Agence nationale de la recherche* – National Research Agency.
ANRS: *Agence nationale de recherche sur le SIDA et les hépatites virales* – National agency for Research on AIDS and viral hepatitis
APEL: Accreditation of Prior and Experiential Learning.
APL: *Aide personnalisée au logement* – personalised housing benefit.
ASU: *Administration scolaire et universitaire* – school and university administration.
ATER: *Attaché temporaire d'enseignement et de recherche* – Temporary research and teaching assistants.
ATSS: *(Personnels) administratifs, techniques, de service, de santé et sociaux* – Administrative, technical, service, health and social (staff).
BCRD: *Budget civil de recherche et développement* – civil research and development budget.
BCS: Grants based on social criteria.
BEP: Certificate of vocational education.
BTS: *Brevet de technicien supérieur* – Higher vocational diploma.
Business-funded GERD: Business-funded Gross domestic Expenditure on Research and Development.
Business-funded NRDE: Business-funded National Research and Development Expenditure.
CA: Chiffre d'affaires – turnover.
CAP: Certificate of vocational aptitude.
CDI: Permanent contract.
CEA: (French Atomic Energy Commission) *Commissariat à l'énergie atomique* – French atomic energy commission.
CEPR: *Contrat de projet état region* – State Region project contract.
CEPREMAP: *Centre pour la recherche économique et ses applications* – Centre for economic research and its applications.
CEREQ: *Centre d'études et de recherches sur les qualifications* – Centre for study and research in training and education policy.
CERI: *Centre d'études et de recherches internationales* – French centre for education and international research.
CERN: *Conseil européen pour la recherche nucléaire* – European Organisation for Nuclear Research.
CESI: *Centre d'études supérieures industrielles* – Centre for higher industrial studies.
CHU: *Centre hospitalier universitaire* – University hospital.
CIFRE: *Convention industrielle de formation par la recherche* – Industrial Agreement for Training through Research.
CIR: Research tax credit.
CLCC: *Centre de lutte contre cancer* – Centre for the Fight against Cancer.
CNAF: *Caisse nationale d'allocations familiales* – National Family Allowance Fund.
CNAM: *Conservatoire national des arts et métiers – National* Centre of Industrial Art and Design.
CNES: *Centre national d'études spatiales* – National Space Agency.
CNRS: *Centre national de recherche scientifique* – National Centre for Scientific Research.
CNU: *Conseil national des universités* – National University Council.
COM: French overseas territory.
CPGE: *Classe préparatoire aux grandes écoles* – preparatory classes for Grandes Ecoles.
CROUS: *Centre régional des oeuvres universitaires et scolaires* – French student support agency.
CSP: Socio-professional category.
CTI: *Commission des titres d'ingénieurs* – Commission for Engineering Bachelor's degree accreditation.
CTRS: *Centre thématique de recherche et de soin* – Thematic research and care centre.
CUCES: *Centre universitaire de coopération économique et sociale* – University centre for economic and social cooperation.
CUEFA: *Centre universitaire d'éducation et de formation des adultes* – University centre for adult education and training.
CUFR: *Centre universitaire de formation et de recherche* – University centre for education and research.
DAEU: *Diplôme d'accès aux études universitaires* – diploma giving access to university studies.
DCG: *Diplôme de comptabilité et de gestion* – accounting and management diploma – formerly DPECF.
DEA: *Diplôme d'études approfondies* (diploma testifying to five years of tertiary education), *magistère* (post-grad. vocational qualification).
DEE: Domestic Expenditure on Education.
DEPP: *Direction de l'évaluation, de la prospective et de la performance* – Evaluation, Prospective and Performance Directorate.
DERD: External Expenditure on Research and Development.
DERDE: Business-funded GERD: Business-funded Gross domestic Expenditure on Research and Development.
DESA: *Diplôme d'études supérieures spécialisées* – post-grad. applied diploma.
DESCF: *Diplôme d'études supérieures comptables et financières* – higher education diploma in accounting and finance.
DESE: *Diplôme d'études supérieures spécialisées* – post-grad. economics diploma.
DESS: *Diplôme d'études supérieures spécialisées* – post-grad. specialised diploma.

DEST: *Diplôme d'études supérieures spécialisées* – post-grad. technical diploma.
DEUG: *Diplôme d'études universitaires générales* – undergraduate diploma of general university studies.
DEUST: *Diplôme d'études universitaires scientifiques et techniques* – undergraduate diploma of scientific and technical university studies.
DGESCO: *Direction générale de l'enseignement scolaire* – Directorate-General for Education.
DGESIP: *Direction générale pour l'enseignement supérieur et l'insertion professionnelle* – Directorate-General for Higher Education and School-to-Work transition.
DGFIP: *Direction générale des finances publiques* – Directorate-General for Public Finance.
DGI: *Direction générale des impôts* – Directorate-General of Taxation.
DGRH: *Direction générale des ressources humaines* – Directorate-General for Human Resources.
DGRI: *Direction générale pour la recherche et l'innovation* – Directorate-General for Research and Innovation.
DIEO: Personnel of Management, Inspection, Education and Careers Service.
DIRD: Gross domestic Expenditure on Research and Development.
DNB: *Diplôme national du brevet* (ISCED 2).
DNTS: Technological university diploma (DUT).
DOM: *Département d'outre-mer* – French overseas department.
DPC: *Diplôme de premier cycle* – First cycle Diploma.
DPCE: *Diplôme de premier cycle* – First economic cycle Diploma.
DPCT: *Diplôme de premier cycle* – First technological cycle Diploma.
DRT: *Diplôme de recherche technologique* – Technological research diploma.
DUT: *Diplôme universitaire de technologie* – Technological University Diploma.
EDI: *Emploi à durée indéterminée* – Permanent contract.
ENA: *École nationale d'administration* – European School of Governance.
ENM: *École nationale de la magistrature* – French National School for the Judiciary.
ENS: *École nationale supérieure*.
ENSI: *École nationale supérieure d'ingénieurs* – French National Engineering School.
EPA: *Établissement public à caractère administratif* – Public higher education institution.
EPIC: *Établissement public à caractère industriel et commercial* – public industrial and commercial research agency.
EPO: European Patent Office.
EPSCP: *Établissement public à caractère scientifique, culturel et professionnel* – Public institutions for scientific, cultural and vocational education.
EPST: *Établissement public à caractère scientifique et technologique* – Public scientific and technological research agency.
ES: *Économique et social* – Economics and Social Sciences option.
ETI: *Entreprises de taille intermédiaire* – Meidum-sized enterprises.
EU: European Union.
EUROSTAT: Statistical Office of the European Communities.
FIP: University engineering courses.
FNAL: *Fonds national d'aide au logement* – National Housing Aid Fund.
FNH: *Fonds national de l'habitation* – National Housing Fund.
FSDIE: *Fonds de solidarité et de développement des initiatives étudiantes* – Solidarity and development fund for student initiatives.
FTE: Full-time equivalent.
GDP: Gross Domestic Product.
GE: *Grandes entreprises* – Major companies.
Government-funded GERD: Government-funded Gross domestic Expenditure on Research and Development.
Government-funded NRDE: Government-funded National Research and Development Expenditure.
HDR: *Habilitation à diriger des recherches* – research supervision accreditation.
IAE: *Institut d'administration des entreprises* – Institute for Business Administration.
IEP: *Institut d'études politiques* – Institute of Political Studies.
IFA: *Imposition forfaitaire annuelle* – Annual flat-rate tax.
ILO: International Labour Office.
INALCO: *Institut national des langues et civilisations orientales* – National institute of Oriental languages and civilisations.
INP: National Polytechnical Institute.
INPI: *Institut national de la propriété intellectuelle* – National Institute for Industrial Property.
INPSA: *Institut national de promotion supérieure agricole* – National Institute for advanced agricultural development.
INRA: *Institut national de la recherche agronomique* – National Institute for Agricultural Research.
INRIA: *Institut national de recherche en informatique et en automatique* – National Institute for IT and Telecommunications Research.
INSEE: *Institut national de la statistique et des études économiques* – French National Institute for Statistics and Economic Studies.
INSERM: *Institut national de la santé et de la recherche médicale* – National Institute for Medicine and Medical Research.
IRD: *Institut de recherche pour le développement* – Institute for Development Research.
ISCED*: International Standard Classification of Education (UNESCO).
ITRF: *Ingénieurs et personnels techniques de recherche et formation* – engineers and technical staff for research and training.
IUFM: *Institut universitaire de formation des maîtres* – Teacher training college.

List of acronyms and abbreviations

IUP: *Institut universitaire professionnalisé* – Vocational university institute.
IUT: *Institut universitaire de technologie* – University Institute of Technology.
JEI: *Jeune entreprise innovante* – Young innovative company (YIC).
L: Arts & Humanities.
LASMAS: *Laboratoire d'analyse secondaire et des méthodes appliquées à la sociologie* – Laboratory for Secondary Analysis and Methods Applied to Sociology.
LMD: *Licence, master, doctorat* – Bachelor's degree, Master's and PhD.
LOLF: *Loi Organique relative aux Lois de finances* – French Constitutional by-law on budget acts.
LRU: *Loi relative aux libertés et responsabilités des universities* – Law for University Liberties and Responsibilities.
M1: First year of Master's.
M2: Second year of Master's.
MBA: Master of Business and Administration.
MCF: Lecturers.
MEFI: *Ministère de l'économie, des finances et de l'industrie* – Ministry of the Economy, Finances and Industry.
MEN: French Education Ministry.
MESR: *Ministère de l'Enseignement supérieur et de la Recherche* – Ministry of Higher Education and Research.
MIRES: *Mission interministérielle recherche et enseignement supérieur* – Inter-ministerial Mission for Research and Higher Education.
NAF: *Classification d'activités française* – French classification of economic activities.
NPO: Non-Profit Organisation.
NRDE: National Research and Development Expenditure.
OCDE: Organisation for Economic Co-operation and Development.
OPCA: *Organisme paritaire collecteur agréé* – Joint registered collection agencies.
OST: *Observatoire des sciences et techniques* – Science and Technology Observatory.
OVE: *Observatoire de la vie étudiante* – National Observatory of Student Life.
PACA: Provence-Alpes-Côte d'Azur.
PCEM: *Premier cycle des études médicales* – first cycle of Medicine studies.
PCRD: *Programme-cadre de recherche et développement* – Framework Programme for Research and Development.
PCS: *Professions et catégories sociales* – professions and socio-professional categories.
PI: Intermediate profession.
PR: University professors.
PRES: Centres for Research and Higher Education.
R&D: Research & Development.
R&T: Research and technology.
RNCP: National Inventory of Professional Qualifications.
RTRA: Thematic Advanced Research Networks.
S: Scientific option.
SES: *Section d'éducation spécialisée* – Specialised education section.
SESSI: *Service des études et statistiques industrielles* – Office of Industrial Studies and Statistics.
SHS: Human and social sciences.
SIES: Sub-Directorate for Information Systems and Statistical Studies.
SISE: *Système d'information pour le suivi des étudiants* – Student monitoring Information System.
SME: Small and medium enterprises.
SMI: Small and medium industries.
ST2S: Medicine and Social sciences and technologies (formerly SMS).
STAPS: *Sciences et techniques des activités physiques et sportives* – Physical education and sports science and techniques.
STG: *Sciences et technologies de la gestion* – Management sciences and technology option.
STI: *Sciences et technologies industrielles* – Industrial sciences and technology option.
STS: *Section de techniciens supérieurs* – Undergraduate-level technicians preparing a BTS.
STT: *Sciences et technologies industrielles* – Industrial sciences and technology option.
TIC: Information and communication technologies.
TOM: French overseas territory.
UFR: *Unité de formation et de recherche* – Education and Research Unit.
URSSAF: *Union de recouvrement des cotisations de sécurité sociale et d'allocations familiales* – French Social Security and Family Allocations Agency.
USPTO: United States Patent and Trademark Office.
UT: Technology universities.
VAP: *Validation des acquis professionnels* – validation of professional skills.
$PPP: Dollar measured in purchasing power parity.
€bn: Billion euros.
€m: Million euros.