

Europe and International Department

FRENCH CASE STUDY

C3QA PROJECT

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High Council for evaluation of research and higher education

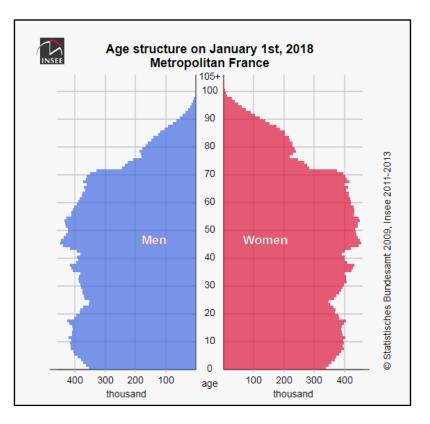


CHAPTER 1: OVERALL LANDSCAPE – NATIONAL HIGHER EDUCATION (HE), RESEARCH AND QA CONTEXT (WITH FOCUS ON DOCTORATE LEVEL)

1.1 Brief presentation of the HE and research system

1.1.1 General relevant information the French HE and research system

• France is at the heart of Europe, sharing borders with Spain, Italy, Switzerland, Germany, Luxembourg, Belgium and the principalities of Andorra and Monaco. With an area of 551 695 km² (metropolitan part), France has a population of 67 186 638 habitants (2018). The growth domestic product GDP) per capita is 38 000 USD (2016).



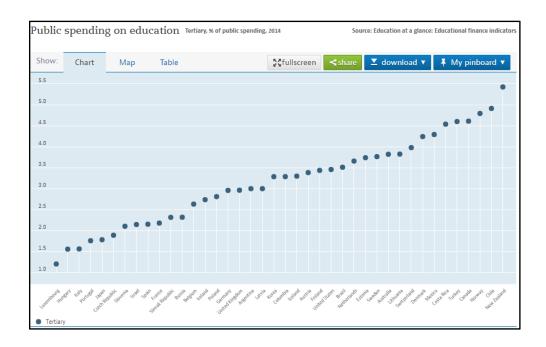
Age-groups (2018)								
age	Mill.	%	% women					
65+	13.15	19.6	56.9					
20-64	37.63	56	50.9					
<20	16.41	24.4	48.9					
Total	67.19	100	51.6					

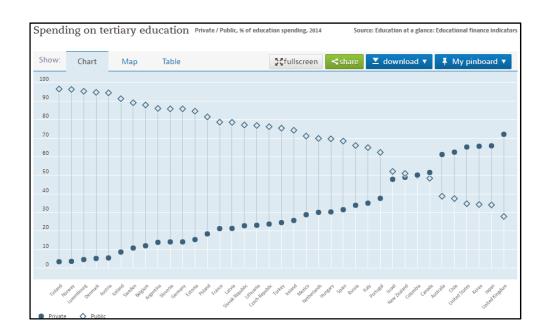
Source: Insee, population estimates (end of 2017)



• France is one of the world's most research intensive nations with €48 billions in R&D investment and it is the 5th largest economy in OECD for R&D spending. The share of GDP devoted to research is 2.23%.

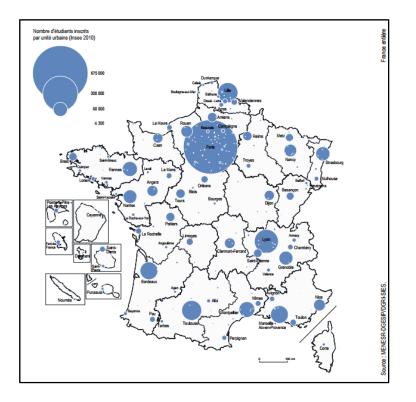
The education and higher education system benefits from large national investments. France average spending per student is similar to the other OECD countries.







- In France, there are about 3500 higher education institutions (HEIs), public or private, and among them:
- 74 universities (2017) and most of them are public,
- 230 engineering schools (30% of them within the universities),
- 220 business schools,
- 120 schools of arts,
- 20 architecture schools.



Students registered in the Higher education system, Source Ministry of HE, L'état de l'Enseignement supérieur et de la Recherche en France (N°10 - Avril 2017)



• Students registered in the French Higher education system

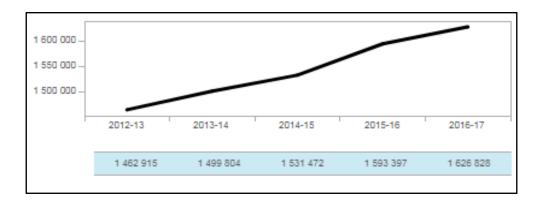
In 2015, there were 2 551 000 students registered in the higher education system, with 60% of them at the university. This number is increasing since decades and 2 900 000 students are expected in 2025.

								2025
	1960	1970	1980	1990	2000	2010	2015	(projection)
Université	215	661	858	1 160	1 397	1 4 3 7	1 593	1 838
dont IUT		24	54	74	119	117	116	128
STS	8	27	68	199	239	242	256	273
CPGE	21	33	40	64	70	80	86	94
Autres établissements et formations	66	130	215	293	454	560	616	707
Ensemble	310	851	1 181	1717	2 160	2 3 1 9	2 551	2 912
Part de l'université (en %)	69,3	77,7	72,7	67,5	64,7	62	62,5	63,1
Source : MENESR-DGESIP/DGRI-SIES.								

Students registered in the HE system (by 1000, source Ministry of HE)

• Students registered at the French universities

In 2016, there were 1 626 828 students registered in the French universities, and 60% of them were female. (Source Ministry of HE, see graph below)



Cycles	2012-13		2013-14		2014-15		2015-16		2016-17	
1er	879 756	60,1%	901 932	60,1%	921 737	60,2%	966 994	60,7%	994 151	61,19
2ème	520 658	35,6%	536 165	35,7%	549 074	35,9%	566 734	35,6%	573 093	35,29
3ème	62 501	4,3%	61 707	4,1%	60 661	4,0%	59 669	3,7%	59 584	3,79
Total général	1 462 915	100,0%	1 499 804	100,0%	1 531 472	100,0%	1 593 397	100,0%	1 626 828	100,09

The previous table shows the repartition of students among the LMD scheme.

References to the national qualifications frameworks

At the end of secondary school, and with a national Diploma called "Baccalaureat", the French national qualifications framework system for higher education is directly based on the Bologna process. There are 3 steps: Licence – Master and Doctorate. Licence is 3 years after the Baccalaureat (180 ECTS), Master 5 years (120 ECTS) and then Doctorate for 3-4 years.



1.1.2 Relationships between higher education and companies: internships, placements, practicum, etc.

In France, the public sector and businesses still play a relatively limited role in doctoral programmes. This can be explained by the fact that in France, careers as scientific experts are not highly valued. The difference in the hiring salary between a graduate from a top school and a doctoral student from the same school is minimal.

Less than one in seven engineers currently continue their studies to pursue a doctorate. However this number varies significantly depending on the specialism: 25% of engineers specialised in physics, materials and energy, 22% of chemists, 13% of aerospace specialists and 2% of civil engineering, construction, mining and geology graduates are doctoral students. Many engineers pursue a doctorate degree in order to perform their research without having to choose between academic research and more applied research. Doing research also lets them work in France in their specialism since companies are much less inclined to relocate their research centres outside the country than they are their production plants. Some aspiring doctors, some follow this course of study to shift into public research, while others opt for a career in the private sector, particularly through industrial research training agreements (conventions industrielles de formation par la recherche (CIFRE1)).

France's CIFRE initiative allows businesses to receive financial support to recruit young doctoral students whose research projects, under the supervision of a public research unit, will lead to a PhD. CIFRE doctoral students account for just under 10% of total numbers.

CIFREs work with three partners:

-a business (or non-profit organisation, local authority acting under a public or social project), which gives a doctoral student a research project for his/her thesis,

-an external research unit which provides scientific supervision for the doctoral student,

-a doctoral student who holds a Master's degree.

The company hires a young Master's graduate for a permanent or 3-year contract, with a minimum gross annual salary of $\in 23,484$ ($\in 1,957$ per month) and gives him/her a research project for his/her thesis topic. The company in turn receives an annual grant of $\in 14,000$ for three years from the National Research and Technology Association (A.N.R.T.). A collaboration agreement is established between the company and the unit, specifying the conditions under which research will be conducted and the intellectual property clauses for the results obtained by the doctoral student. The doctoral student's research will qualify for a research tax credit under the same criteria that apply for any researcher working for a company.

There are no nationality or age requirements for the doctoral student.

Since 1981, 26,450 doctoral students have benefited from the CIFRE initiative and brought together 9,000 companies and 4,000 research teams from a wide range of business sectors and scientific fields.

The number of CIFRE application submissions has grown steadily and doubled in a decade, reaching 1,750 in 2011. After a 3-year general decline in the number of applications, the initiative recorded an 8% increase in 2016.

In 2016, 1,377 new CIFREs were accepted. The success rate (ratio between the number of CIFREs attributed and the number of applications) is 83%. CIFREs account for 10% of doctoral students who receive funding.

• Some examples of incentives to promote results dissemination and research exploitation policy :

Over the past ten years, French universities or groups of institutions have put in place technology transfer bodies (SATT) and incubators to support start-up creation, often in cooperation with the schools.

Around thirty of these incubators were accredited in March 2014 as "PEPITE²" (Pôle Etudiant pour l'Innovation, le Transfert et l'Entrepreneuriat) by the French Ministry of Higher Education, Research and Innovation, in partnership with the Caisse des dépôts. The purpose of these initiatives is to bolster and personalise support for future entrepreneurs. While they mainly target young PhD graduates, they are also for students of all levels, regardless of their projects. The concrete aim is to "raise student awareness" and foster entrepreneurship, to "train" as many students as possible in entrepreneurship during their studies and particularly during their doctorate studies, and "support" students through a personalised approach.

¹ http://www.enseignementsup-recherche.gouv.fr/cid22130/les-cifre.html##dispositif

² http://www.enseignementsup-recherche.gouv.fr/pid30796/pepite.html



1.2. Brief presentation of the doctorate level

1.2.1 Organisation of cycle 3 studies in France

A doctorate is a higher university degree incorporated in the Bologna LMD scheme. The doctorate comes right after the master (Doctorate: 8 years after the high school diploma (3 + 2 + 3)).

It is certified by a nationally recognised degree, issued by a higher education institution and authorised by the Ministry of Higher Education and Research (university, private doctoral school). The usual length of doctorate studies is 3 years (or more) of academic and/or applied scientific research work. It is validated as a result of a thesis defence.

Doctoral studies involve several individuals and bodies: PhD student; Thesis supervisor; Research unit; Company (where applicable); Thesis supervisory committee; Doctoral school; Defence committee, etc. The aim is to offer doctorate students scientific training in research, with the support of a thesis supervisor and a research unit, in addition to training to prepare for graduate employment.

Useful links:

Order of August 2006 on the Doctorate Degree: <u>https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000267752</u> <u>http://www.enseignementsup-recherche.gouv.fr/cid20185/la-formation-doctorale.html</u>

Order of May 2016 on the Doctorate Degree: <u>https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000032587086</u>

All sections in italics are taken from the article by Pierrick Gandolfo, "La réussite doctorale en France: constats et bonnes pratiques", Article in press in Peter Lang Editions, 2017. Pierrick Gandolfo is a professor at the University of Rouen Normandy. He is a scientific advisor to Hcéres and coordinator of the process for evaluation of doctoral schools under the evaluation of programmes Department.

"According to the new Order of 25 May 2016 establishing the national framework for education and the procedures for awarding national doctorate degrees (and under terms similar to the Order of 6 August 2006), "the doctorate is a research programme and professional research experience. [...]

It includes personal research performed by the doctoral student, supplemented by additional training approved by the doctoral school. It focuses on scientific, economic, social, technological or cultural research. It is validated by the awarding of a national doctoral degree." The Order also specifies that "doctoral schools [...] shall organise the training of doctoral students and prepare them for employment once their doctoral degree has been completed".

"Apart from a few exceptions, doctoral schools are organised into themes, with a range of disciplines covering those of the research units with which they are associated. Around 270 French doctoral schools are evenly distributed between Sciences, Technology and Healthcare (with some 90 in Science and Technologies and 50 in Life Sciences and Environment) and Humanities and Social Sciences (with over 40 in Law, Economics, Management and 80 in Literature, Languages and Humanities). At the start of the 2014 academic, there were over 75,000 doctoral students enrolled (with around half in Sciences, Technology and Healthcare) and around 14,400 doctorate degrees were awarded (two-thirds of which were in Sciences, Technology and Healthcare)."

More information on Doctoral Schools, see above 2.3



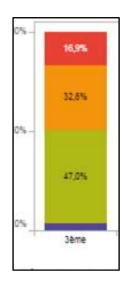
1.2.2 Number of HEIs providing Cycle 3 :

In total, 67 of France's 74 universities³ are grouped into 20 communities of universities and institutions and 5 associations of institutions awarding doctorate degrees. Only universities are able to award doctorate degrees. Schools are unauthorised to do so.

1.2.3 National statistics on Doctorate studies (Source Ministry of Higher Education)

• 60 000 students are registered at doctorate level. 50% are female and 37% are foreign students.

Law and economics
Humanities
Sciences
Sport
Health



A decreasing number of doctoral students:

Chart 1.2.3a: Students registered at doctorate level, by field of study from 2009 to 2015

Human Sciences and humanities
Society sciences
Medecine and Biology
Other



https://publication.enseignementsup-recherche.gouv.fr/eesr/10/EESR10_R_38-le_doctorat_et_les_docteurs.php

³ Meaning 67 universities, 3 technology universities (Compiègne, Belfort-Montbéliard and Troyes) and Jean-Francois Champollion University Center for Teaching and Research, which are EPSCPs (French public scientific, cultural and professional institutions), which are not part of universities, Université Paris-Dauphine and Université de Lorraine, which are "grands établissements", and the Centre Universitaire de Formation et de Recherche de Mayotte, which is a public administrative institution.



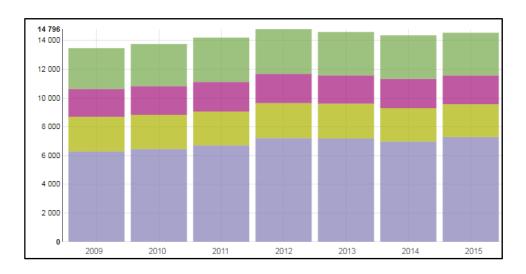


Chart 1.2.3b: Degrees awarded at doctorate level, by field of study from 2009 to 2015⁴.

Interesting thing is that the number of registered students is decreasing, whereas the number of degrees awarded is increasing in the meantime.

 $^{{}^{4}} https://publication.enseignementsup-recherche.gouv.fr/eesr/10/EESR10_R_38-le_doctorat_et_les_docteurs.php$



CHAPTER 2: NATURE AND CHARACTERISTICS OF DOCTORATE STUDIES

2.1 Information on Doctorate program design (methodology, ECTS...)

All doctoral schools, "in the continuation of previous university study programmes, must provide its doctoral students with theoretical and practical resources to prepare them for integration into society, whether in the private or academic sector, at a level that corresponds to their qualifications." Most of these resources are accessible via a range of scientific and professional programmes which are "clearly organised and coherent in terms of content (knowledge of the field, methodological, analytical and critical thinking aptitudes, etc.) and the number of course hours." Within lead institutions with doctoral schools, a doctoral college (or equivalent body) often manages professional/cross-disciplinary courses while the doctoral schools centralise and coordinate thematic/scientific courses. These are developed in partnership with directors of research units/federations/institutes, technological platforms or Master's programmes.

Although existing regulations do not impose a specific number of hours, the majority of doctoral schools require that their doctoral students take and pass a defined number of courses ranging from a few dozen hours to 500 hours, with most ranging from 80 to 120 hours. Doctoral students are typically asked to take an equal proportion of thematic and professional courses.

Whether offered by the doctoral school or a doctoral college, these courses always supplement all the knowledge and skills acquired in the students' host research unit. Ideally, and as defined in the Order of 25 May 2016, doctoral students complete and regularly update a "portfolio [...] comprising the personalised list of all the doctoral student's activities during his/her programme, including teaching, dissemination of scientific culture or technology transfer, which exhibits the skills developed while working towards a doctorate degree⁵."

2.2 Characteristics of the Cycle 3 study:

2.2.1 Organisation of Cycle 3 studies (selection, admission and progression)

Admission criteria

The prerequisite for enrolling in a doctoral programme is to hold a national Master's degree or equivalent Master's level degree, particularly a master's obtained within the European Higher Education Area.

For individuals with an equivalent degree obtained outside France but which does not automatically equate to the master's level within the European Higher Education Area, or who have been granted credit for previous knowledge as per Article L. 613-5 of the French Education Code, the head of the institution may enroll them in the doctorate programme as an exception on the recommendation of the doctoral school Council. Individuals who do not have a national Master's or equivalent degree obtained abroad, and who want to be granted credit for acquired knowledge as per Article L. 613-5 of the French Education Code in order to enroll in a doctorate programme, must be candidates for enrolment in the doctorate programme with the doctoral school and indicate that the thesis supervisor has agreed to supervise their research and submit their research project.

In all cases, doctoral students must renew their enrolment at the university each year. Doctoral students may apply to suspend their enrolment for a maximum of one year. This one-year hiatus remains exceptional and is subject to the conditions stipulated in the internal rules of the doctoral school.

Selection criteria

While some doctoral schools invest fully in recruiting their doctoral students via systematic competitive selection processes with candidate interviews, others leave full control in the hands of thesis supervisors and/or overseeing research units.

⁵ Pierrick Gandolfo, op. cit.



Enrolment in the PhD programme must specify the research topic, the context of the PhD programme and the host unit.

The thesis topic must lead to original and informative research and be feasible within the scheduled timeframe. The thesis topic is chosen jointly between the young researcher and the thesis supervisor and made official upon enrolment. The thesis supervisor, chosen for his/her recognised expertise in the research field in question, must help the doctoral student identify the innovative nature of the topic within the scientific context and ensure that it is relevant. He/she must also ensure that the doctoral student demonstrates initiative and innovative thinking while conducting his/her research.

Funding for the doctoral student during the degree is not mandatory, however some doctoral schools, especially in the fields of science and technology, only accept their doctoral students once 3 years' of PhD funding has been obtained.

Progression

At the beginning of the doctorate degree, the thesis supervisor and director of the research unit must determine the resources required to conduct the research and ensure that access is provided to them. The doctoral student therefor is integrated into his/her host unit as a full-fledged researcher.

The thesis supervisor undertakes to regularly follow the progress of research and discuss new directions that could be taken in light of the results already obtained. He/she is obligated to inform the doctoral student of potential positive feedback or objections and criticism of his/her work and make recommendations on how to improve it.

Since the Order of May 2016 reforming doctoral studies, starting in the 2nd year of enrolment, doctoral students must present their research to a thesis supervisory committee (CST) comprising at least two members (professors). The members are appointed by the Director of the doctoral school for their scientific expertise and/or their experience in thesis supervision or research. The thesis supervisor may not be a member of the thesis committee. The names of the committee members and their contact details are immediately communicated to the doctoral students. The doctoral student may ask the thesis committee to meet at any time.

The thesis committee assesses the training conditions of doctoral students and the progress of their research in an interview at the end of the 2nd year of enrolment at the latest, and every subsequent year of enrolment. It prevents or resolves any conflict, discrimination or harassment issues. The committee therefore conducts an "interview" with the doctoral student in order to ensure that the conditions for writing the thesis are met (working conditions, communication with the thesis supervisor, work motivation, etc.) and to assess the progress of the thesis. It is not so much meant to monitor scientific aspects as it is to provide educational and especially human support. Its purpose is to ensure that the thesis is progressing well and to notify the doctoral school if problems arise between the doctoral student and the thesis supervisor, or if research is at a standstill.

Furthermore, a thesis supervisor may also contact a committee to inform it of its own problems with a doctoral student. According to the government order, this "interview" may be conducted remotely. The only firm rule is that the thesis supervisor may not be a member of the thesis committee.

According to Article 13 of the Order of 25 May 2016, the committee must issue recommendations and a report of the interview to the director of the doctoral school, the doctoral student and the thesis supervisor.

In addition to this, the role of the doctoral school is to provide doctoral students with methodological, transferable skills and scientific training. Students choose most of the courses they wish to take. However, doctoral schools make some of these courses and training mandatory (language, participation in the orientation day, doctoral student events, etc.).

Each course is approved by the doctoral school based on its own criteria and gives rise to European Credit Transfer System credits (ECTS credits). Each doctoral school has set the minimum number of credits required to defend a thesis.

A thesis is a step in the research and management process for a professional project. It must meet scheduled deadlines in accordance with the spirit of the doctoral programme and in the interest of the doctoral student.



2.2.2 Status, competencies and role of the supervisor

The supervisor has a crucial role as the PhD student is placed under his/her control and responsibility.

- Who can be a thesis supervisor? (Order of 25 May 2016, as amended by the Order of 1 July 2016)

• Full professors and senior lecturers/assistant professors with "accreditation to supervise research" (HDR)

• Individuals who hold a doctorate, chosen by the head of the institution on the basis of their scientific competencies on the proposal of the doctoral school's director, after consulting the academic council's research committee

In accordance with regulations, the thesis may be supervised jointly by two thesis supervisors, under the conditions of the Order of 25 May 2016. The rate of involvement of each co-supervisor must be specified at the time of initial enrolment in the doctorate programme and then in an agreement signed by the institution(s) with which they are affiliated.

Co-supervision may be shared between one of these people and one or two people from the socioeconomic sector, recognised for their competencies in the field.

To ensure that each doctoral student and his/her research is supervised effectively with all necessary attention, thesis supervisors oversee a limited number of young researchers. The maximum number of doctoral students supervised by a thesis supervisor is stipulated in the internal rules of each doctoral school (generally between 3 and 20, depending on the doctoral school and field of study). This also contributes to a reduction in the number of drop-outs.

The evolution of the role of the supervisor:

"Beyond aspects dedicated strictly to research, the role of thesis supervisors has changed considerably. They are more involved in orienting doctoral students in the courses they choose (thematic or cross-disciplinary courses taught at the school and/or doctoral college and/or in preparing them for their future after obtaining their PhD (no longer limited to the sole prospect of a job as a researcher or professor). They provide guidance to their doctoral students and give them all the information required to explore several career paths, in the academic or non-academic field, in France or abroad."

"The growing importance higher education institutions are placing on the quality of supervision has led many to offer training dedicated specifically to thesis supervisors. This initiative is fully in line with the new Order of 25 May 2016, which states that doctoral schools must "provide thesis supervisors with specific training or guidance." Although this training is often met with scepticism, feedback from supervisors or future supervisors who have completed training is generally quite positive. In an effort to improve quality, some institutions would even like to make this type of training compulsory to obtain certification to direct research (HDR). Other institutions believe that it is better to maintain a certain degree of flexibility and rely on effective communication, leaving supervisors free to decide whether or not to participate in this initiative. In return, all doctoral students are expected to invest themselves fully in their projects and become increasingly independent in their research and the collective tasks of their overseeing research unit⁶."

2.2.3 Thesis defence mechanisms and regulations

Thesis defences must be conducted in accordance with the Order of 25 May 2016 (Articles 17 to 19). As per Article 17 of the Order of 25 May 2016, "authorisation to defend a thesis is granted by the head of the institution, based on the opinion of the director of the doctoral school, on the recommendation of the thesis supervisor" and once the research has been reviewed by at least two rapporteurs.

To give an opinion in favour of the thesis defence, the director of the doctoral school requests that the doctoral student be attributed the number of ECTS credits requested in the course supervision procedure. They must obtain two favourable pre-defence reports from two external experts (who usually then sit on the examination board). They must also obtain approval from the director of the doctoral school and the president of the university (usually represented by the vice-chair of research).

⁶ Pierrick Gandolfo, op.cit.



Software is increasingly being systematically applied to all theses to verify the existence plagiarism before authorisation for thesis defence is given.

The thesis examination board is formed and appointed in accordance with Article 18 of the Order of 25 May 2016.

It must include at least one professor with accreditation to direct research employed at the institution and the thesis supervisor(s).

Thesis supervisors may participate in discussions but may lot lead the debates. They participate in the deliberations but do not take part in the final decision. The thesis supervisor(s) are therefore taken into account in the ratios which may be considered within the doctoral college for members within or outside the overseeing institution.

They sign the thesis defence report but do not sign the deliberation report. When the thesis defence report mentions the deliberation, it must be stated that the decision was made by the members of the examination board excluding the thesis supervisor(s).

Participation of the examiners in the thesis defence via videoconference is authorised on an exceptional basis, under the conditions stipulated in Article 19 of the Order of 25 May 2016. But, the president of the examination board must be physically present for the thesis defence. The language of the thesis defence is the language in which the thesis was written. However if the language is not French, the members of the thesis examination board may express themselves in French.

Levels of distinction (similar to Latin honours) must be awarded in accordance with the provisions of the Order of 2009, which were not amended by the Order of 25 May 2016. The opinions of the jury are included in the thesis defence report and can be included in the deliberation report.

2.2.4 Diversification of Doctoral studies

In addition to the "classic" PhD and the old "doctorate at work", a new kind of doctorate/PhD is now being increasingly developed, the "practice-led" PhD.

Nowadays, having a PhD is a condition for a growing number of senior positions on the international market, be it in public institutions such as museums, or in private companies such as architectural firms. An increasing number of French universities have therefore recognised the importance of developing a practice-led PhD programme that meets the needs of architects, landscape architects, custodians, curators, artists and writers who want to pursue an international career.

In France, the SACRe⁷ (Science, Art, Creation and Research) PhD sponsored by PSL Université Paris⁸, and the PhD in "Practices and Theory of Artistic and Literary Creation" offered by the University of Aix-Marseille, or the future Practice-led PhDs of the Paris-Seine University, bring artists and academics together around a creative project, but fail to include architecture, landscape and heritage.

Internationally, on the other hand, initiatives for this new type of PhD or doctoral programmes do exist and are increasingly common, for instance at RMIT Europe, SEAHA⁹ (University of Brighton, UCL and Kingston University in the United Kingdom), and NACCA in Maastricht¹⁰.

Practice-led research aims to incorporate practice into the research process, based on the belief that practice is one means for producing knowledge. In line with the most recent theoretical and epistemological developments in the field of creation, the idea is to go beyond the practice-led research stances currently used, in order to design and operationalise practice-led research strategies in which practice is the driving force, a source of both the research questions and findings. This is a matter of putting practice into a strategy of continuous improvement through research, via a stance of reflexivity towards its own approaches, tools and arguments for intervention.

Practice-led research will also borrow from research for practice, as it aims to inform and guide professional practices. However, this dimension is intrinsic (though often implicit) to the requirement of reflexivity, reproducibility and transferability, which is one of the criteria for scientific work.

⁷ http://www.femis.fr/sacre-phd-programme-psl

⁸ https://www.univ-psl.fr/en

⁹ http://www.seaha-cdt.ac.uk/

¹⁰ https://www.maastrichtuniversity.nl/research/institutes/macch/nacca



Practice-led research strives to invent specific forms of dissemination and exploitation required by the research project itself, and to create a pool of high-level professionals capable of tackling the challenges not only of higher education and research but also their employment in the public and private sectors by broadening students' cross-sector opportunities through transferable skills.

2.2.5 Internationalization of Doctoral studies

Doctoral studies are increasingly internationalised for several reasons:

- There are a number of foreign students studying for doctorates in France,
- Career opportunities might be broader with an international doctorate,
- There are an increasing number of incentives to promote mobility in addition to internationalised doctorate studies.
 - Joint supervision :

The easiest way to internationalize doctorate studies is the international jointly supervised doctorate (cotutelle¹¹). This is based on the tradition of cooperation between professors, while also developing the international dimension of doctoral schools and scientific cooperation between French and foreign research teams.

Some basic information to keep in mind:

- Conditions: Agreement with one or more foreign higher education institutions

- Content: In each country, the thesis must be under the responsibility of a thesis supervisor who exercises his/her supervisory functions in partnership with the other supervisor.

According to the Order of 25 May 2016, joint-supervision (cotutelle) was established to reinforce the international dimension of doctoral schools, facilitate the mobility of doctoral students and develop scientific cooperation between French and foreign research teams. A cotutelle is established between two institutions in different countries. An agreement must be signed to define the principles governing the cotutelle thesis. The doctoral student enrols at both institutions. He/she conducts research under the responsibility of a thesis supervisor in each country who undertakes to fully perform his/her supervision duties in collaboration with the other thesis supervisor(s). Only one thesis defence will take place. After the thesis defence, the candidate obtains a doctorate degree from each of the partner universities. Cotutelles therefore enable students to obtain two degrees.

Regulations and procedures are the ones governing doctoral programmes in France and in the partner country. Both universities recognize the validity of the established cotutelle and that of the defended degree (Doctor Degree in the French university and equivalent degree in the foreign university).

There are two possibilities with regard to the conferment of the degree:

- Either the student receives a degree conferred jointly by both institutions. Then, the degree conferment letter states both titles (for example, Doctorat en littérature française and PhD in French literature)

- Or the student receives two PhD from both institutions. Each degree stating the specific title in each university, stating that the thesis had been defended in the framework of the cotutelle and specifies the name of the partner institution.

In both case, the thesis is defended in only one of the two institutions associated to the cotutelle, on decision of both directors of research.

How does the cotutelle work?

Every year of preparation of his/her thesis, the student enrolls in both universities while enrolment fees are paid to only one them.

Social insurance during the cotutelle is covered by a agency the name of which is specified in the cotutelle memorandum of agreement. Accommodation arrangements made by the student in the partner country and the financing plan (nature of assistance applied for by the student) are specified in the agreement.

¹¹ https://ressources.campusfrance.org/catalogues_recherche/diplomes/fr/cotutelle_fr.pdf



Duration of thesis preparation is necessarily divided up between the two institutions part of the cotutelle by alternate periods in each country (of at least one year in France). The normal duration of doctoral programme is 3 years in France.

Publication, valorisation / promotion and protection of a thesis topic and research outcomes, are carried out by the doctoral candidate's both host laboratories, according to the specific procedures in each country.

Oral defense of the thesis

The jury of the oral defense is appointed by mutual agreement by both partner universities. Its composition is based upon a well-balanced proportion of members from each institution, among them, both supervisors, and external scientific representatives. The financing of the defense in the framework of the cotutelle is often subject of specific help. Stay expenses are reimbursed or covered by the host university. Travel costs of jury's members are covered by the other partner university in accordance with institutional modalities.

Language of the oral defense

When national languages in both countries are different, the thesis is drafted in the language admitted as writing language for theses in one or other of the partner universities. The same rule applies for the oral defense. The doctoral candidate must nevertheless draft an abstract of his/her thesis in the other language.

Assistance for mobility may be granted to facilitate travels.¹².

• The European doctorate:

Universities may also issue a European Doctorate¹³ for their PhD students.

This degree is based on the principles decided upon at the Conference of University Rectors and Presidents on European Doctorates. The European doctorate is a traditional doctorate degree with a "European label" certificate issued by the president of the university.

The following four conditions must be met in order to apply for the "European label" when the thesis defence is being organised:

1- the doctoral student must have studied for at least one term in a European country other than the country of the thesis defence;

2- the authorisation to defend the thesis is granted based on the reports of at least two HDR accredited professors from higher education institutions from two European States outside the country where the thesis is to be defended;

3- at least one thesis examiner must be from a higher education institution in a European State other than the country where the thesis is to be defended;

4- part of the defence must be conducted in a European national language other than the national language(s) of the country where the thesis is to be defended.

This process is not the same as the cotutelle but may be overlapped with it.

This "label" does not appear on the doctorate diploma but is an advantage for promoting the doctoral programme internationally.

Candidates wishing to obtain the "European label" must simply inform their doctoral school before the thesis defence.

https://college-doctoral.u-bordeaux.fr/en/Internationalization/Systems/The-European-doctorate-label

¹²Source CampusFrance, Note sur le doctorat en co-tutelle, février 2016.

¹³ Some examples : https://www.universite-paris-saclay.fr/en/node/8802,

https://edseg.univ-lyon3.fr/Presentation/2735-European-Doctorate-label

https://www.univ-paris5.fr/eng/INTERNATIONAL/Strategy-2010-2013/International-degrees/European-Doctorate-Label



2.3 Positioning of Cycle 3: doctoral school and links with research

Presentation and role of doctoral schools in France:

"In France, all doctoral students are affiliated with one of the country's 261 doctoral schools, operating under the responsibility of one or more accredited institutions or a community of universities and institutions (ComUE)¹⁴."

"Doctoral schools use the human, financial and material resources provided by their lead institution(s). Although it is not always the case, the average annual budget of a doctoral school is often around €100 per doctoral student. Each doctoral school is free to use this grant at its own discretion to cover the costs of the courses it offers, annual events (e.g. orientation days, science days), the mobility of its doctoral students (participation at national and international conferences, research unit work placements) or travel expenses for thesis defence examiners (limited use for some humanities and social science fields)."

"In general, student numbers at doctoral schools range between 200 and 400 with 60 to 80 at the lower end, and up to 1,200 doctoral students at the other extreme. Doctoral schools are typically placed under the responsibility of a director who may be assisted by one or two co-directors. They are supported by a Council (the composition of which is regulated) and a Committee, which is formed at the discretion of the doctoral school. The Council usually meets three to four times a year to adopt the school's strategy while the Committee is a less formal and more reactive body which manages the files of doctoral schools have one or two doctoral students on the Committee to increase their involvement in the school's affairs and facilitate communication between management and the student body."

"More specifically, doctoral schools need to contribute to the standardisation and international visibility of university PhD programmes, and the organisation of sites.

They provide doctoral students with a multi-disciplinary culture as part of a coherent scientific project. They implement a student selection policy based on clear and overt criteria, i.e. they "inform students of enrolment conditions, required skills, available funding, the type, quality and rates of employment after obtaining the doctorate degree" (as per Article 3 of the Order of 25 May 2016). They ensure that research units and teams provide doctoral students with proper supervision. They ensure that doctoral students are able to prepare and defend their thesis in optimal conditions. They organise scientific and intellectual dialogue between doctoral students (e.g. within a college of doctoral schools). They offer doctoral students courses and training which are useful for their research and career plans and necessary for acquiring broad scientific knowledge. They provide tools to help PhD graduates find employment in public institutions and the private sector. They follow-up and monitor PhD graduate employment. Finally, they open up opportunities across Europe and internationally, particularly by promoting joint thesis supervision (cotutelles)¹⁵."

Articulation with research

The doctorate studies are the results of research conducted within a research unit with which the doctoral student is affiliated while enrolled in the PhD programme

Doctoral research topics may be proposed by research units, and doctoral students are then chosen based on their skills and expertise to perform the research. The situation depends heavily on the local context and the research field. In the scientific field, research units often propose the topics, while in humanities and social sciences, it is often the supervisor and the future doctoral students themselves.

During their research work, doctoral students join a research unit or team that guides them throughout their study programme. Their research is promoted under this arrangement through seminars, conferences, "Journées d'étude", events, etc.

January 2018

¹⁴ Pierrick Gandolfo (professor at the Université de Rouen-Normandie, Hcéres Scientific advisor, Programme evaluation department, coordinator of the Doctoral Schools evaluation), "The doctoral success in France: reports and best practices", article in press in Peter Lang Editions.
¹⁵ Ibid



Research units' directors must facilitate the scientific and material integration of doctoral students within their research units. Research units monitor the progress of doctoral students' research. This may consist of thesis interviews, research presentations within the research unit or at a "Journée de Doctorants" (open-house day for doctoral students) before a community of recognised and skilled researchers, with professors from outside the institution if possible, in an effort to improve quality.

2.4 Monitoring of Doctoral Students and graduates

2.4.1 Guidance of doctoral students

supervisors¹⁶."

"The longitudinal follow-up of thesis research is essential for guiding all doctoral students and limiting situations leading to students dropping out of the programme. This follow-up may be conducted in several ways using complementary methods defined or managed by the thesis supervisor, the host research unit and/or the doctoral school.

The thesis supervisor is naturally the main person who follows the progress of doctoral students' research. In most cases, doctoral students are followed up via regular meetings with their advisors. However, the frequency of these meetings can vary significantly depending on the context in each field. In the sciences, technology and healthcare field, doctoral students are generally, although not always, required to conduct experiments within their research unit or adjacent technology platforms, thus facilitating almost daily communication with their thesis supervisors. This scenario is rarer for humanities and social science doctoral students as their research does not require their presence at a research unit. While this difference is in no way a weakness for ensuring effective follow-up, it does mean that in the humanities and social sciences field, regular meetings, albeit less frequent than in sciences, technology and healthcare, need to be scheduled so that supervisors can advise students on their research. For research activities, follow-up may be supplemented by tools developed within the research unit, such as internal lectures given by the doctoral students, or by putting in place steering committees made up of researchers or professors from the research unit or another body. It should be underlined that in this case again, there are differences from one field to another, with research activities sometimes confined to the work between the doctoral student and supervisor." "Regardless of the field, the doctoral school is responsible for putting in place suitable tools to followup doctoral students with the aim of monitoring the progress of the thesis in terms of the results and publications/outputs of the student, and the acquisition of additional skills in the broad sense, to prepare them for their future once they have obtained the PhD. To be operational and effective, these tools (validated by the Council of the doctoral school) must be adapted to the profiles of the doctoral students and be implemented in collaboration with the research units and thesis



2.4.2 Doctoral training courses

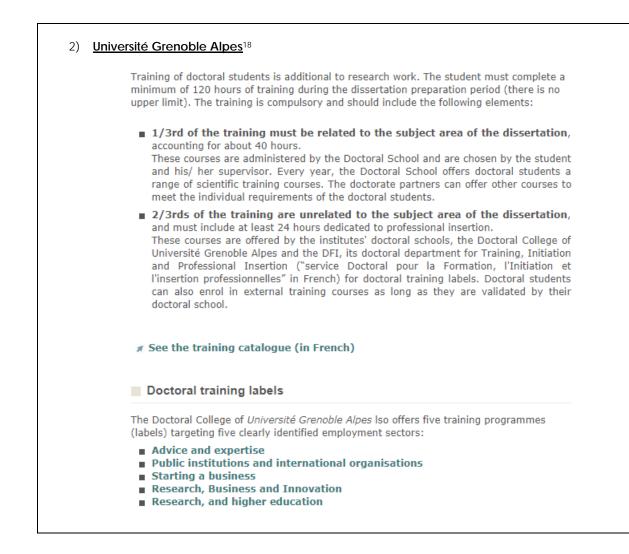
The overarching structure of the doctorate in France is based on research activites but also on training courses. Doctoral students choose the courses they plan to take from a course guide, with their supervisor. Some doctoral schools have made certain courses compulsory while others have not.

Some examples of courses provided:

IVersite IS-SACLAY							
ormations proposées 20 iquer sur la formation pour ac							
Accompagnement de la thise	- Préparation à l'Après thèse	Communication et médiation scientifique	Connaissance de l'Entreprise	Culture générale du jeune chercheur	Définir son projet professionnel	Entrepreneuriat	
Formations générales en langues et ouverture culturelle – Anglais	Formations générales en langues et ouverture culturelle - Arabe	Formations générales en le langues et ouverture culturelle – Chinois	Formations générales en langues et ouverture culturelle – Espagnol	Formations générales en langues et ouverture culturelle – Français lange étrangère	Formations générales en langues et ouverture culturelle – Italien	Formations générale langues et ouverture – Japonais	
Formations générales en langues et ouverture culturelle – Portugais	Formations générales en langues et ouverture culturelle – Russe	Formations scientifiques disciplinaires proposées par une école doctorale	Formations scientifiques pluridisciplinaires proposées par une école doctorale	Outils et méthodes pour bien exercer son métier de doctorant	Parcours ' Conseil et expertise en innovation '	Parcours ' Enseignement du supérieur '	
Valorisation de la recherche et innovation							Dates de d
Consulting sector, recruitment, practice	•Understand key s	f consulting job, provide informatio itment process of consulting firms: success factors of preparation proce ful storyline interview i methodology and structured apon	steps, challenges and prerequisite	is vet , planning			14 mai 2018
	 Mastertransversa 			Alex and			
	•Review a synthes			V ACTIVITY A	ormats: quantitative, directed inter	views, open interviews,	

¹⁷ https://www.universite-paris-saclay.fr/en/node/8644





2.4.3 Rights and duties of doctoral students

The new Order of May 2016 requires that a study agreement be signed by doctoral students and their thesis supervisors. This agreement includes aspects such as the research schedule, the professional and personal plans of the doctoral student and the individual study programme related to the project. The Order also specifies that the agreement "may be amended as needed at each reenrolment by an addendum signed between the parties" (Article 12). This is often called the thesis charter.

The respect of intellectual property and ethical rules is a very important aspect of doctoral studies. For the past several years, before the defence, the thesis is submitted electronically and examined by plagiarism detection software.

¹⁸ https://doctorat.univ-grenoble-alpes.fr/en/during-a-doctorate/doctoral-student-training/



How do conclude doctoral studies?

"Doctoral students (and sometimes supervisors) struggle to handle the end of the PhD programme. Although it ultimately shapes the profile of future graduates, this difficult time can also result in dropouts, whether from substantial problems or the inability to finish the manuscript (and/or publications related to the thesis) or a lack of funding for the thesis. In this second case, having to continue research and obtain other sources of funding is in conflict with the workload involved in writing the thesis and preparing the defence. Regardless of the context, it is easy to see how important it is for doctoral schools to provide operational supervision in addition to the natural investment of the supervisor and host research unit."

"In a report published in 2014 by the French Ministry of National Education, Higher Education, Research and Innovation (MENESR), statistics showed that 40% of theses defended in 2012 took less than 40 months to complete. A third of doctoral students required an extra year and 11% of PhD degrees took six years or more. Half of the shorter doctorates were in exact sciences, whereas around 30% of doctorates in humanities and social sciences were obtained in over six years, and only 14% in less than 40 months. These differences between fields mostly stem from the fact that a high number of doctoral students in humanities and social sciences are employed, forcing them to juggle employment and their PhD studies. This scenario does not just apply to this field, as clinicians studying for their doctorate of science degrees also need to fulfil their hospital obligations, thus increasing the average time it takes for them to complete their science doctorate degrees. These professional obligations sometimes cause working doctoral students to temporarily suspend their doctorate studies. Since September 2016, doctoral students are able to defer their studies for up to one year. This new practice is meant to be used on an exceptional basis (according to the Order) and will likely be proposed by doctoral schools primarily to employed doctoral students¹⁹."

2.4.5 Socio-economic aspects

• Scholarships and subsidies

"Around 65% of doctoral students receive specific funding, 19% rely on a paid employment and 12% are not financed. These numbers hide significant disparities between fields as all doctoral students in sciences, technology and healthcare are typically funded by a doctoral contract (or equivalent funding) while some humanities and social sciences fields tend to have a high number of employed students, especially secondary school teachers combining teaching/marking and work on their thesis. Others are forced to fund their doctorate studies through part-time jobs, making it more difficult to successfully complete their doctorate degree²⁰."

¹⁹ Pierrick Gandolfo, op.cit.²⁰ Ibid.



Integration into the job market

"The 2006 Order states that doctoral schools "shall organise follow-up of the integration of PhD graduates, and more generally all their doctoral students, on the labour market." The new 2016 version replaced the term "integration" by "career", mentioning that this follow-up is carried out "in coordination with the departments within the relevant institutions." Surveys are therefore usually managed by an observatory or doctoral college (or equivalent body). The quality of these surveys depends on their potential use, both for communicating with doctoral students and informing them of available career options through the promotion of their future degree, and for retrospectively changing how the doctoral school's general operation. In line with the previous paragraph, it is expected that the PhD graduates questioned participate and contribute to providing doctoral schools and lead institutions with information that could later be used as real management tools for doctoral programmes.

In a report published in December 2015 on PhD graduate employment three years after their graduation in 2010, the French Centre for Research on Education, Training and Employment (Céreq) stated that "in a situation of economic downturn between 2011 and 2013, PhD graduates benefited from an increase in the number of research positions in businesses and the public sector." These positions were also more stable with 82% of graduates on a permanent contract, compared to 67% in 2010. The unemployment rate fell by two points between 2001 and 2013, from 11% to 9%, below that of master's graduates. However, the positive trend in these figures hides a strong disparity between fields, with especially encouraging results for engineering sciences, computer science and electronics, but continued difficulties for doctors of Chemistry, Biology, Earth Sciences and Humanities.

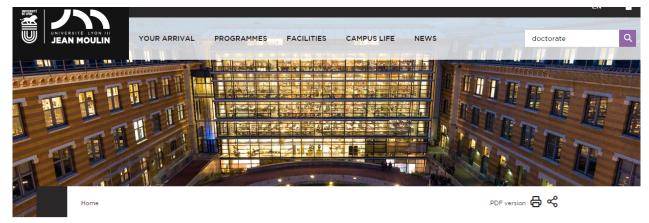
Interestingly, the report mentioned that "no "typical profile" emerged for an unemployed PhD graduate" and that "the conditions under which the thesis was carried out had no influence on the likelihood of being unemployed three years after thesis defence." However, reassuringly, the measures implemented by doctoral schools to improve career opportunities for PhD graduates were positive factors that need to be recognised.

Too many young PhD graduates are still limiting their doctorate to a three to five-year research project on a specific topic. Too few of them are objectively capable of fully applying all knowledge and (above all) skills learned during their doctorate studies. Beyond mere expertise, the abilities to summarise and remain objective on a specific topic, and for many fields, the experience of working as a team with individuals with very different profiles (researchers, professors, engineers, technicians, administrative staff, students), make the doctorate the only qualification to provide such adaptability, making doctoral-level graduates real "Swiss army knives". In the pursuit of their Holy Grail, they not only had to establish various strategies to find solutions to all kinds of problems frequently encountered when working on a research topic, but, above all, developed a rebound capacity that only this level of university education can provide. It is almost inevitable for doctoral students to encounter a large number of difficulties (technical, methodological, operational, relational problems, etc.) that they must somehow overcome to succeed in their studies. Without doubt, doctoral schools and doctoral students/graduates must invest more in making this level of qualification, which is unique in France, better known to the general public and any potential employers²¹."

²¹ Ibid.



CHAPTER 3: INTERNAL QUALITY ASSURANCE MECHANISMS



WELCOME TO JEAN MOULIN LYON 3 UNIVERSITY

Internal Quality Assurance mechanisms at Lyon III University

The question of the internal quality of the doctoral studies arises during all the key periods of these studies: the registration in the Phd, its preparation, its defence, but also after the defence.

Methodological note: It's difficult to distinguish the national rules imposed on all French universities from the margins of maneuver left to the universities. To present the margins of maneuver, we must rely on national rules and decline them through the example of the largest doctoral school of the University Jean Moulin Lyon 3 by its number of students, the doctoral school of law.

3.1 Internal quality during the Phd registration

Condition related to the student:

- French general rule: to hold a master's degree or equivalent
- Specific application made to doctoral school of law: average mark of 12/20 at the master's degree, 14/20 mark in the dissertation

Condition related to the thesis director:

• French general rule: maximum number of PhD students supervised by a thesis director, taking into account the constraints linked to the disciplines, in particular the rare disciplines, set by the doctoral school board

• Specific application to doctoral school of law: 10 students. In fact, the average supervision rate is 3 doctoral students per thesis director (320 PhD students for 104 directors)

3.2 Internal quality during the Phd preparation

Monitoring committee:

• French general rule: establishment of an annual monitoring committee from the 2nd year of doctorate

• Specific application to doctoral school of law: almost perfect compliance with the national rule as soon as the text enters into force (which is not the case in all the doctoral schools of this university a priori): of the 196 PhD students concerned in 2016-17, 185 were seen by the monitoring Committee in 2015-17, 3 having requested a caesura year.

Evaluation of curricula and training activities:

• French general rule: evaluation must be carried out regularly, notably through surveys of doctoral students. As part of a process of continuous improvement of the curriculum, the results of the evaluations are the subject of presentations and debates within the council of the doctoral school

• Specific application to doctoral school of law: simple provision of results



3.3 Internal quality for the thesis defence

• French general rule: jury: between 4 and 8 members with balance between external/internal members; also gender equity. Moreover, the thesis director takes part in the jury, but no longer takes part in the decision.

• Specific application to doctoral school of law: the first two criteria are fully applied, the third is not always achieved (this is an objective towards which we tend); the director is sometimes involved in decision-making.

3.4. Internal quality after the Phd award

Beyond the official texts, several quality criteria can be taken into account:

- Average duration
- Ratio between the number of inscriptions and the number of theses defended and in how long
- Number of official dropouts, number of non-registrations
- Method of funding, as an indicator of the time that the doctoral student can give to his work

With regard to doctoral school of law:

- Average duration of theses in year: 5.33 in 2014, 5.6 in 2015, 5.25 in 2016
- Number of theses defences: 52 in 2014, 41 in 2015, 37 in 2016, 40 in 2017
- Number of registrations: 297 in 2014-15, 322 in 2015-16, 320 in 2016-17
- Number of official dropouts: 12 in 2014-15, 12 in 2014-12015, 5 in 2016-17
- Number of non-registrations: 35 in 2014-15, 26 in 2014-15, 28 in 2016-17



CHAPTER 4: EXTERNAL QUALITY ASSURANCE MECHANISMS AND NATIONAL POLICIES

4.1 National strategy and policy in terms of Doctorate level and QA of Doctorate level: state of the art

Replacing AERES, the High council for the evaluation of research and higher education (Hcéres²²) is an independent administrative authority, created by Law ²³ n° 2013-660 of July 22nd 2013.

Heres is the national quality assurance agency, member of ENQA and registered at EQAR, and is responsible for the evaluation of programmes, instutions and research units.

Hcéres seeks to follow best international practice in the performance of its missions. With regard to evaluation criteria, its methods are based, on principles of objectivity, transparency and equal treatment for all organisations assessed, and, with regard to the selection of the individuals responsible for evaluations, on world-class scientific expertise, neutrality and balance in the representation of themes and opinions. Hcéres seeks to prevent conflicts of interest in the composition of the expert committees responsible for carrying out evaluations. It may perform evaluations directly or verify the quality of evaluations performed by other bodies by validating the procedures used. Hcéres enables the organisations and institutions that it evaluates directly to present, at their request, observations throughout the evaluation procedure, and at its conclusion.

Regarding doctoral schools in France, they are evaluated every five years by the Hcéres Evaluation of Programmes Department.

Evaluation is based on doctoral school projects for the next five-year contract. It may involve a renewal of the same project with or without modifications (change in title, management, etc.), a merger or the restructuring of several doctoral schools, or the creation of a new project (ex-nihilo).

The evaluation of doctoral school projects is based on a review and self-evaluation (internal evaluation managed by the lead institution(s)) of the general operation of schools under the previous contract. For each project, a panel of experts is commissioned by Hcéres. This panel is formed of four to six members, including a chair and recent doctoral graduate, and analyses the report of pre-existing doctoral schools and the doctoral school projects for the next contract.

A half-day site visit of each doctoral school is organised in the form of interviews between the panel of experts and school stakeholders, doctoral students and project leaders.

All visits to a site's doctoral schools are grouped over two to three days. In order to understand the site context, the first half day is dedicated to providing the entire panel of experts with i) a contextual presentation of the lead institution(s) and (ii) an operational presentation of the doctoral programme policy of the site (College or equivalent body).

The aim of this evaluation is policy is not to get any control on doctoral schools. The purpose of the evaluation is the continuous improvement and enhancement of the institutions and programs. The evaluation is aimed at providing the institution his own image in a mirror, communicate about its mission and strategies and demonstrate the way it does perform its mission.

²² http://www.hceres.fr/

²³https://www.legifrance.gouv.fr/affichTexte.do;jsessionid=E248667E924662099357C1640F63A146.tpdjo08v_3?cidTexte=JORFTEXT000 027735009&categorieLien=id

Source: Hcéres, http://www.hceres.fr/MODALITES-D-EVALUATIONS/Campagne-d-evaluation-2018-2019/Evaluation-des-ecoles-doctorales



The national QA system

"The accreditation of institutions is underpinned by periodic evaluation carried out by the French High Council for Evaluation of Research and Higher Education (HCÉRES). These evaluations are carried out on site, by panels of peers, i.e. current or former doctoral school directors and an expert "young PhD graduate" (who recently defended his or her thesis, holds a doctoral-level position and contributed to the operation or coordination of his or her original doctoral school). A circumstantial report is drawn up by the chair of the HCÉRES panel for each doctoral school in order to analyse the school's review and project on the basis of three key criteria: the doctoral school's operation and association with research, doctoral student supervision and training, follow-up and employment of doctors. These reports are sent to the doctoral schools' lead institutions, which are able to make comments. The evaluation reports and these comments are then sent to the Ministry of National Education, Higher Education, Research and Innovation (MENESR) and published on the HCÉRES website²⁴."

The Hceres evaluation standards

"For external evaluations of doctoral schools carried out by HCÉRES, an interview is systematically organised behind closed doors between the panel of experts and a panel representing doctoral students from the school in question. Various points are discussed, but special attention is paid to the doctoral programme. Although it is not always the case, these interviews often reveal that i) doctoral students are insufficiently consulted for developing and modifying their range of study programmes, ii) the accessibility of certain programmes does not always meet all demand, iii) programmes are not always evaluated by their users, and if they are, the doctoral schools do not necessarily take into account analysis of the opinions collected to change the format/volume/content of programmes with negative feedback. These experiences show that there is sometimes a lack of consultation between the doctoral school (or doctoral college) and doctoral programme students."

The "Hcéres Standards for external evaluation of a doctoral school" is structured as follows: 1 – The school's operation and association with research

This section describes and analyses the following aspects:

- Positioning of the doctoral school within the higher education and research institutions.
- The doctoral school's organisation and governance.
- Doctoral student recruitment and orientation policy.
- The doctoral school's scientific policy.

2 – Supervision and training of doctoral students

This section describes and analyses the following aspects:

- Doctoral student supervision policy.
- Doctoral student monitoring measures.
- Range of study programmes and events offered to doctoral students.
- Policy on vivas and thesis duration.

3 – Monitoring of the career paths of doctoral graduates

This section describes and analyses the following aspects:

- Actions carried out to promote career opportunities of its doctoral graduates and the doctoral programme.
- Measures for monitoring the careers of its doctoral graduates.
- Data analysis, communication and use²⁵."

²⁴ Pierrick Gandolfo, op.cit.



4.2 Future incentives for Cycle 3 at national level

National incentive : the reform of the doctoral studies

Doctoral policy in France was overhauled in May 2016 with an order creating for example the individual advisory committee that must systematically meet with each doctoral student once a year starting in the second year of enrolment in order to report on the doctoral students work and any problems he or she may have encountered with the thesis supervisor (or vice versa). Major changes also include stricter thesis durations (3 or 6 years, one additional year as an exception) and the fact that the thesis supervisor may not take part in the thesis examination board's decision.

Local incentives for HEIs / professors/students engaged in Cycle 3

Supervising doctoral students and guiding them towards thesis defence is promoted through career development for professors.

Financial bonuses for professors who work as thesis supervisors no longer exist in France, but, depending on the institutions, professors may be granted time in lieu for the number of doctoral students they supervise.

However, the main motivation remains the recognition gained from the theses supervised, the defence of these theses and the quality of these theses and young doctoral graduates.



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