Orientation of the French A-Level Graduates and Pedagogic Investment in French Universities

Vanessa Boléguin, Stéphane Guillon
University of Strasbourg, LISEC - EA 2310, Faculty of Education Sciences
7, rue de l'Université, F-67000 Strasbourg, France

Abstract

As access to higher education has steadily become more and more democratized in France, academic failure and dropping out during the first year of Bachelor Degree ("Baccaluréat+1") have become subjects of priority in the field of education research. Our article questions how professors can use statistical data at their disposal to support new students, with the aim of fighting absenteeism and academic failure. What kind of tools do these professors have in order to improve academic success within these first year students on a short-term basis as well as on a local level?
N. B.: In France, secondary education ends with the "Baccalauréat" or "Bac" (more or less A-Level). In this paper we will use the English word. After three years of postsecondary education in the university students can complete a Bachelor Degree called "Licence" in France ("Bac+3"); then after two extra years they can complete a Master degree ("Bac+5") and after three extra years a PhD (called "Doctorat" in French: "Bac+8").

1. Introduction

Does the university produce the conditions for students to drop out and to fail to integrate? Is this due to an education approach inadequate for the new student populations or a weak consideration of the differences between student academic backgrounds and the expectations of teachers? [1]. Can we still speak of an 'institutional laissez-faire' attitude that undermines the first year at university, given the unequal interdisciplinary distribution of student academic backgrounds? Above all, "the question of student success cannot be treated independently of the academic background which presides the entry into a given study and which largely determines future success" [16]. If the university should be considered as the place where built up failures and delays, thwarted directions, and socio-cultural constraints and barriers are revealed, how then can we anticipate these obstacles and adapt complementary investment in terms of academic support? [20].

Nearly 80% of A-Level graduates from a generation are moving towards higher education today in France: this enrollment concerns almost all general A-Level graduates, 75% of technological A-Level graduates, and 23% professional A-Level graduates; and altogether, they represent 53% of the youth of a generation. But at the same time that the university becomes available to different types of A-Level graduates, the French graduation rate at university is one of the lowest in Europe and those that leave without a diploma is increasing in proportion. One third of the students enrolled in a university program leaves before the third year and only 38% of A-Level graduates enrolled in a Licence program obtain a diploma in three years – 51% of general A-Level graduates and 10% of technological A-Level graduates. One quarter of students enrolled in the first year in 2005-2006 repeated their first year, but only half of these repeaters will continue onto their second year while the other half will quit the university. Half of the current technological and professional A-Level graduates quit university during their first year compared to one in five general A-Level graduates that do [18].

In universities, the teaching staff is taking action in a form of intervention against four significant phenomena: massive absenteeism, heterogeneity of students, students who chose their major only partly because of their affinity for the subject, and a differentiated attraction among the disciplines based on the possibilities of the respective professional fields. But is academic past the only individual characteristic to take into account in a needs assessment?

We have chosen to focus our attention on the socio-educational composition of the *new A-Level graduates* in their first year, a composition that maybe in part described by past linked variables – type of A-Level, repeated years in high school –, in sorts that could impact learning practice and

orientation, and to the social background (from the socio-professional classification and the status of scholarship).

Students have been subjects of interest for researchers since the 1960s [14], but researchers' centers of interest have evolved over the decades: social reproduction (1960-1970), strategic actor and employability (1970-1980), student-university relations (1980-1990), and social groups in mutation (1990-2000). However, the creation of the technological A-Level in 1969, then professional A-Level in 1987 has profoundly and structurally changed higher education. With this massive increase of postsecondary education, the institutional priority consists of allowing students to improve their integration to university, something only the best succeeds at. And on this point, the inequality of access to success in a student group is the subject of many works. The most preoccupying phenomenon for observers of the French university during the 1980s and 1990s is that of dropping out during the first year of university [12], a phenomenon that is different than reorientation: student recruitment has transformed and this transformation contributed to the reinforcement of dropping out and repeating, with and before all of the technological and professional A-Level graduates. Since 2000, the numbers and characteristics of social groups within the student population has stabilized [17], and it has accompanied a base of selectivity within selective fields and at the same time, with less attraction to university studies, especially in the scientific studies [7]. However, Duru-Bellat & Kieffer confirmed the persistence of inequality despite the increase in the rate of schooling: therefore, since 1995, the rate of access to higher education stagnated and the studies have become hierarchical and the distribution of A-Level graduates are based from socio-educational criteria and not only social [10]. Since 2001, the proportion of scholarship recipients in higher education has essentially stabilized at 30% [13]. This evolution is explained by the weak understanding of the number of scholarship recipients and of the susceptible population itself. The scholarship holders based on social criteria make up 95% of the aided students and 40% of them were found in the last level, those for which the aid was the most important.

Our research question was first of all for a normative purpose: we would like to guide the actions of staff and equip them in terms of engineering the training, pedagogical investment, and anticipation of necessary resources (groups of tutorils, methodological support, information meetings, tutors, personal work with students, long-stance resources on dedicated platforms). We propose after having summarized input of research on multiple groups of students, to describe our sample and our field, before illustrating our reflective approach by the Strasbourg data dating to 2005.

2. Contribution of Research

The question of choice of major in university has especially been treated through the filter of social inequality of origin. Beaud & Convert notes that French higher education "remains very socially segregated" and that professional A-Level graduates in turn would live a university experience like an "impasse" [2]. The sometimes paradoxical choice of major of the technological A-Level graduates present in higher education creates "misunderstanding, miscomprehension, and at the end of the day, individual disillusions," [4]. The work on the social compositions of university courses shows that the aspirations and the choice of study are differentiated socially. In particular, within the professional A-Level graduates, the democratization of the A-Level does not have a large impact on class of origin [10].

The expansion should not reduce but displace inequalities, like an upward translation of all levels of certification. Duru-Bellat & Kieffer described for their part a "segregated democratization": the type of A-Level would become "an important vector in educational inequality" and bring the observed phenomena to higher education [10]. Beaud & Pialoux asked even if the university was adapted, if it had the capacity to adopt the particular modes of welcoming for professional and technical A-Level graduates. The cumulative aspect of inequality in the choice of study generates inequality between academic paths [1], which touches first the atypical A-Level graduates whose presence in non-professional university classes are no longer marginal. Only the less good students of certain studies will attempt their chance at university," [2].

Social background is not the only defining variable: gender, type of A-Level, the age at which they obtained the diploma, and domain are equally important [3], as well as other variables that we did not explore.

The impact of gender comes up like so in the problem of university success: there would be thus gendered ways to study within young women / Women fit in better in their studies, accept more readily the rules and norms of the organization and of university work. More globally and before having the same access to higher education, women, generally more studious, are less ambitious. Less frequently scientific A-Level graduates, they opt for all other studies equally – stunned by the auto-censure phenomenon and auto-selection – for studies less prestigious, even dominated, in the sense where these specialties direct after graduating to positions of lesser qualifications, exercising less responsibilities of decision making power.

Apart from a sex-based distinction, the ways of studying are disparate and sociologically plural. The socio-educational differences of these A-Level graduates would explain in part the gaps between aspirations, personal motivation and work, anticipation of more or less implicit expectations of teachers [7], and more largely of disciplinary matrix as they are the educational expectations and norms linked to the discipline. For beginners, identification of tasks in university work as well as comprehension of what is appropriate studying practice to meet the expectations of the institution still raises many questions. The rules and norms linked to university work often remain implicit and vague [8].

We formulate here the idea of taking advantage of, at the end of administrative and course registration, the extracted data from enrollment files to define groups divided by social origin, by academic path (repeaters and type of A-Level) and gender to better adapt to the needs of educational support plans, taking into account the input of research results. The analysis ahead would allow for educational action to avoid negative effects once implemented. Indeed, remediation measures, to help university integration and choice of study, would not help students at risk of academic failure better integrate into their studies, but rather produce a godsend effect – the tutoring would benefit students that are already better academically equipped –; an effect called "cooling down" through less valued or "dominated" choice of study; even a "cooling out" effect produced by reorientation plans for atypical A-Level graduates. Whether the accompanying measures are for the purpose of facilitating the process of acculturation to university studies for students of modest origins [6], under the form of internships before entry and educational training, or of guidance in terms of reorientation during the first semester, the analysis of the educational efficiency of such measures conclude that there is a weak significance of their impact.

According to Dubet, the forms of student experience in the expanded university allows the production of a type of pursued nature project, the degree of integration in the university life and of engagement in an "intellectual vocation", allowing to distinguish the actual dropouts, the students in reorientation or on the path of abandon and question the relevance of the notion of "ghost students", "educationally invisible", and without university affiliation, culturally remote from a learned culture [9].

The concurrence of a parallel salaried activity contributes as well to academic failure of the new students, especially those from less privileged backgrounds. Finally, the pressure of their social background can influence the allowed duration of study and on material investment, especially among technological and professional A-Level graduates [5].

As departments in university combine different types of students, it appears to be like an *educational context*, which may appear to be heterogeneous. The question is therefore whether the university, in the first year, can cope with educational heterogeneity. Although research on such heterogeneity of classes, in terms of schooling level, exclusively deals with secondary education, it shows that heterogeneous classes have a positive effect in raising the level of the academically weakest [11]. The question then remains whether these findings can be applicable to the first year of higher education for the general public whose aspirations, due to selectivity and prioritization of certain departments, are sometimes thwarted and where differentiation is difficult to achieve, as are disparate characteristics of students, courses, the risks of absenteeism, academic failure, and dropping out, as well as the needs of cognitive or academic remediation.

3. Field and Population of Research

Adapting the pedagogy to the heterogeneity of student populations makes an upfront analysis necessary, in anticipation, of the composition of the different groups of new students. On this point and despite the existence of local observatories of higher education that produces numerous and clear studies, precise results at the faculty level is missing in the university community, which allows for educational plans to be adapted for the newly enrolled. It is what we propose to achieve here from content elements in the administrative enrollment folders of the new students. Controlling upfront the heterogeneity of the groups allows us to anticipate risks, to adapt responses, and to spread the additional provided averages.

Our field brings together three universities in Strasbourg: Louis Pasteur (I), Marc Bloch (II), and Robert Schuman (III) which unified in the beginning of 2009 to become the current University of Strasbourg (UdS), which is composed today of 38 components (called "faculties"). Our choice to work on statistical data found its origin in our willingness to uncover certain elements of the socio-educational composition of student populations by big disciplinary families throughout a university. We focused our efforts on the new A-Level graduates, 6268 students in the beginning of the 2005 school year (obtaining their A-Level the same year as their enrollment in university), whose presence questions the conditions of distribution in the different departments, the modes of university integration and the success. The socio-educational composition allows it to explain in part the differences between success rates in the departments, in part because the specificities of teachers and modes of recruitment

(selective or not) impact logically what follows. Our population is therefore exhaustive and the data are computer extractions from administrative folders of enrollment.

This article falls within a current research project from 2012 to 2015 covering all the students enrolled during the school year 2005-2006 at University of Strasbourg, which aimed to reconstruct retrospectively by complementary questionnaires and face to face interviews about university path, student experience, and the training-employment relation during the period 2005-2012. We propose here to synthesize the definitive results in the first step of the project supported by distribution of these students in different departments.

The methods taken into account to construct our reflection (past academic record, sex, department, social origin) do not question of course some of the complexity of university orientation process. This is about reflecting on the construction of a direct usable and operational tool.

4. The Students in their First Year at the University of Strasbourg

We gathered (see table n°1) together departments with *new A-Level graduates* enrolled in 2005 in Strasbourg. The first years of medicine and pharmacy gathered together were 18.5% of the total enrolled in first year followed by the humanities (18.4%), law, economy, and administration (17%), the sciences (11%), and literatures and languages (10.6%). The rest of the enrollments are distributed between the arts (4.3%), sports (3.3%), and political science (1.6%). Together the university technological fields and all overwhelmed specialties were 12.7% of the total. Students who repeated a year or more in high school (see table n°2) were found more frequently in proportion in sports (+13.8 pts gap from the mean), the arts (+10.7 pts), the humanities (+9.4 pts), and in law, economy, and administration (+4.4 pts). Even before medicine and pharmacy (-12.7 pts), it is political science that has the least amount of high school repeaters (-24.5 pts). Representing more than six out of ten enrollments in the first year (see table n°3), women are underrepresented in sports (-28.5 pts), in technological fields (-20.9 pts), in the sciences (-11.9 pts) and in political science (-7.3 pts). They are significantly overrepresented in literatures and languages (+20.6 pts) and in the humanities (+10.4 pts).

Nearly 30% of the enrollments were scholarship recipients (see table n°4). The only significant gaps were in three departments: political science appeared as the least attractive concentration for scholarship holders (-11.3 pts) even before medicine and pharmacy (-5.3 pts); scholarship holders were found proportionally as numerous in the humanities (+4.6 pts).

The most significant gaps in terms of impact are social origin on orientation (see table n°5) found in political science (+29.7 pts of students whose parents are executives, +5.2 pts for intermediate professions, -8.4 pts for employees and -11.8 pts for workers) and in lesser measure in medicine and pharmacy (+22 pts for students whose parents are executives, -3.7 pts for employees, -2.2 pts for workers). Students from a working class background are equally lightly overrepresented in the humanities (+2.2 pts) and in law, economy, and administration (+1.9 pts). The sons and daughters of businesspeople are lightly overrepresented in law, economy, and administration (+3.1 pts). This social differentiation in department recruitment is not accompanied however by a massive social homogeneity in the departments: the different socio-professional categories are present in different degrees as well as types of A-Levels, so that the new A-Level graduates are integrated in the departments whose socio-educational composition exert an influence on the pedagogy, the conditions of welcoming, but also on the altogether process of university integration as well as social integration.

By type of A-Level (see table n°6), it appears that professional A-Level graduates, who remain marginal in the overall volumes of new students at the university (6.4%), are absent in political science, practically excluded in the technological fields (1.5%) and in sports (2.9%) and in medicine and pharmacy (less than 4%). They are overrepresented in the arts (+0.3 pt) and law, economy, and administration (+0.5 pt), but more so in literatures and languages (+1.3 pt) and in the sciences (2.8 pts). The technological A-Level graduates are invested with priority and counter-intuitively, even before university technological departments (where they make up a little more than one out of five students), the sports department (more than one quarter of the total); they are equally represented in the humanities (close to 19%), the arts (close to 16%) and law, economy, and administration (more than 15%). Since the departments can select, the professional A-Level students are excluded (in political science and technological departments).

Scientific A-Level graduates are logically strongly represented in medicine and pharmacy (+49.6 pts), in the sciences (+40 pts) but equally in technology (+10.4 pts); the literatures are concentrated in literatures and languages (+34.7 pts), in the arts (+31.2 pts) and in the humanities (+8.2 pts); as for the ES A-Level students they are overrepresented in law, economy, and administration (+29.6 pts), in political science (+16.5 pts) and in the humanities (+13.3 pts).

To go beyond the simple socio-graphical approach of the data, we propose a synoptic representation (see table n°7) constructed from four

differentiator criteria: the degree of homogeneity of the specialty as well as the portion of former repeaters, scholarship recipients, and students from a privileged social background.

The subjects can be thus positioned from these four indicators in a continuum from medicine, where the pedagogical staff will find themselves with a homogeneous group (scientific A-Level graduates make up nearly 93%), rarely any former repeaters (less than 18%), few scholarship holders (less than a quarter) and more frequently students from a privileged background (nearly 45% have a father who is an executive or in an intellectual profession); political science distinguishes itself from medicine especially because it welcomes a very heterogeneous group (the weight of economics and social A-Level graduates – 40% - rivals the scientific A-Level graduates – 47%); the scientific subjects are homogeneous (83% of scientific A-Level graduates but at the same time more than 9% of professional A-Level graduates), welcomes less former repeaters – a quarter of their total – and students of socially privileged backgrounds and more scholarship recipients (more than 30%). Law-economy-administration and technology subjects welcome homogeneous groups (53% of economics A-Level graduates for one, 53% of scientific graduates for the second) but although the first gathers more students of a socially privileged background (one third), the second distinguishes itself by students less often late educationally (25%). As for literatures-languages, they gather more often a heterogeneous public (48% of literatures but close to a quarter of economics graduates), scholarship holders are close to one third, with on time profiles (73.5%), although sports departement distinguishes itself by a lower presence of scholarship recipients (less than 28%) and more frequently former repeaters (more than 44%). To the limit of this continuum are positioned the humanities and the arts which can be distinguished by a heterogeneity in terms of A-Levels, a very strong presence of former repeaters, of scholarship recipients, and of students from less privileged backgrounds.

5. Conclusion

Because the time of the observation is situated in the beginning of the university year, this snapshot skips a part of the difficulty of the heterogeneity: in fact, the educational effort is thwarted by the fact that the structure modifies during the year due to a progressive phenomenon of academic failure, abandon, and reorientation, differentiated according to the type of past academic background. This instability during the year represents an obstacle to the educational plans. Therefore, the new students are just a part of the enrolled in the first year: they found university repeaters, reoriented students, or students retaking studies. We focused our attention, for the needs of our article, on this population without ignoring the influence of the coexistence of the contrasting populations who come into contact.

The social background, the status of scholarship does not appear to be the most strongly differentiated variables in comparison to gender and past academic background. We are at the heart of a paradox: academic training reinforced in the selective subjects benefit more often, by the process of educational selection that is indirectly a social selection, to students already better equipped academically.

Understanding and precisely describing the causes of university failure (defined roughly for the needs of the article as the failure to obtain its first year) allows us to define the field of intervention of actors and the efficiency of the support devices. Anticipating in the beginning of the university year the risks of failure, absenteeism, and inability to adapt to the expectations of professors – by exploitation of administrative local data available in real time – could be a lever inscribed in the pedagogical arsenal of support and put to a level, of information and of training, at the same time in terms of academic competencies and university work methods to acquire but equally of representation of professional fields linked with disciplines and the functions of different types of work, and finally to aid early to the intra or extra-university reorientation; an oriented effort for students in risk of failure present in the beginning of the year before they fail. This article proposes to construct a tool of detection of potential risks and the needs by departments. The university pedagogy calls out to influence phenomena that are found in part their origin away from the apprenticeship process, teaching, and evaluation. The explicative model in this way valorizes the wish to take into consideration the weight of sociological constraints linked to academic past, territorial mobility, material conditions of university integration, plural socialization put in contradiction, as well as the deterioration of placement perspectives, resistance during the study to put in perspective displacement and maladjustment.

In our view, because of its multidisciplinarity, the education sciences enable a rich and transverse lighting on students' success in University, above all when we study young A-Level graduates who enroll for the very first time. The methodology we chose to get the data used in this article is just one among the ones we used in the context of our longitudinal research project. On one hand, for our research, we have exploited administrative data collected in the registration records of students in the first year of their Bachelor Degree, which allowed us to describe their previous schooling, their social background and their more or less forced orientation in studies at University. On the other hand, we have re-

interrogated these students seven years later through a qualitative questionnaire online to be able to describe their student experience, the contradictions that could have existed between their projects and the reality of their student experience. Finally, we interviewed some of them in a face-to-face qualitative approach, in order to question this time their representations and the way they understand their studies from the time when they enrolled at the University until the moment they positioned themselves in a career more or less related to their education and the degrees they have completed or not. The extra issues that emerged after the study of those data from administrative records have focused our attention on how students agreed or not with a change in their orientation, and whether they had then opted out or not, how this event had cooled down some of their former expectations and if this change had finally played a role in their subsequent careers. We also investigated whether the students found resources and support during their university years, first amongst teachers but also the administrative staff and ultimately among their peers. We also tried to determine whether pedagogic proposals had been a constraint or an asset during their first year, whether technologies applied to education were proposed by teachers and more broadly by the University of Strasbourg, and if students had used them to supplement lessons or to manage their own lack of availability.

The issue of gender influence on students' orientation remains complex: was it an unconscious self-limitation, a deep internalization of socio-cultural injunctions or could we discern among female students an adaptation strategy to an already unequal society in the job opportunities it proposes after graduation? And with regard to scholarship holders, online questionnaires have confirmed the hypothesis of a personal restraint to continue their education due to economic constraints. Finally, the question would be to try and explain why delays of some young less prepared to the academic world have not been bridged in terms of academic skills, a difficulty which could be explained by the existence of different types of A-Levels in France or by a former repetition in secondary education.

6. References

[1] Beaud S., Pialoux M. (2001). « Les "bac pro" à l'université. Récit d'une impasse ». *Revue française de pédagogie*, vol. 136, p. 87-95.

[2] Beaud S., Convert B. (2010). « 30% de boursiers en grande école… et après ? ». *Actes de la recherche en sciences sociales*, n° 183, p. 5-14.

[3] Beaupère N., Chalumeau L., Gury N., Hugrée C. (2007). *L'abandon des études supérieures.* Paris : La Documentation française.

[4] Blöss T., Erlich V. (2000). « Les "nouveaux acteurs" de la sélection universitaire : les bacheliers technologiques en question ». *Revue française de sociologie*, n°41-4, p. 747-775.

[5] Boléguin V. (2011). *La Réunion : une jeunesse tiraillée entre tradition et modernité. Les 16-30 ans au chômage*. Paris : L'Harmattan.

[6] Boyer R., Coridian C., (2002). « Réapprendre à apprendre pour réussir en première année de D.E.U.G. », *L'orientation scolaire et professionnelle*, 31/3

[7] Chevaillier T., Landrier S., Nakhili N. (2009). *Du secondaire au supérieur : Continuités et ruptures dans les conditions de vie des jeunes*. Paris : La Documentation française.

[8] Coulon A. (1997). *Le métier d'étudiant. L'entrée dans la vie universitaire*. Paris : P.U.F.

[9] Dubet F. (1994). « Dimensions et figures de l »expérience étudiante dans l'université de masse ». *Revue française de sociologie*, n°35-4, p. 511-532.

[10] Duru-Bellat M., Kieffer A. (2008). « Du Baccalauréat à l'enseignement supérieur en France : déplacement et recomposition des inégalités ». *Population*, vol. 63, n°1, p. 123-157.

[11] Duru-Bellat M., Mingat A. (1997). « La constitution de classes de niveau dans les collèges ; les effets pervers d'une pratique à visée égalisatrice ». *Revue française de sociologie*, vol n°38, p. 759-789

[12] Erlich V. (1998). *Les nouveaux étudiants. Un groupe social en mutation.* Paris : Armand Colin.

[13] Fabre J. (2007). « Les boursiers de l'enseignement supérieur en 2005-2006 », *Note d'information de la DEPP*, n°07.26.

[14] Fave-Bonnet M.-F., Clerc N. (2001). « Des "Héritiers" aux "nouveaux étudiants" : 35 ans de recherches ». *Revue française de pédagogie*, vol. 136, p. 9-19.

[15] Frickey A., Primon J.-L. (2002). « Les manières sexuées d'étudier en première année d'université ». *Société contemporaines*, n° 48, p. 63-85.

[16] Garcia S. (2010). « Déscolarisation universitaire et rationalités étudiantes ». *Actes de la recherche en sciences sociales*, n° 183, p. 48-57.

[17] GRUEL L., GALLAND O., HOUZEL G. (dir.) (2009). *Les étudiants en France : Histoire et sociologie d'une nouvelle jeunesse*. Rennes : Presses universitaires de Rennes.

[18] PROUTEAU D. (2009). « Parcours et réussite en licence des inscrits en L1 en 2004 ». *Note d'information*, n°09.23.

[19] Revue française de pédagogie, 2001, vol. 137 : « La pédagogie et les savoirs : éléments de débat ».

[20] Revue française de pédagogie, 2010, vol. 172, n°3 : « La pédagogie universitaire : un courant en plein développement ».

7. Tables of Data:

Table 1. A-Level graduates' choices for their first year at University in Strasbourg

Fields	Registrations	Percentage
Medicine-Pharmacy	1161	18,5%
Humanities	1156	18,4%
Law-Economics-Administration	1066	17,0%
Technologic fields (DUT)	797	12,7%
Sciences	687	11,0%
Literatures-Languages	664	10,6%
Arts	270	4,3%
Sports	208	3,3%
Political Science	102	1,6%
Others	157	2,5%
Total	6268	100,0%

Table 2. Did new students repeat a year or more in high school ?

Fields	No	Yes
Medicine-Pharmacy	82,3%	17,7%
Humanities	60,2%	39,8%
Law-Economics-Administration	65,2%	34,8%
Technologic fields (DUT)	74,8%	25,2%
Sciences	74,8%	25,2%
Literatures-Languages	73,5%	26,5%
Arts	58,9%	41,1%
Sports	55,8%	44,2%
Political Science	94,1%	5,9%
Total	69,6%	30,4%

How to read the table : 69,6% of our global sample never repeated a year in high school before university. As far as students in medecine-pharmacy are concerned, this rate reaches 82,3%, i.e. a gap of -12,7 pts from the mean.
χ 2=233,53, ddl=8, 1-p=>99,99%

Table 3. Distribution by Gender

Fields	Women	Men
Medicine-Pharmacy	65,8%	34,2%
Humanities	71,6%	28,4%
Law-Economics-Administration	59,3%	40,7%
Technologic fields (DUT)	40,3%	59,7%
Sciences	49,3%	50,7%
Literatures-Languages	81,8%	18,2%
Arts	65,2%	34,8%
Sports	32,7%	67,3%
Political Science	53,9%	46,1%
Total	61,2%	38,8%

χ 2=445,13, ddl=8, 1-p=>99,99%

Table 4. Distribution by Scholarship

Fields	No Scholarship	Scholarship
Medicine-Pharmacy	75,4%	24,6%
Humanities	65,5%	34,5%
Law-Economics-Administration	69,3%	30,7%
Technologic fields (DUT)	69,9%	30,1%

Sciences	69,7%	30,3%
Literatures-Languages	67,9%	32,1%
Arts	68,5%	31,5%
Sports	72,1%	27,9%
Political Science	81,4%	18,6%
Total	70,1%	29,9%

χ 2=35,76, ddl=8, 1-p=>99,99%

Table 5. Distribution by social background

Fields	PCS1	PCS2	PCS3	PCS4	PCS5	PCS6	PCS7	PCS8
Medicine-Pharmacy	0,9%	5,7%	44,1%	13,1%	7,6%	13,5%	3,6%	3,0%
Humanities	1,0%	5,1%	26,3%	15,2%	12,2%	17,9%	4,5%	4,8%
Law-Economics-Administration	0,8%	9,9%	33,2%	11,9%	11,6%	17,6%	4,5%	5,4%
Technologic fields (DUT)	2,4%	8,0%	27,7%	20,2%	14,6%	19,3%	3,6%	2,0%
Sciences	0,9%	7,4%	33,8%	15,6%	13,0%	14,1%	5,5%	2,0%
Literatures-Languages	1,4%	7,4%	27,0%	13,0%	11,1%	17,0%	4,5%	4,8%
Arts	1,5%	4,4%	31,1%	11,9%	14,1%	8,9%	3,0%	1,9%
Sports	1,0%	1,9%	21,2%	10,6%	13,0%	13,0%	2,9%	1,4%
Political Science	0,0%	5,9%	61,8%	19,6%	2,9%	3,9%	3,9%	1,0%
Total	1,1%	6,8%	32,1%	14,4%	11,3%	15,7%	4,2%	3,6%

PCS [socio-professional category]: 1. Farmers; 2. Craftsmen, storekeepers, company managers; 3. Business executives ans intellectual positions; 4. Intermediary positions; 5. Employees; 6. Workers; 7. Retired ; 8. Others or Unemployed.
χ 2=264,56, ddl=56, 1-p=>99,99%

Table 6. Distribution by type of French A-Level

Filières	Scientific	Economics and Social fields (ES)	Literature	Technological	Professionnal
Medicine-Pharmacy	92,9%	0,1%	0,3%	2,9%	3,8%
Humanities	16,8%	37,0%	21,8%	18,6%	5,8%
Law-Economics-Administration	16,3%	53,3%	8,3%	15,1%	6,9%
Technologic fields (DUT)	53,7%	20,5%	3,1%	21,2%	1,5%
Sciences	83,3%	1,3%	0,0%	6,3%	9,2%
Literatures-Languages	11,1%	23,9%	48,3%	8,9%	7,7%
Arts	17,4%	15,2%	44,8%	15,9%	6,7%
Sports	43,8%	24,5%	2,4%	26,4%	2,9%
Political Science	47,1%	40,2%	12,7%	0,0%	0,0%
Total	43,3%	23,7%	13,6%	13,0%	6,4%

χ 2=3878,37, ddl=32, 1-p=>99,99%

Table 7. Socio-educational Classification

Fields	Homogeneity in first year at university	Few high school repeaters	Few scholarship holders	Few students from lower social backgrounds
Medicine-Pharmacy	x	x	x	x
Humanities				
Law-Economics-Administration	x			x
Technologic fields (DUT)	x	x		
Sciences	x	x		x
Literatures-Languages		x		
Arts				
Sports			x	
Political Science		x	x	x