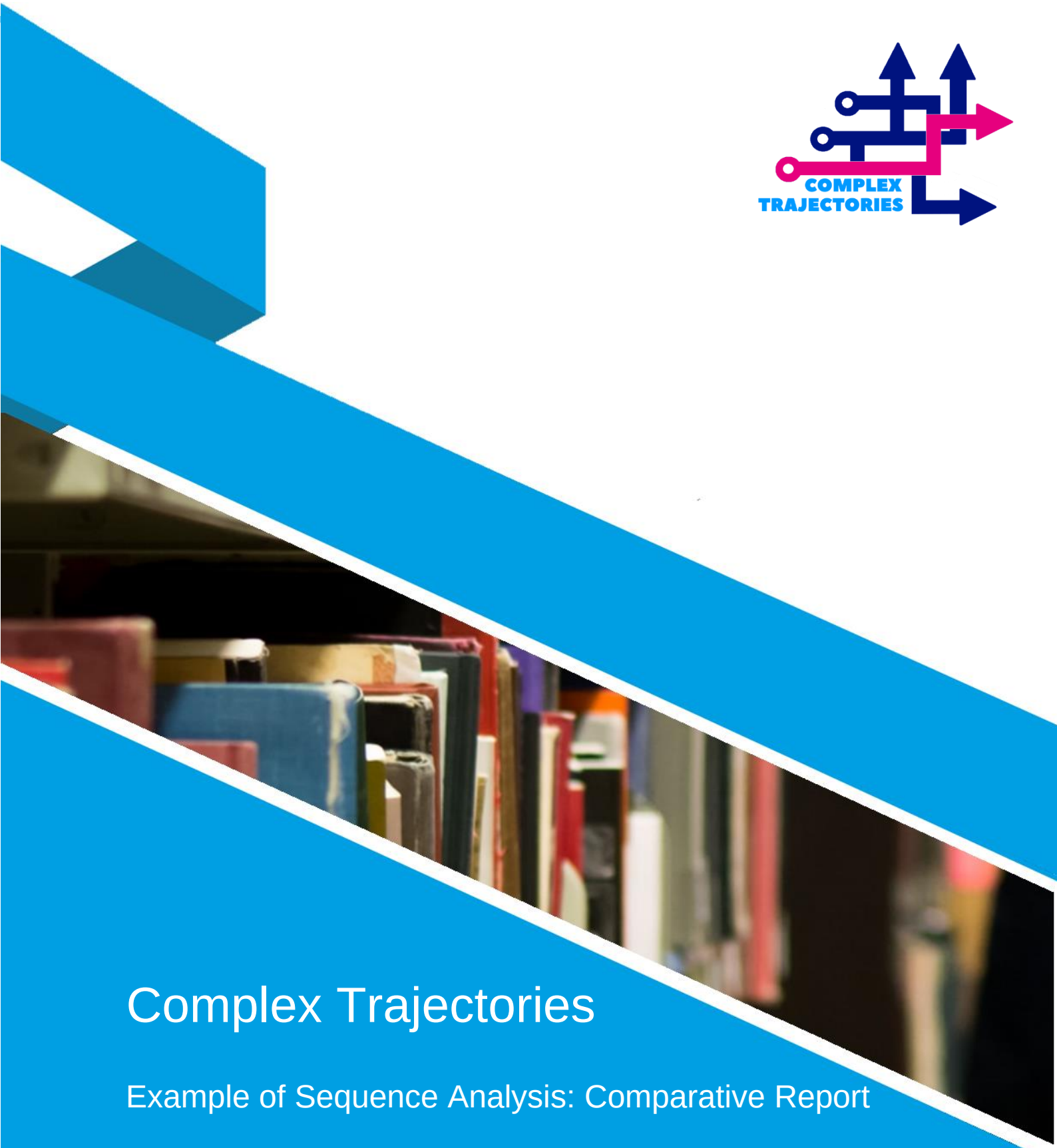

Complex Trajectories

Example of Sequence Analysis: Comparative Report

May 2023

Co-funded by the
Erasmus+ Programme
of the European Union

Authors:

Helena Troiano

Albert Sánchez-Gelabert

Janine Jongbloed

Jean-François Giret

Vera Miguéis

Chris Edwards

Ona Valls

Work Group:

Josep M. Duart (Coord.)

Carina Álvarez

Raquel Barandalla

Pauline Born

John Brennan

Teresa Cardoso

Simon J. Cross

Chris Edwards

Marina Elias

Jean François Giret

Francesc J. Hernández

Janine Jongbloed

Vera Miguéis

Francisco David Muñoz

João Paz

Maria do Carmo Pinto

Albert Sánchez-Gelabert

Alfredo Soeiro

António Teixeira

Helena Troiano

Alícia Villar

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1. Introduction

Although we call them by the same name around the world, and despite the process of European harmonisation, higher education systems are very different in terms of the options they offer and the rigidity of the pathways they design (Brennan, 2021; Charles, 2015; Hovdhaugen, 2011).

These normative forms are very constraining. We can see this, for example, in the study by Charles (2015, 2016) in which he compares the ways of navigating through the university that are typical of the UK, Sweden and France. For the first, he uses the metaphor of a network of roads, where students can choose between many different routes, but need a map to avoid getting lost. They see it as a long-term investment and try to get through it quickly, although they often combine it with paid work. In the Swedish case, the metaphor is an underground map, a cheap means of transport that allows students easy changes and reorientations, simple exits and re-entrances, so that they can exercise their autonomy and find their own path in relation to other areas of their lives. Finally, the high-speed train route is the one that serves to represent the paths followed in the French system. The pathway is clearly marked, it is fast, but not flexible, as it is difficult to reorientate and, once you get off, it is very difficult to get back on. Students think of it as a selective system that gives them access to a particular profession and, to a certain extent, to a social status.

However, the most common ways of navigating through university are not only conditioned by the normative marks of the respective university systems, but are also related to the more general forms of transition to adult life, the economic context and the relationship with other social institutions. Thus, in a similar framework to that which Chevalier (2016, 2017) draws in classifying between Bismarckian countries, with policies of State subsidiarity towards families, and Beveridgean countries, which follow policies of individualisation, Van de Velde (2007) identifies very divergent institutionalised forms of becoming an adult. The author describes them as ranging from the Danish conception of a long but emancipated youth, which is a process of self-discovery, through a typical short British emancipation that aims for professional success, passing by the rapid French emancipation that contrasts with the late access to the profession, up to the familiarised conception of the Spanish youth where they live at home with their parents until they make the great step towards emancipation after having achieved a certain degree of labour insertion.

The normative forms on how to move through university define what we know as a pathway, in the sense of a mapped itinerary, but even in the most rigid framework we can expect individuals to follow their own trajectory, according to their own logic and strategy (Haas & Hadjar, 2019; Picard et al., 2011). In fact, the institution's interest is almost always focused on retention in the original degree programme, while the student's interest is persistence, i.e. learning or graduating in any programme or institution, and he/she will be able to find breaches even in the most

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regulated contexts to change the orientation of his/her trajectory (Abad Esteve & Àlvarez Ramos, 2019; Boylan, 2020; Tinto, 2017; Villar Aguilés et al., 2017).

If policies to widen access to university are successful, then it is likely that the diversification of student trajectories will continue to increase, because the profiles of students will also become more diverse in terms of age, social origin, routes of access, ethnic origin, first generation at university, etc. (Doray & Murdoch, 2010; Kamanzi et al., 2010; Orr, 2010; Sánchez-Gelabert et al., 2020). These people, who are generically referred to as non-traditional students, not only arrive with new needs to support their studies, but also with new meanings and ways of interpreting their university experience, tracing new trajectories (Figuera-Gazo et al., 2020; Helland & Hovdhaugen, 2021; Herbaut, 2020; Sánchez-Gelabert, 2020; Sanchez-Gelabert & Elias, 2017; Tieben, 2020), while often showing a greater combination of studies with other areas of their lives (Denice, 2019; Picard et al., 2011).

On the other hand, it is common to observe that the adaptation of institutions to respond to these new needs and experiences is very timid; in fact, even the knowledge of these trajectories from the students' point of view is non-existent or partial (Bohonnek et al., 2010; Orr, 2010; Picard et al., 2011; Tinto, 2017).

We want to start working in this direction. We propose to analyse the students' trajectories, also taking into account the changes that the students have made following their own logic and aiming for success defined from their own point of view. We are aware that the interest lies not only in the change of degree (which is the one we can address for most of the institutions participating in the project), but also in the change of institution and on-site/on-line modality (which we can only address for one or two of these institutions). To approach this task, we adopt a comparative and longitudinal perspective, using cohorts of students entering university for the first time in 2012.

In this document we will show the comparison between different Higher Education Institutions and university systems, specifically:

- Catalonia university system[1]: the whole of the face to face universities, one specific on-site university (Universitat Autònoma de Barcelona) and one distance learning university (Universitat Oberta de Catalunya) – Spain
- Universitat de València – Spain
- Universidade do Porto – Portugal
- Universidade Aberta – Portugal
- Université de Bourgogne – France

[1] This study is based on data provided by the Departament de Recerca i Universitat from the DWH Uneix data on May 2021. The responsibility for all conclusions drawn from the data provided lies exclusively with the authors.

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- Open University – United Kingdom

In this report, first, we select some important characteristics in order to understand the context that, obviously, influences the pathways set by the institutions, as well as the flexibility and other opportunities and meanings that students encounter. Secondly, we offer a visualisation of the trajectories found in each of the contexts and compare them. Finally, we address indicators of complexity in the trajectories in an attempt to summarise this dimension of the trajectory followed by the students.

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2. Institutional Context

2.1. Description and territorial framing

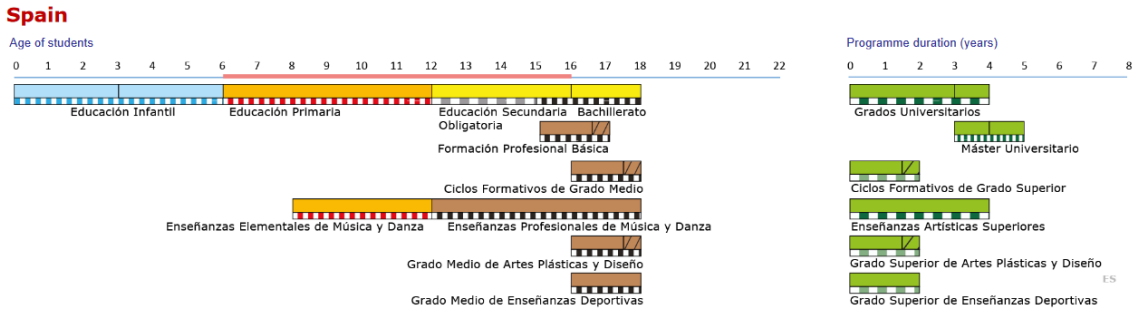
2.1.1. Universities in Spain: the whole system in Catalonia and Universitat de València.

On the one hand, we have information on the entire Catalan university system, public and private universities, and distance learning universities, which we will present separately because of their particularities and because it is an objective to study the differences. On the other hand, we have information from the University of Valencia.

The economic and social contexts are very similar in the two autonomous communities. These are territories with a large seafront that are used intensively for tourism. They are also heavily industrialised areas, especially Catalonia. And Valencia has important agricultural production and food trade and transformation. Catalonia has 7.5 million inhabitants and Valencia 5 million. Both territories are bilingual, both speak Valencian/Catalan (which are the same language) and Spanish.

In Catalonia there are 12 universities, 7 public, 4 private and one virtual. In the whole of Valencia there are 10 universities, 5 public, 4 private and one virtual. The University of Valencia is the most important public university in the autonomous community. Both governments have autonomy to define educational policies and relative autonomy for university policies. The structure of the education system and the university system is equivalent in both places.

Figure 1. Education System in Spain.



Source: Eurydice, 2019. See legend in the appendix.

The bachelor's and master's degrees are considered university studies, the rest are part of tertiary education, but not part of the university institution.

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Degrees usually last 4 years, 240 ECTS, but there are exceptions, such as the 6 years of medicine, or the 5 years of dentistry, pharmacy, veterinary medicine and architecture.

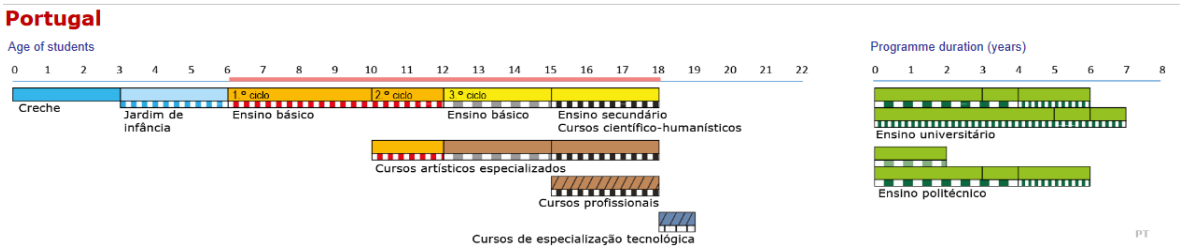
2.1.2. Universities in Portugal: Universidade do Porto and Universidade Aberta

In the Portuguese case, we have at our disposal the data of the University of Porto (15 schools and faculties), which is an on-site university. Furthermore, we have information from the Universidade Aberta, which is an on-line university.

The network of public Higher Education Institutions in Portugal comprises 14 Universities, 20 Polytechnic Institutes and 6 institutions of military and police Higher Education. The network of private Higher Education Institutions comprises 36 Universities and 64 Polytechnic Institutes.

Higher Education in Portugal is divided into two sub-systems, university education and polytechnic education.

Figure 2. Education System in Portugal.



Source: Eurydice, 2019. See legend in the appendix.

The Bachelor's degree programs take 3-4 years of study, awarding between 180 and 240 ECTS, and the Master's degree lasts 1-2 years, granting between 90 and 120 ECTS. There are exceptions on the duration, for example in medicine.

During the period considered in the analysis, some faculties offered the integrated masters (combination of bachelor and masters), with an average duration of 5 years (300 to 360 ECTS).

2.1.3. University in France: Université de Bourgogne.

In the French case, we have data from the Université de Bourgogne, face-to-face degrees (most of them) and some that can be taken online, such as, from the second year onwards, the Bachelor's Degree in Arts or Business, and at Master's level, some degrees in Educational Sciences or Business.

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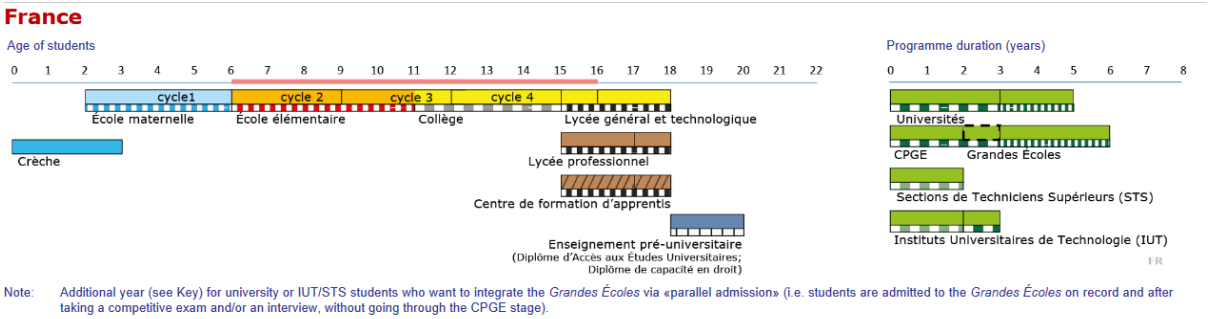
There is no distance learning university in France. Each university, if it wishes, can offer degrees in virtual mode.

There are universities, which are of a public nature; and there are also Grandes Écoles, which are public or private higher education centres recognised by the state, which are accessed after a two-year preparatory course. Within the system there are also specialised institutes, which award degrees recognised or not by the state, and higher schools of art, design and architecture, which are mainly state-owned, but can also belong to the chambers of commerce and industry.

Figure 3. Education System in France.



Note: Additional year (see Key) for university or IUT/STS students who want to integrate the *Grandes Écoles* via «parallel admission» (i.e. students are admitted to the *Grandes Écoles* on record and after taking a competitive exam and/or an interview, without going through the CPGE stage).

Source: Eurydice, 2019. See legend in the appendix.

Bachelor's degrees ("licence") usually last 3 years and comprise 180 ECTS, but there are exceptions for medicine, dentistry, architecture, and engineering degrees. For typical bachelor's degree at the university, the teaching units, semesters and years have a value in European credits at the rate of 30 credits per semester, 60 credits per year. The validation of a teaching unit, of a credited component, of a semester, of a year, entails the capitalization of the related European credits (the teaching units are definitely acquired and cannot be taken again by the student).

There are also shorter university diplomas ("diplome universitaire") that only take one or two years and professional bachelor's degrees, particularly in technological and professional subjects in the University Institutes of Technology.

2.1.4. University in the United Kingdom: The Open University

The Open University (OU) is a distance learning institution providing higher education to the four nations of the United Kingdom, Europe, and beyond. Although broadly similar, there are some differences in the structure of the education systems between the nations. The differences are primarily to do with how school students are allocated to a year group. It is possible for a person to be in one year group but find they would be in a different one if they were to move to one of the

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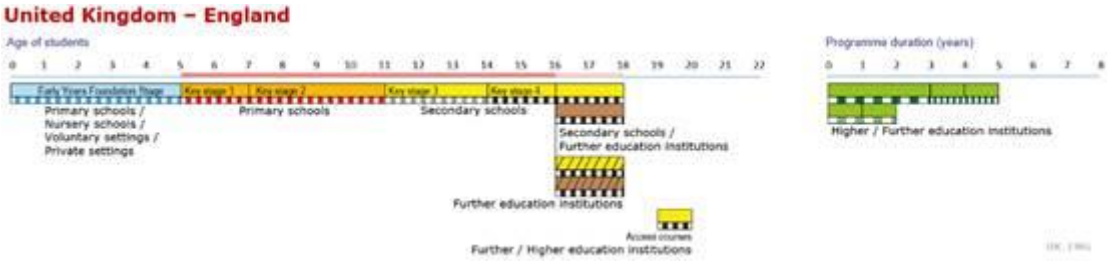
other three nations. The other most significant difference is that in Scotland there is greater flexibility towards the end of the formal education age group.

The UK university system has been unified since 1992, when the polytechnics became universities. Each university can establish its own selection system, most universities are members of the centralised Universities and Colleges Admissions Service, UCAS, system. There are three administrative units corresponding to England and Wales, Scotland, and Northern Ireland, which have autonomy to decide on grants, quality assurance and to implement university policies.

In total there are around 400 institutions across the UK. And a distance learning university that operates across the four nations. The degree structure followed by the Open University corresponds to the structure of England which, at university level, is equivalent to that of Wales and Northern Ireland.

Due to the size of the relative populations, the majority of OU students live in England. Therefore, within the tables in this report, we focus on this sub-cohort. The education system within England is summarised within Figure 4. Undergraduate bachelors degrees in England usually take 3 years of fulltime study to complete the required credit; usually 180 ECTS.

Figure 4. Education system in England



Source: Eurydice, 2019. See legend in the appendix.

2.2. Prices and Grants

2.2.1. Universities in Spain: the whole system in Catalunya and Universitat de València.

The university price policy is determined by each autonomous community. The price of the ECTS in Catalunya is between 20,42 and 22,80 euros, which results in an approximate price of the degree between 1300 and 1800 euros a year for a standard course of 60 credits in an on-site university (discounts applied depending on family income). The particularity is that when a student has to retake a subject, the price of the credit increases. So, a second time enrolled costs the

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original credit price multiplied by 1,24, third enrolment multiplies by 2,67 and subsequent ones by 3,71.

Distance university follows the same rules, except that it adds 12,85 € for every credit enrolled for the teaching and learning materials cost. On the other hand, there isn't any requirement for a minimum of credits for semester enrolled, so the students can choose to enrol into only one subject, if they want.

The ECTS cost in València is of 13,16 to 20 euros per credit, that results in a price between 900 and 1200 euros per year (two semesters). There is also an economic penalisation for retaking credits, so the second time one student enrols in a subject, the price is multiplied by 1,99, the third by 4,23 and subsequent enrolments by 5,64.

Different levels of the administration offer their own grants, therefore, there are grants at the level of the state, the autonomous communities and the universities themselves.

The Spanish grants are general grants depending on family income. They cover the price of enrolled credits and possible complements (aid for study, residence away from the family home, income, school material and academic excellence). After the first year, the retention of the grant depends on the student's performance. The requirement has changed in difficulty over the years, becoming stricter during conservative governments and more flexible during socialist governments.

The Catalan and Valencian government grants complete the free tuition fees by making the income thresholds for Spanish grants less demanding. The Valencian government also offers a wage grant to cover the missed opportunity of working. And since 2016, it also provides grants for finishing studies and to academic excellence.

Universities usually have grants on offer for unforeseen financial situations or personal circumstances. And the different agents provide grants for different concepts, such as mobility, language studies, acquisition of computer equipment, collaboration with university tasks, etc.

2.2.2. Universities in Portugal: Universidade do Porto and Universidade Aberta

At the Universidade do Porto, for bachelors and integrated masters, the yearly fee is about 700€. For masters it varies between 700€ to 2500€.

Students enrolled in undergraduate and integrated master's degrees at the University of Porto may apply for scholarships awarded by the University's Social Services (SASUP). These grants depend on family income. After the first year, the requirement to be eligible for a grant is that the student need to have had a minimum academic performance in the last academic year in which

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he/she was enrolled in higher education; and since he/she has been enrolled in higher education, to have had no more than two academic years without a minimum academic performance. Minimum academic performance is considered to happen when the student obtains a number of credits equal to, or higher, than that resulting from the calculation of the following expression: 0,4 x (Total number of Credits of the degree / Normal duration of the course in curricular years).

At the Universidade Aberta the price per ECTS is 11,61€, so as at the Universidade do Porto, the annual fee is about 700€ for full-time students. In the case of master's degrees, the tuition fee ranges between 2500€ and 4000€ (plus the application and registration fee, 45€ and 250€ respectively). UAb does not have integrated master's degrees and does not award scholarships for bachelor's or master's degrees.

2.2.3. University in France: Université de Bourgogne.

For the year 2020-2021 for in-person or on-line initial studies: 170 € registration fee for bachelor's degree + 92 € for the Student Life and Campus Contribution (CVEC), which is exempted for bursary holders.

For those in continuing education (who have exited the initial education system and re-enter to continue their education), tuition can often be much higher (approx. 900 euros or more per year) and depends on the program in question. Tuition fees for continuing education adult students differs between each specific degree and diploma and depends on whether it is in-person or on-line. Often, these fees are paid for by their employer or by Pôle Emploi (employment insurance for those who are unemployed).

Tuition fees at the *grandes ecoles* and other non-university institutions, are typically also much higher. There may be scales depending on parental income or scholarships available (for example, SciencePo).

There are grants based on parental (family) income for French students under the age of 28 in initial education (have not interrupted their studies for more than a year). This determines both whether they pay university fees and comprises a bursary for lodging and food, which varies according to the family's expenses and income level. These bursaries are given to approximately half of the students at Université de Bourgogne.

Thus, the grants are intended for young people in initial training, but are understood as a complement to the funding supplied by the family. The government makes it clear that the French Civil Code stipulates that parents must provide for their children, even when they are of age, as long as the latter are unable to meet their own needs.

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2.2.4. University in the UK: The Open University

Education within the United Kingdom is devolved to the four nations with each setting their own arrangements for funding higher education. In England, Wales and Northern Ireland undergraduate degrees usually take 3 years; in Scotland they generally take 4 years.

The Times Higher Education Supplement, THES[2], details the current cost of study within the UK. These costs are for students going to university conventionally from their compulsory school education. Residents of Scotland pay no tuition fee for their undergraduate study. In Northern Ireland, residents are charged up to £4,275. In Wales, this fee is up to £9,000, whilst in England it is a maximum of £9,250.

EU residents pay no tuition fee in Scotland. In Wales they pay up to £3,925.

Tuition fees at the Open University also vary by nation. In Scotland, most students do not pay for their study. For those that do, the fee is £6,444 for a degree. This equates to £2,148 per year for a three year degree. OU students in Northern Ireland are charged £6,444 for a degree and in Wales this is £7,848. In England, an OU degree costs £19,368, equivalent to £6,456 per year. Students in the EU would pay the same fee as those in England.[3]

Each nation has its own system of grants to support those that need financial assistance.

2.3. Entry and Progress Requirements

2.3.1. Universities in Spain: the whole system in Catalonia and Universitat de València.

University entrance requirements are the same for all public universities throughout Spain, and also for the Catalan distance university (UOC), although the autonomous communities manage the entrance exams and student admissions. Thus:

- Academic track (batxillerat) + Access exam (PAU)
- Professional track (CFGS) + Complementary exam, non compulsory
- Over 25 years + specific exam
- Over 45 years + specific exam
- Over 40 years + professional accreditation
- University studies completed

[2] https://www.timeshighereducation.com/student/advice/cost-studying-university-uk

[3] https:// www.open.ac.uk

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- University studies non completed with at least 30 validated credits

The sorting of students coming from academic and professional tracks is done on the basis of their entrance grades, which are the combination of the grades obtained during their studies at the high school and the result of the entrance exam.

The progress requirements, on the other hand, are much more diverse. Each university has its own regulations, which can differ in their selectivity.

In general, full-time students are required to enrol for a minimum of 60 credits in the first year (standard course), a requirement that is reduced by approximately half for part-time students. From the second year onwards, most universities reduce the number of minimum credits by requiring students to enrol for between 40% and 70% of a standard course. Within these parameters, some universities are more flexible and establish equivalent limits for part-time and full-time students. Others are very flexible, but only for part-time students.

With regard to minimum performance requirements, most universities require their full-time students to pass between 12 and 18 credits in the first year. The requirement drops by about half for part-time students. Some universities are less selective and spread these requirements over several years. Others are more selective and add requirements in terms of minimum time to pass sets of subjects in initial selective courses.

The consequence of not complying with the minimum number of credits required is that students must drop out of the degree course they are studying. In some universities, this is extended to the common course for different degrees, so that the student cannot enrol in any of the degrees for which the initial course constitutes the common course; however, s/he can re-enrol after a certain waiting period (normally one year).

In comparison with these parameters of the Catalan on-site university, the University of Valencia is located in the range of the most flexible. Specifically, full-time students must enrol for a minimum of 36 credits, part-time students for a minimum of 24 credits. First-year new students must pass a minimum of 12 credits. If they fail to do so, they will not be able to enrol in the same degree until two academic years have passed.

And even more flexible is the Catalan distance learning university, where the minimum enrolment for all students in any course is one subject (6 credits). The minimum that students must pass in the first year is 6 credits, and there is no requirement for the following years.

This flexibility is also reflected in the methodology, which allows all the tasks, including the exams, to be carried out using the university's platform, with its various applications, and by email.

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2.3.2. Universities in Portugal: Universidade do Porto and Universidade Aberta

In Portugal, access requirements are nationwide established:

- National Contest for Admissions to Higher Education (main access route to higher education). In this contest there are some vacancies allocated to students from the islands, Portuguese emigrants, military, and students with physical or sensory disabilities.

- Special Access Regime:

  - student from Portuguese-speaking African countries,
  - highly Competitive Athlete,
  - Portuguese officials of Portuguese diplomatic mission abroad and their families,
  - civil servants on official mission abroad,
  - foreign officials of diplomatic mission accredited in Portugal and their family members.

- Special contests:

  - Holders of technological specialization diplomas,
  - Over 23 years of age people.

The progress requirements in the University of Porto establishes that there are no prescriptions for the first two years. In order not to be expelled later, a student must accumulate, in the first 3 years of enrolment, at least 60 ECTS but, if he only accumulates 60 ECTS, he must continue his course with at least 50 ECTS per year. After one year has elapsed after the prescription, the student may re-enter only once. For part-time students ("TE equivalent" regime), the aforementioned minimum amounts are reduced by 50%.

At Universidade Aberta there are two study regimes. On the one hand, the full-time student regime in which the student enrols in all the curricular units foreseen in the study plan for that year. In this case the student is expected to complete the degree in 3 years. On the other hand, the part-time student regime in which the student is enrolled in part of the curricular units (maximum 60% of the curricular units). For this study regime the student is expected to complete the degree in 6 years, however, students may take more than 6 years to complete the degree without any implications.

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2.3.3. University in France: Université de Bourgogne.

In the French system, there is not an entrance exam, rather students apply to university if they have a high school baccalaureate or equivalent and complete application documents. However, some programs are selective, and candidates are chosen based on their high school grades and other documents, such as letters of motivation. Other programs are not selective, and students should be guaranteed a space, although perhaps not in their first-choice institution. Indeed, there is no selection at entry for the majority of university bachelor's programs. However, the specific application process has changed over time with the use of online platforms that are used at a national level to allow students to apply to university programs and universities to respond to these students. Nevertheless, not all programs and higher education institutions use these platforms (for example, the *grandes ecoles*).

The progress requirements are not based on the successful achievement of credits, but rather on passing sets of courses. For each bachelor's program, there is a relatively strict set of courses that students must take. Students must obtain a weighted average of 10 or more out of 20 on all their classes for the year in order to pass to the next year, with some exceptions.

(1) AJAC means "adjourned authorized to continue", this system allows a student who has only validated one semester of the year N to go on to year N+1, in which he/she will have to validate the two semesters of year N+1 and the one he/she is missing from year N. This is authorized on an individual basis.

(2) Students with a pedagogical accommodation (normally an elongated program), either because they are a high-level athlete or artist, employee, disabled, etc., or because they were accepted conditional on following this modified curriculum.

Each individual set of courses is definitively validated and capitalised into credits either by obtaining each of its constituent elements, or by compensation (overall weighted average of the constituent courses greater than or equal to 10 out of 20).

During the make-up session, the student retakes the subjects for which he/she did not obtain the average for each of the courses not validated. However, the possibility of repeating a year is not automatic in selective programs and is determined by an academic jury.

2.3.4. University in the United Kingdom: The Open University.

Universities in the UK each set their own entry requirements which can be course specific. These requirements often include minimum grades in previous exams or tariff points based on the sum total of these grades converted to a points system. Most universities require English and Mathematics passes at GCSE: the examinations commonly taken at age 16. Conventionally,

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there is an admissions process of applications, interviews, and offers which is geared towards school leavers. Where students' grades do not meet those required for their choice of institution, they can enter a clearing process, to ensure they are offered a suitable place at another university. This clearing process is managed by UCAS.

All UK higher education institutions have a responsibility to widen the access to undergraduate study by increasing the proportion of less represented demographic groups. In Scotland this is managed through the setting of two sets of admission requirements: minimum and standard. The minimum requirements are those relevant to widening access students. In Wales and England, there is an Access to HE diploma designed to provide an equivalent level of education to the English A-Levels and the Advanced Welsh Baccalaureate. Northern Ireland has its own Access to HE course.

In contrast to conventional universities, the Open University has no entry requirements. The university's mission is to be open to people, places, methods, and ideas. Students are able to study degree courses whatever their previous academic achievement. The OU also has its own Access modules, specifically designed to prepare students with low previous qualifications, lack of educational experience, or confidence for full university study.

There are no progress requirements to completing a degree at the Open University, other than the life of credit. Some degrees, for example in law and psychology have different time constraints usually imposed by professional bodies. In practice, the effective time constraint on most OU students is via the life of module credit in counting towards a qualification. This is set by default at 16 years. Therefore, 16 years after a student completed any module, they would not be able to count that credit against any qualification. As noted above, this limit is sometimes set lower for a small number of degrees. Having stated there are no progress requirements at the OU, there is at least one exception where progress in a mathematics degree is dependent on gaining a certain grade in one key module.

Students can therefore study at different rates and can change their individual rate of study each year. Sometimes taking several years break, perhaps for childcare. Students could study at the same rate as a conventional university and complete their degree in three years. Most OU students that complete, do so in around six years.

Although universities are able to generally assume all their undergraduate students are studying towards a degree, this cannot be completely assumed at the Open University. For years prior to the cohort in this study, funded students studied module by module at their own pace. No degree intention was necessarily assumed. This 2012/13 cohort was the first cohort under a new funding regime of student loans in England; administered through the Student Loans Company, SLC. Under this regime, students are required to declare to the SLC which degree they are studying

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towards as a condition for the loan. It is still possible to pay for modules oneself and therefore to study whichever modules and at whichever pace one chooses. As the OU's record of degree intention is self-reported, can contain more than one qualification and can be updated at any time, it is a valuable but incomplete record.

2.4. Social and Academic Composition of the cohorts

In order to carry out the analysis of the trajectories, we selected the 2012 cohort of students. This choice is due to the fact that in 2012 the reformed degrees in the framework of the European Higher Education Area have already been implemented in a generalised way. At the same time, choosing this cohort will give us a follow-up period of 7 years, which is long for three-year degrees, but necessary for the monitoring of students of online degrees, which follow a slower pace, and also for students of integrated master's degrees (Portugal), long special degrees (Medicine, etc.), or joint degrees.

The analysis is offered for universities participating in the Erasmus+ Complex Trajectories consortium. In the case of data from the Catalan university system, it is divided between the set of on-site universities, one particular on-site university and the distance learning university.

As an important element of context, we offer some indicators that will help us to identify the differences and similarities between university systems and institutions.

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Table 1. Social and academic indicators of the samples. Cohort 2012.

		Cohort 2012-13 Number	Female %	Under 25 years old %	Parent SES or level of studies %	Same nationality than HEI %	Directly from academic track %	Entry grade
On-line	**UOC**	7,376	51	20.6	--	97.6	--	--
	OU*	12,730	62.0	31.4	42.4	86.2	>=4.9**	--
On-line: degree in education	**UAb**	160	73.8	6.3	--	93.8	--	--
On-site: Single univers.	**UP**	5,431	53	91	--	97	72	--
	UB	5,206	55	98.5	High SES: 58	96	75	Good: 59%
	UV	11,911	61.7	82.5	Parents univ.: 38.2	86.2	54.2	Average (over 14): 8.16
	UAB	7,434	59.4	92.5	Parents univ.: 38.9	95.4	70.4	Average (over 14): 8.6
On-site: Catalan system		36,909	54.9	91.2	Parents univ.: 43.3	94.2	63.3	Average (over 14): 8.58

* The OU data are for the portion of the 2012/13 cohort that were studying in England and commenced their studies in the first semester of the academic year.

**The OU does not record whether students have come directly from an academic track. It seems likely that students entering aged 18/19 have come from school/college and this is the source of the figure included. There will be an additional proportion coming directly from studies elsewhere and this is unknown.

Table 1 shows that the biggest difference that can be observed between distance and on-campus universities is, of course, the much older age of students in the former. This is also reflected in the small number of students who probably come directly from the academic track. If we compare two of the online universities for which we have complete data, the UOC and the OU, we see that in the English case the profile is more female, a little younger and with a higher proportion of foreigners. UAb follows the same trend as the other online universities with a very small proportion of students under 25 years of age and a high percentage of females. However, we only have access to data for the degree in education and do not know the percentage of the entire cohort of the university.

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If we move on to compare the on-site universities with each other, the University of Valencia is where we find a greater degree of social diversity. There are fewer students with university parents (similar to the proportion in the UAB), more foreign students and a lower proportion of students from the academic track. On this last point, it is followed by the Catalan system, where students from the academic track do not dominate as much as at the University of Porto and the University of Bourgogne. The latter not only takes in students who are mostly traditional because three quarters of them come from the academic track, but also because almost all of them are under 25 years of age.

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3. Trajectories

3.1. Main trajectories: Sequence Analysis

In this section we present a series of charts showing the Sequence Analysis of the 2012 cohorts, in which it is possible to see what the cohort has done over the next seven years after enrolment (overall percentages for every academic year). As the students have entered for the first time to the studies in 2012, in this year we can see that all the people are in the same status, enrolled in the degree. From the second year onwards, they may be in more statuses: not enrolled in higher education, enrolled in a Bachelor's degree (or undergraduate degree), enrolled in a Master's Degree (or Graduate degree), or graduated. In the case of the OU, information is collected for each semester, not only on whether the student has enrolled, but also on whether the student has completed the module.

Figure 5. Sequence Analysis. Higher Education trajectories, Universitat Oberta de Catalunya (Catalan online university). 2012 cohort.

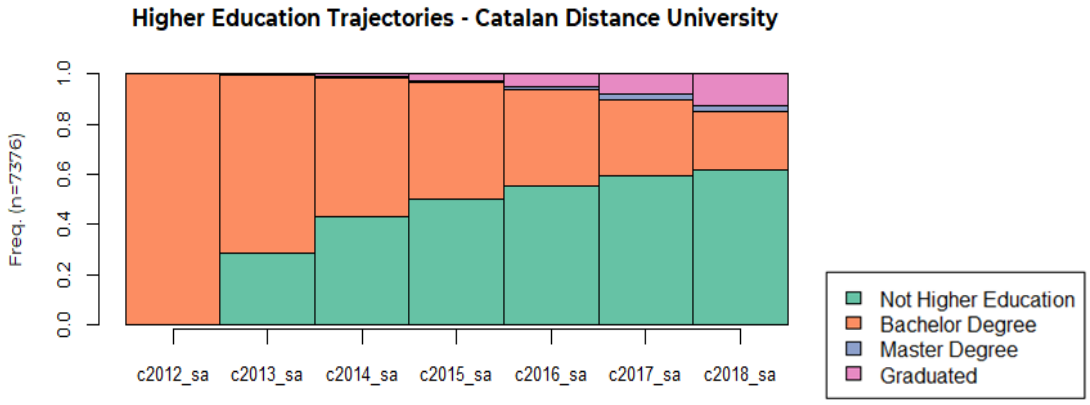

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Figure 6. Sequence analysis. Higher Education trajectories, Open University (UK), a distance university. Data includes only students starting in the first semester of 2012/13. The horizontal axis is semester.

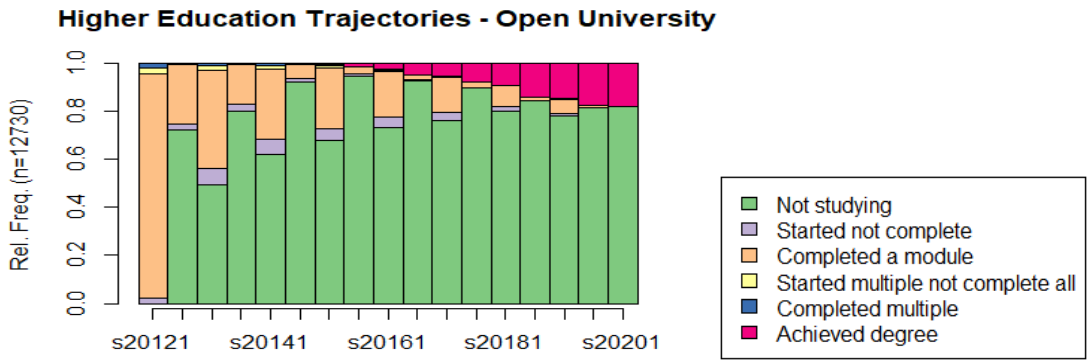
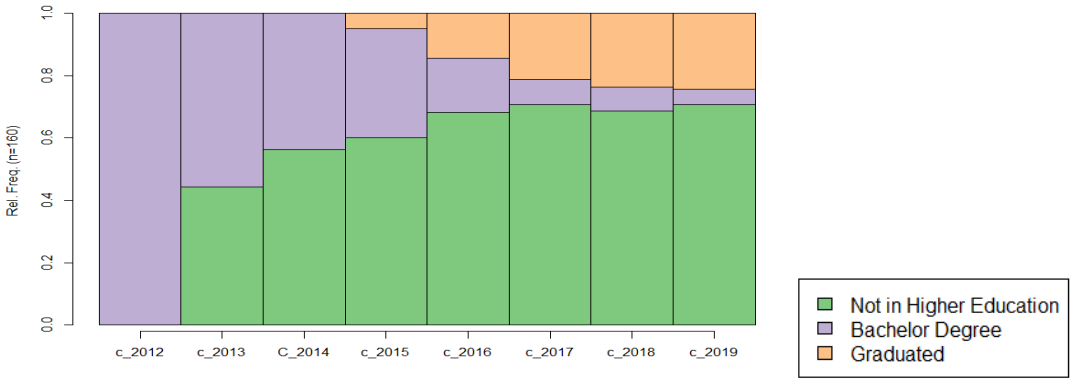


Figure 7. Sequence Analysis. Higher Education trajectories, Universidade Aberta (Portugal). On-line university. 2012 cohort.



Distance learning universities, as is well known, are characterised by the difficulty their students experience in completing their studies. This is a tendency that is also reflected in these three sequence analyses. The differences are due to the fact that a higher graduation rate is observed in England at the end of the period studied. However, it should be taken into account that in this country, the degrees are programmed in 3 years, whereas in Catalonia they are of 4 years. On the other hand, it should also be noted that the years recorded for the British case are 9, while

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only 7 years are recorded for the Catalan case. In Portugal, for the Bachelor's Degree in Education, we observe the same tendency, with sequences similar to those in Catalonia, although there is higher drop-out rates -there is no information on university degree changes- and no information on whether they are studying for a Master's degree.

In addition, the flexibility of distance learning universities makes it difficult for us to observe the phenomenon clearly. Indeed, that flexibility makes it hard to distinguish between a student taking a break from study and one who has stopped studying altogether. In addition, there may well be occasions where a student stops study believing they will not continue at any point, only to pick up their degree some years later. And, of course, the opposite will be true for some other students.

For instance, at least one OU student took over forty years to complete their degree. This would no longer be possible as degrees need to be completed within 16 years, and some in fewer. So, if students take longer than 16 years for their studies, they lose the credit that is older than this. However, the chart in Figure 6 shows large proportions of students not studying from the second semester onward. From the pattern, it is clear the majority of these do not return to study within the period spanned by the data.

Figure 8. Sequence Analysis. Higher Education trajectories, University of Porto. 2012 cohort.

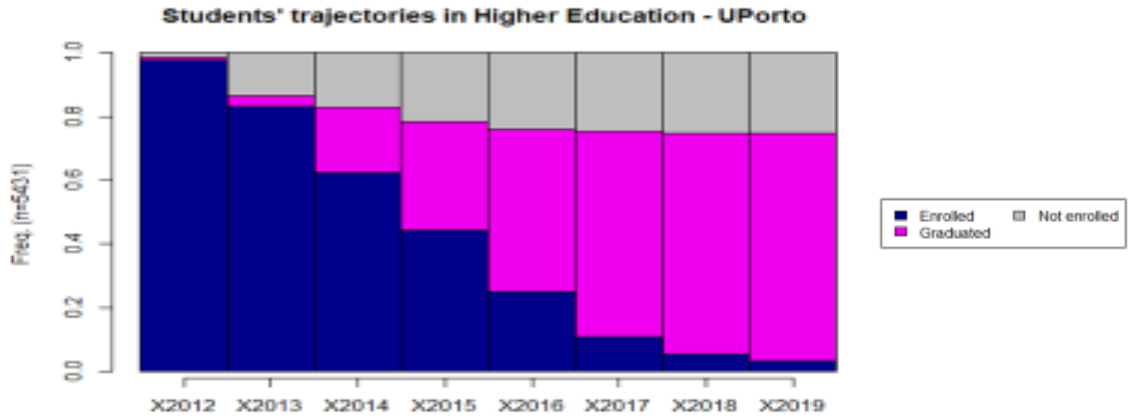

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Figure 9. Sequence Analysis. Higher Education trajectories, University of Burgundy. 2012 cohort.

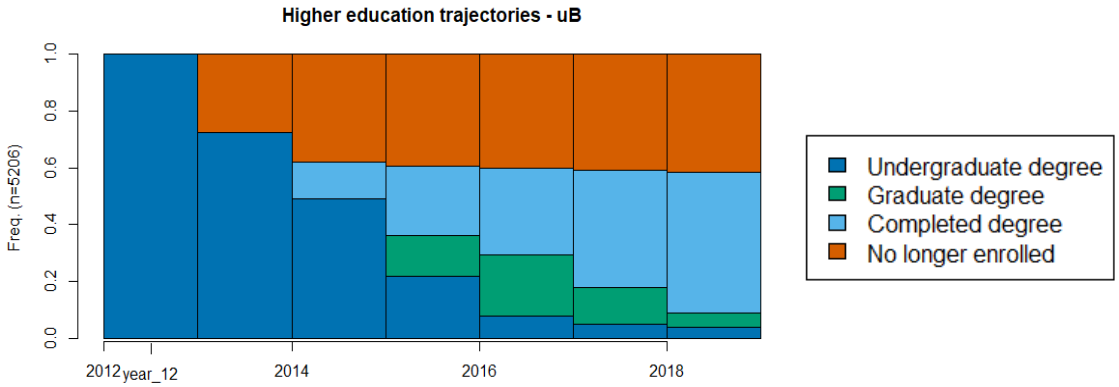

Figure 10. Sequence Analysis. Higher Education trajectories, University of Valencia. 2012 cohort.

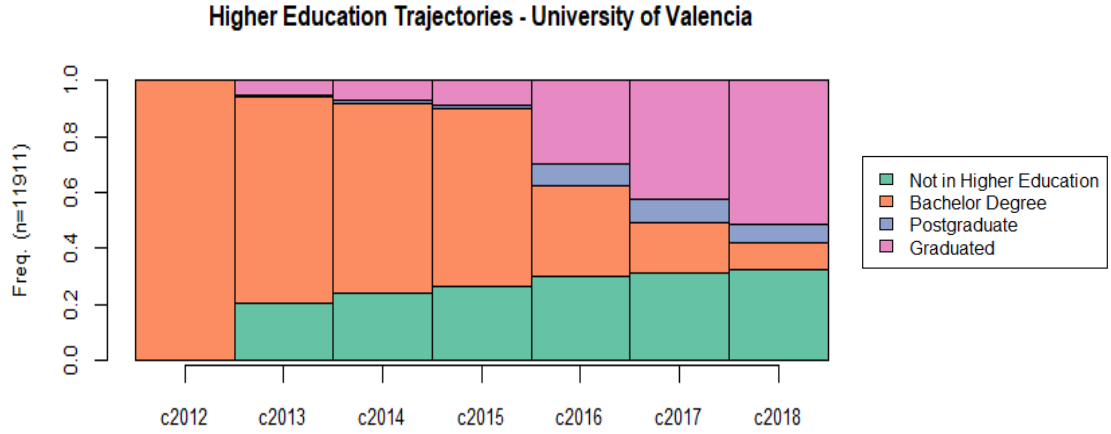

Figure 11. Sequence Analysis. Higher Education trajectories, Autonomous University of Barcelona. 2012 cohort.

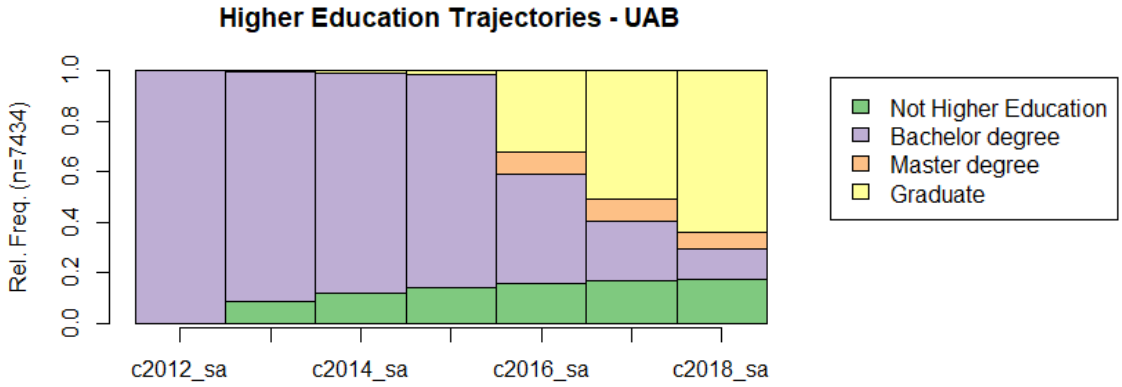

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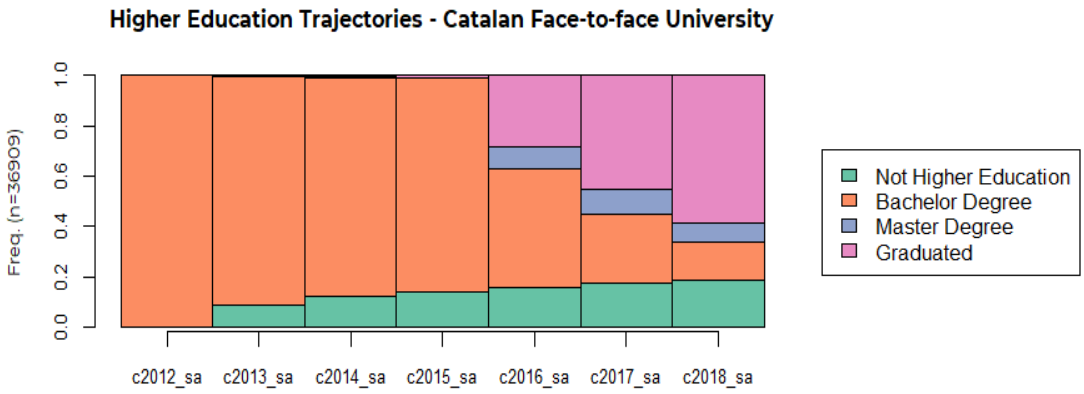
Figure 12. Sequence Analysis. Higher Education trajectories, Catalan onsite universities. 2012 cohort.



It is worth reminding that the standard duration of the degrees in Spain is 4 years, while in France and Portugal it is 3 years, with the exception in the latter country of what are called integrated masters, which are 5-year programmes that include the bachelor's and master's degrees.

Thus, the main feature of our comparison is that at UP and UB there is a very fast pace of transition through university, while at UV and the Catalan on-site universities there is a much slower pace, which extends beyond the usual 4 years.

To be specific, in 2014 the UB already had 50% of the cohort not enrolled, which represents 40% in the case of the UP for the same year. At the end of the period, very few people from both universities are still enrolled in the degree, so, as we said, the rate of transition is similarly fast, although the graduation rates at the UP are higher.

In the UV, UAB and generally in the face-to-face university in Catalonia, students are much slower, but, on the other hand, the drop-out rates at the end of the period in Catalonia are lower and at the UV they are between those of the UP and the UB.

3.2. Main trajectory indicators

As complementary results to the visual representation of the sequence analysis, we offer a series of indicators referring to various aspects of the trajectories followed by the students.

Within the framework of this project, we consider that a trajectory is complex when there has been a drop-out, some kind of change (of degree, university or online/onsite modality), or a delay

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beyond the institutionally established time plus one year (t+1). However, we have not been able to apply the latter reference to distance learning universities. This is because there is no established timeframe from the point of view of the institution and it is difficult to establish what the expected reference time is. Doubling the time stipulated by on-site universities seems a good empirical reference, but there is still the problem of deciding on which population to calculate it, because we do not know how many students have dropped out or how many are doing a stop-out (a fairly common option among this type of student).

First-year dropouts include all those people who, after having enrolled in the 2012 academic year, do not enrol the following year or any other year of the following 7 academic courses. On the other hand, total dropout refers to people who, at the end of the study period (or during the three last academic years for the OU), have not obtained a degree and are not studying. Note that this last category does not include students who have stopped their studies for any number of years if they eventually re-enrolled.

Change of degree includes people who, at some point, have changed their first-year enrolment option. Persistence means that, at the end of the period considered (or in the two last semesters for the OU), the student is enrolled in a degree. Finally, access to a master's degree includes enrolment in a master's degree programme or any other postgraduate programme.

Table 2. Trajectory indicators. Cohort 2012.

		Complex Trajectories (other than t+1) %	1st year drop-out %	Total drop-out %	Change of degree %	Persistence %	Access to Master's degree %
On-line	**UOC**		23.6	62.4	10.4	19.3	4.4
	OU		39.9	58.3	20.5	0.6	--*
On-line: degree in education	**UAb**		44.4	70.6	--	5	--*
On-site: Single universities	**UP**	43.3	11.5	25.4	9.2	2.5	44.4
	UB	57.8	25	41.4	20	0.5	27.9
	UV	48.6	18.9	29.5	8.8	6.3	13.6
	UAB	56.1	6	17.7	18.4	6.5	17.8
On-site: Catalan system		61.6	6.3	19.1	21.2	8	18.4

*this detail is not contained in the OU and Uab datasets.

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As mentioned above, the particular characteristics of distance learning, together with the characteristics of the students who study there, result in higher drop-out rates than in face-to-face universities. The analysis of sequences show that this dropout occurs earlier in the trajectory of English and Portuguese students than in that of Catalan students. There is also a greater component of change among OU students. In both cases, the record of between seven and nine years is short in order to observe the more complex trajectories, those who make long stop-outs, or those who persist for a long period of time studying. As for UAb, it is worth mentioning that the drop-out rate is higher than the real rate, as there is no data on students who change studies.

The UB also has a high proportion of students who drop out, but with a radically different trajectory pattern. At the UB, it seems that students make decisions very quickly, so that change and abandonment are common trajectories, and this increases the number of students in complex trajectories. However, the percentage of students who go on to postgraduate studies is very high.

Access to Master's programmes is very well established in the UP and, in general, is very high, except in the case of the online university. Again, seven years for a cohort of distance learning students is not enough time to see what access to the postgraduate level is like in the end.

Both in the single Catalan university and in the system as a whole, we can see that this is where there is less drop-out and more change, which is the opposite trend to the rest, where drop-out outweighs change. We can see that, although we have taken the UAB because it is a fairly central university, in the sense of being representative of the whole system, the simple fact of considering the students who change institutions as a change, and not as a drop-out, means that the percentage of change in the system is automatically higher.

3.3. Indicators by particular populations

In the following sections we present the same trajectory indicators divided according to different independent variables of a social and academic nature that are explored as a cause of the differences in the results.

3.3.1. Indicators by sex

First of all, we show the indicators divided by gender. In general, the indicators of academic achievement favour girls, so we expect that in the case of trajectories, both the indicators of completing and continuing studies are higher for girls. In contrast, the indicators of change have been much less explored and no previous hypotheses have been established.

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Table 3. Trajectory indicators by sex. Cohort 2012.

			Complex Traject. (other than t+1) %	1st year drop-out %	Total drop-out %	Change of degree %	Persist. %	Access to Master's degree %
On-line	**UOC**	Men		23.3	62.5	11.3	18.7	4.8
		Women		24	62.7	9	19.9	3.9
	OU	Men		39.9	60.5	17.2	0.6	--
		Women		37.8	56.9	23.7	0.6	--
On-line: degree in education	**UAb**	Men		50.0	78.6	--	0.0	--
		Women		42.4	67.8	--	6.8	--
On-site: Single universities	**UP**	Men	51.5	12.3	30.0	11.1	3.2	52.3
		Women	36.2	10.8	21.4	7.6	1.9	37.5
	UB	Men	58	25	42	20	0	24
		Women	58	25	41	20	1	31
	UV	Men	54.4	18.9	32.0	9.9	8.1	14.5
		Women	44.8	19	27.9	8.1	5.3	13.1
	UAB	Men	65.8	7.3	23.4	21.8	8.5	18.4
		Women	49.6	5	13.7	16.1	5.1	17.4
On-site: Catalan system		Men	71.1	7.3	23.4	24.7	10.5	18.1
		Women	53.9	5.4	15.4	18.3	5.9	18.6

In on-site universities, the pattern of gender differences is broadly the same as expected, except in the case of the UB, where the proportion of men's and women's complex trajectories is the same.

In the situation of drop-out and persistence we also find a higher proportion of men for all universities, except in the cases of the UOC and the UB, which present very similar indicators, as is also the case for the UV in the case of first-year dropout.

From the observation of the data, we can see that the change of studies is more common in the case of men, adding a degree of complexity to their trajectories for this reason. The exception, once again, is the University of Burgundy, where the proportions are identical, and, notably, the Open University, where change is much more common among women than among men.

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Access to master's degrees is maintained in similar percentages between men and women at Spanish universities, while at the UP the majority of students are men, while at the UB it is women who present much higher percentages.

3.3.2. Indicators by age

Mature students, who are considered non-traditional students at university, tend to have greater difficulties in following and completing their studies. Therefore, all the indicators associated with dropout, delay and complexity are expected to be higher for students aged over 25. However, changing studies brings with it an associated meaning of "trying again" having "lost time", which, in the case of mature students, we expect to be an option that is not as considered as in the case of younger students. In the same sense, access to a Master's degree is an option that involves an investment of time that older students may see as a "luxury".

Table 4. Trajectory indicators by age. Cohort 2012.

			Complex Traject. (other than t+1) %	1st year drop-out %	Total drop-out %	Change of degree %	Persist. %	Access to Master's degree %
On-line	**UOC**	Up to 25		21.3	54.2	19.2	20.5	6.5
		25 +		24.2	64.5	8.1	19	3.9
	OU	Up to 25		38.3	57.6	18.0	0.6	--
		25 +		38.8	58.6	22.7	0.6	--
On-line: degree in education	**UAb**	Up to 25*		40.0	90.0	--	10.0	--
		25 +		44.7	69.3	--	4.7	--
On-site: Single universities	**UP**	Up to 25	41.2	9.7	23.0	9.7	2.4	44.5
		25 +	64.7	30.3	50.5	4.3	3.9	43.5
	UB	Up to 25	58	25	41	20	1	28
		25 +	70	51	65	8	0	14
	UV	Up to 25	47.5	18	27.6	9.5	6.2	15.0
		25 +	53.4	23.6	38.5	5.7	7.1	7.1
	UAB	Up to 25	54.8	5	15.9	18.7	6.3	18.8
		25 +	72.2	17.4	38.4	15.1	8.6	5.9
On-site: Catalan system		Up to 25	45.6	5.2	16.9	22	7.8	19.5
		25 +	62.8	17.3	40.7	13.1	9.9	6.9

* The UAb data have a small sample of students “Up to 25”.

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In general, as was expected, older students present higher levels of complexity, except for the option of opening up the opportunity (and the risk) of change; they also access Master's degrees to a lesser degree.

There are a few exceptions to this trend. For example, at the OU we observe that there is practically no difference according to age and, if anything, the change occurs more frequently in the case of older students. Also, persistence at the UOC and the UB differs very little according to age. Therefore, we can think that, although the profile of distance learning university students has become younger in recent years, it seems that the trajectories of this profile in this online context are also of a complex nature.

The other exception is the UP, where access to Master's programmes is very similar for young and older students.

3.3.3. Indicators by parental social background

Social background is a variable that we cannot use for some of the institutions under study because there is not always enough response from students. Also, it should be noted that the variable is specified as level of studies for Catalan and Valencian universities, while it is socio-economic status for the French university. The OU maintains a record of the self-declared background of its students both in terms of socio economic status, SES, and previous educational qualification, PEQ.

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Table 5. Trajectory indicators by social background. Cohort 2012.

			Complex Traject. (other than t+1) %	1st year drop-out %	Total drop-out %	Change of degree %	Persist. %	Access to Master's degree %
On-line	**UOC**	Non-uni.		--	--	--	--	--
		Univers.		--	--	--	--	--
	OU	Low SES/ PEQ		43.4	64.3	23.0	0.6	--
		Not low SES/ PEQ		35.1	53.9	20.0	0.6	--
On-line: degree in education	**UAb**	Low SES/ PEQ		--	--	--	--	--
		Not low SES/ PEQ		--	--	--	--	--
On-site: Single universities	**UP**	Non-univ.	--	--	--	--	--	--
		Univers.	--	--	--	--	--	--
	UB	Low SES	61	28	46	20	0	25
		High SES	55	22	37	20	1	30
	UV	Non-univ.	47.4	17.3	27.8	8.6	6.4	14.7
		Univers.	50.4	21.7	32.2	9.2	6.3	11.9
	UAB	Non-univ.	56	6.1	19	17.3	6.6	17.1
		Univers.	54.8	5.3	14.8	20	6.2	19.5
On-site: Catalan system		Non-univ.	46.9	6.6	20.4	19.7	8.4	19.7
		Univers.	46.5	4.9	15.4	24	7.7	24

In the Catalan university system the difference between those who follow complex trajectories according to their parents' studies is very small, although the internal differences are of interest. Those from lower social backgrounds drop out more while they have less access to the second chance and the assumption of risk implied by changing studies. The continuation of studies

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through access to a Master's degree is also lower for the children of non-university students in both modalities.

The UB follows a similar pattern, although in this case there is no difference in the proportion of students from different SES who change studies.

In the case of Valencia, the trends are reversed: students from families with university studies are those with the highest percentage of complex trajectories. The same happens in the case of dropout trajectories (in the first year and in the whole period) where the children of parents with university studies are more present. As for access to Master's degrees, it is also lower for children of university family background.

The OU follows a very particular pattern, because we see more drop-out for those with low SES/PEQ, but we also see more change in the degree intention.

3.3.4. Indicators by nationality

The trajectory indicators are shown below according to whether or not the student has the same nationality as the institution where he/she is studying. In general, the participation of foreign students in the university at undergraduate level is very small (see Table 1 above), but, as we work with a large number of students, it is possible to analyse the trajectories that are the most followed by them.

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Table 6. Trajectory indicators by nationality. Cohort 2012.

			Complex Traject. (other than t+1) %	1st year drop-out %	Total drop-out %	Change of degree %	Persist. %	Access to Master's degree %
On-line	**UOC**	Spanish		23.4	62.2	10.4	19.4	4.4
		Non-Sp.		29 6	72.1	10.6	17 3	3.4
	OU	UK		35.6	56.3	22.2	0.6	--
		Non-UK		57.5	70.6	15.3	0.4	--
On-line: degree in education	**UAb**	Portug.		43.3	69.3	--	5.3	--
		Non-Pt.*		60.0	90.0	--	0.0	--
On-site: Single universities	**UP**	Portug.	42.9	11.0	24.6	9.3	2.6	45.2
		Non-Pt.	57.7	27.4	50.0	7.1	1.8	21.4
	UB	French	57	25	41	20	1	28
		Non-Fr.	66	35	55	17	0	21
	UV	Spanish	42.3	9.4	21.1	9.7	7.0	15.3
		Non-Sp.	87.8	78.8	81.8	3	2.2	3.4
	UAB	Spanish	55.4	5.3	16.5	18.5	6.5	18.2
		Non-Sp.	71.2	19.7	42.1	15.9	5	8.8
On-site: Catalan system		Spanish	46.7	5.6	17.9	21.7	8.1	19.1
		Non-Sp.	54	17.6	36.8	13	5.9	7.4

* The UAb data have a small sample of non-Portuguese students.

The complex trajectory is much more widely followed by foreign students in each country. This seems to be due to the higher dropout rates found among these students, with particularly high differences in the case of the UV. However, the persistence trajectory, which would mean the option of continuing to try, or the change trajectory, which implies the attempt to try again by changing course, is much more common among local students.

At the distance learning university, the differences go in the same direction, except for the UOC, where they are smaller or even disappear in the case of the transfer trajectory.

Thus, the complex trajectory is followed much more frequently by foreign students, but not because they opt to change or extend the time spent on the degree programme when they experience difficulties, but because dropping out is much more frequent.

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3.3.5. Indicators by entry grades

The access mark is the academic indicator we use for this report. Unfortunately, it is not available for either of the two distance learning universities we are studying.

Although the scoring systems for access grades in the various countries and institutions we consider are different, based on the classification of grades into quartiles, we have selected the indicators corresponding to the two extreme quartiles of the grade range.

Table 7. Trajectory indicators by entry grades: Lowest - 1st quartile vs Highest - 4th quartile. Cohort 2012.

			Complex Traject. (other than t+1) %	1st year drop-out %	Total drop-out %	Change of degree %	Persist. %	Access to Master's degree %
On-line	**UOC**	Lowest	-	-	-	-	-	-
		Highest	-	-	-	-	-	-
	OU	Lowest	-	-	-	-	-	-
		Highest	-	-	-	-	-	-
On-line: degree in education	**UAb**	Lowest	-	-	-	-	-	-
		Highest	-	-	-	-	-	-
On-site: Single universities	**UP**	Lowest	54.0	19.9	37.9	10.8	1.0	23.6
		Highest	26.6	6.2	11.5	7.7	0.7	74.8
	UB	Lowest	64	29	51	18	1	24
		Highest	41	16	25	17	1	43
	UV	Lowest	77.5	56	66.4	7.2	4.9	6
		Highest	22.7	4.4	12.9	11.1	5	18.8
	UAB	Lowest	71.8	9.8	28.7	23.2	10.1	11.3
		Highest	36.5	1.9	5.6	14.3	2.6	25.3
On-site: Catalan system		Lowest	62	10.3	19.7	24.6	11.4	11.4
		Highest	31.5	2.3	5.5	17	5.1	26.6

We observe that this is one of the variables that gives the most extreme differences in the trajectory indicators used. Students who enter with lower entry grades have much more frequent complex careers, which are basically due to the drop-out rates.

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There is also less persistence at the end of the period for students with higher grades, but here we find the exception of the UV and the UB, where the percentages are the same for both extremes of entry grades.

The change of degree is less frequent for students with higher grades, with the exception of the UV. Thus, in this university we would find a pattern similar to that seen in some cases for variables of a social nature. While those with higher grades would drop out less, they would also take more risky trajectories leading to change of degree.

Finally, access to the Master's level is much more frequent among students with good entry grades, and the difference is particularly marked in the case of the UP.

3.4. Compensatory advantage on choosing between options. Catalan system.

In this last section we address a specific analysis in order to examine in some detail the question of how trajectories are related to the educational opportunities that students may have and, therefore, to the equity of the system. Specifically, we examine the combined influence of academic achievement and social background variables on the trajectories followed. We do so only for the case of the Catalan on-site system, which is the one for which we have the complete data to carry out this analysis.

First, we divide the population of students according to the number of credits they have achieved at the end of the first academic year. Next, we consider whether any of their parents have university studies. Finally, we prioritise some of the situations during the student's time at university in order to classify him/her exclusively in one of the possible trajectories considered: if the student has changed at any point in the trajectory, it is considered a change; if the student has been enrolled for more than the stipulated time plus 1, without having graduated, it is considered a delay; if the student is not in any of the previous categories and has dropped out, it is considered a dropout; and if the student has not passed through any of the previous categories, it is considered non-complex.

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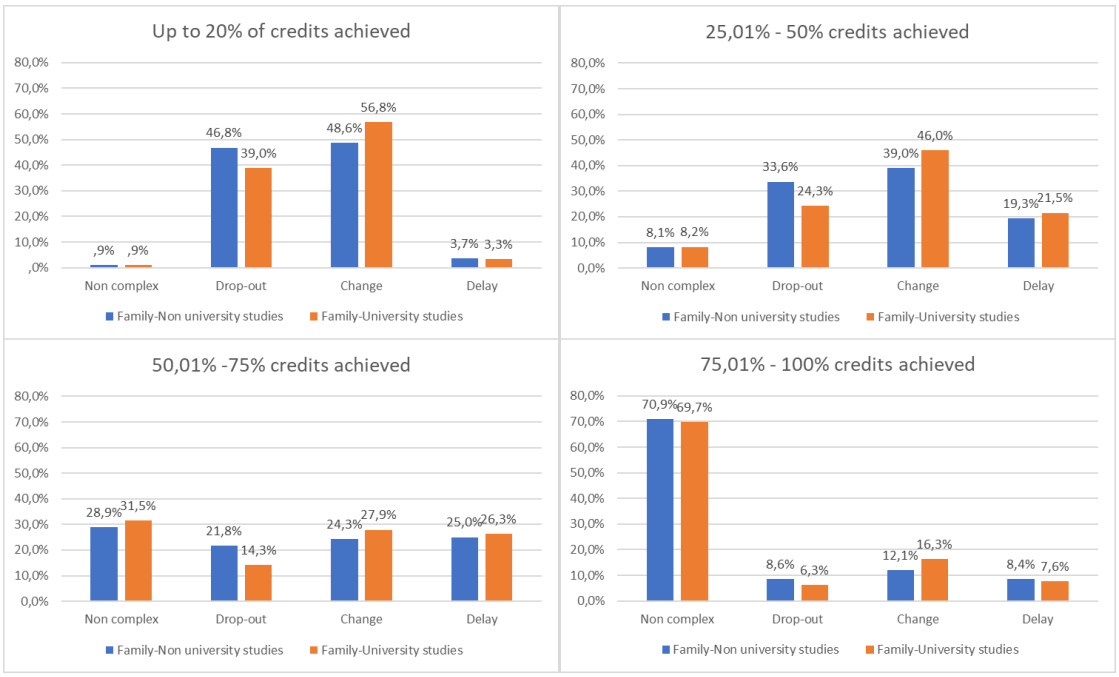
Figure 13. Trajectory by academic performance and family level of education.



A detailed observation of the charts shown in Figure 13 allows us to say that the variable of academic achievement is the most relevant when it comes to explaining the majority of trajectories presented by students. We see that, irrespective of their social background, when there is poor performance, the main options are to drop out and change. As performance improves, non-complex and delay trajectories are gaining students, so that when performance is between half and 75% it seems that there is no clearly dominant trajectory, anything is possible. And when academic performance is good, the trajectory of non-complexity is clearly the norm, although a certain amount of change can still be found.

With regard to the interaction between variables, we can observe that, at all levels of academic performance, but especially when performance is not the best of all, students with non-university parents choose the option of dropping out more than those with university parents, while the latter choose the option of changing more than the former. It is this result of the interaction that tells us that we detect a compensatory advantage in the trajectories followed by the students. This is because, in the face of poor performance, the family from a higher social background compensates for the difficulty and offers the son or daughter the possibility of changing degree, of trying it again. On the other hand, students from lower social backgrounds do not often have this opportunity, and when there is no second chance available, the only option left is to drop out.

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4. Conclusions

In this report we have presented both, on the one hand, the normative framework that different institutions of higher education establish as pathways for their students and, on the other hand, the description of the trajectories that students follow within these institutions. Thus, in a way, it is possible to observe the differences, often divergences, between the institutional logic and the students' logics.

Students' trajectories are differentiated according to various personal and institutional characteristics. It is for this reason that we have presented these differences in terms of the various elements of inequality in each of the contexts analysed.

However, generalisations are difficult to make because the contexts are very different and because sometimes the patterns of inequality take different forms. An interesting example is how, between two of the distance learning universities analysed for which we have the entire cohort data – OU and UOC-, we see that OU students show a significantly higher dropout rate in the first year, while the overall dropout rate is broadly similar.

Thus, inequalities are usually reflected in the expected sense, but it is often necessary to look at the data in more detail, also thinking about the context, or to use complementary analyses that can uncover new patterns of inequality.

In this sense, there is still a way to go in the work of exploring other forms of inequality in the trajectories that could be specific to each context. In particular, we have observed that on-line universities follow their own processes and logics that deserve more detailed comparative analyses, more focused on their own references and contexts.

5. References

Abad Esteve, F., & Àlvarez Ramos, C. (2019). Abandono universitario: revisión del tipo, del cálculo y de su alcance. *Índice*, 32–35.

Bohonnek, A., Camilleri, A. F., Griga, D., Mühleck, K., Micklavic, K., & Orr, D. (2010). *Evolving diversity. An overview of equitable access to HE in Europe.* The EQUNET Consortium. https://www.eurostudent.eu/download_files/documents/Evolving_Diversity.pdf

Boylan, R. L. (2020). Predicting Postsecondary Pathways : The Effect of Social Background and Academic Factors on Routes through School. *Socius: Sociological Research for a Dynamic World*, *6*, 1–25. https://doi.org/10.1177/2378023119895174

Brennan, J. (2021). *Flexible Learning Pathways in British Higher Education: a decentralised and*

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market-based system. IIEP-UNESCO. Quality Assurance Agency for Higher Education.

Charles, N. (2015). *Enseignement Supérieur et Justice Sociale: Sociologie Des Expériences Étudiantes En Europe*. La documentation Française.

Charles, N. (2016). Les étudiants français à la vitesse TGV. L'individualisation des parcours d'études à l'aune des cas anglais et suédois. In *OVE Infos* (No. 31; Halshs-02571782). https://halshs.archives-ouvertes.fr/halshs-02571782

Chevalier, T. (2016). Varieties of youth welfare citizenship: Towards a two-dimension typology. *Journal of European Social Policy*, *26*(1), 3–19. https://doi.org/10.1177/0958928715621710

Chevalier, T. (2017). Social Citizenship of Young People in Europe: A Comparative Institutional Analysis. *Journal of Comparative Policy Analysis: Research and Practice*, *20*(3), 304–323. https://doi.org/10.1080/13876988.2017.1320160

Denice, P. (2019). Trajectories through postsecondary education and students' life course transitions. *Social Science Research*, *80*(January), 243–260. https://doi.org/10.1016/j.ssresearch.2019.02.005

Doray, P., & Murdoch, J. (2010). Nouveaux étudiants, nouveaux parcours? La présence étudiante dans l'enseignement postsecondaire. *Education et Societes*, *26*(2), 5–12. https://doi.org/10.3917/es.026.0005

European Education and Culture Executive Agency, Eurydice, *The structure of the European education systems 2018/19: schematic diagrams*, European Commission, 2019, https://data.europa.eu/doi/10.2797/302115

Figuera-Gazo, P., Torrado-Fonseca, Mercedes Llanes-Ordóñez, J., & Romero-Rodríguez, S. (2020). Equity and Course Advancement in University Students: The Case of Business Administration and Management. In B. Malik-Liévano, B. Álvarez-González, M. F. Sánchez-García, & B. A. Irving (Eds.), *International Perspectives on Research in Educational and Career Guidance* (Issue January). Springer. https://doi.org/10.1007/978-3-030-26135-1

Haas, C., & Hadjar, A. (2019). Students' trajectories through higher education: a review of quantitative research. *Higher Education*.

Helland, H., & Hovdhaugen, E. (2021). Degree completion in short professional courses: does family background matter? *Journal of Further and Higher Education*, *00*(00), 1–15. https://doi.org/10.1080/0309877x.2021.1998394

Herbaut, E. (2020). Overcoming failure in higher education: Social inequalities and compensatory advantage in dropout patterns. *Acta Sociologica (United Kingdom)*.

Co-funded by the Erasmus+ Programme of the European Union

https://doi.org/10.1177/0001699320920916

Hovdhaugen, E. (2011). Do structured study programmes lead to lower rates of dropout and student transfer from university? *Irish Educational Studies*, *30*(2), 237–251. https://doi.org/10.1080/03323315.2011.569143

Kamanzi, P. C., Doray, P., Bonin, S., Groleau, A., & Murdoch, J. (2010). CSSHE Les étudiants de première génération dans les universités : l ' accès et la persévérance aux études au Canada 1. *Canadian Journal of Higher Education*, *40*(3).

Orr, D. (2010). Integrating an aging student population into higher education – challenges for evidence-based policy in Europe. *Canadian Journal of Higher Education*, *40*(3), 25–42. https://doi.org/10.47678/cjhe.v40i3.2013

Picard, F., Trottier, C., & Doray, P. (2011). Conceptualiser les parcours scolaires à l'enseignement supérieur. *Orientation Scolaire et Professionnelle*, *40*(3). https://doi.org/10.4000/osp.3531

Sánchez-Gelabert, A. (2020). Non-traditional students, university trajectories, and higher education institutions: A comparative analysis of face-to-face and online universities. *Studia Paedagogica*, *25*(4), 51–72. https://doi.org/10.5817/SP2020-4-3

Sanchez-Gelabert, A., & Elias, M. (2017). Los estudiantes universitarios no tradicionales y el abandono de los estudios. *Estudios Sobre Educación*, *32*(0), 27–48. https://doi.org/10.15581/004.32.27-48

Sánchez-Gelabert, A., Valente, R., & Duart, J. M. (2020). Profiles of online students and the impact of their university experience. *International Review of Research in Open and Distance Learning*, *21*(3), 230–249. https://doi.org/10.19173/irrodl.v21i3.4784

Tieben, N. (2020). Non-completion, Transfer, and Dropout of Traditional and Non-traditional Students in Germany. *Research in Higher Education*, *61*(1), 117–141. https://doi.org/10.1007/s11162-019-09553-z

Tinto, V. (2017). Through the Eyes of Students. *Journal of College Student Retention: Research, Theory and Practice*, *19*(3), 254–269. https://doi.org/10.1177/1521025115621917

Van de Velde, C. (2007). Devenir adulte: quatre modèles européens. *Agora Débats/Jeunesses*, *45*, 22–31.

Villar Aguilés, A., Hernàndez i Dobon, F. J., & García-Ros, R. (2017). Reubicándose en la universidad. Propuesta de reubicaciones a partir de un estudio de trayectorias educativas. *RELIEVE - Revista Electronica de Investigacion y Evaluacion Educativa*, *23*(1). https://doi.org/10.7203/relieve.23.1.9059

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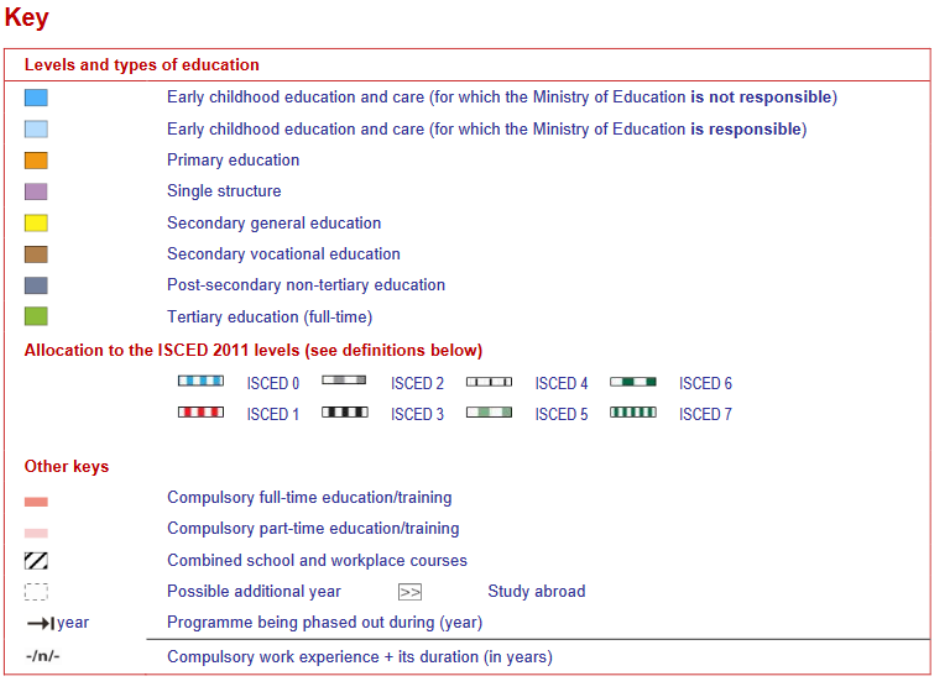
6. Appendix

Legend for the figures of education systems (Eurydice, 2019):



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