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Dropout and Completion in Higher Education in Europe

Main Report

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Dropout and Completion in Higher Education in Europe

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Executive Summary

In the Europe 2020 strategy, one of the goals is to have at least 40% of 30-34–year-olds complete higher education. Reducing dropout and increasing completion rates in higher education is one of the key strategies for achieving this goal, which is regarded as crucial for creating the high-level skills that Europe's knowledge-intensive economic sectors need as well as for Europe's capacity to innovate and foster productivity and social justice. Related to this challenge, this report addresses a comparative study on higher education dropout and completion in Europe (HEDOCE). It is based on an extensive review of literature and policy documents on study success in higher education, a Europe-wide survey of national higher education experts and eight in-depth country case studies. The main aims of the study are 1) to make an inventory of policies and developments in study success in 35 European countries; and 2) to explore the available evidence of the effectiveness of policies and good practices in addressing study success on the country-level as well as the institutional level.

Key findings

Study success is an important issue on the European policy agenda

The HEDOCE study found that study success is regarded as important in three quarters of the 35 European countries surveyed. In almost half of the countries it is high or very high on the policy agenda (see table below).

Importance of study success	Countries
Very high or high on the agenda	Denmark, England, Estonia, Finland, Flanders (Belgium), France, Greece, Hungary, Italy, Former Yugoslav Republic of Macedonia, Malta, Netherlands, Norway, Serbia, Slovenia, Sweden
On the agenda	Austria, Croatia, Czech Republic, Germany, Ireland, Luxembourg, Montenegro, Poland, Portugal, Romania, Spain, Switzerland
No or little relevance	Bulgaria, Cyprus, Iceland, Latvia, Lithuania, Slovak Republic, Turkey

Source: Reporting from national experts.

The definition of study success varies across countries in Europe

National governments and higher education institutions use different orientations to guide their policy-making with respect to study success:

- **Completion**: to have students successfully complete their study programme with a degree.
- **Time-to-degree**: to have students complete their study programme within a reasonable time period.
- **Retention or dropout**: the aim to have students re-enrol in a study programme until they complete their degree and to reduce the likelihood they drop out before completing their programme.

To monitor the situation with respect to each of these orientations, various indicators are used at national and institutional levels. Depending on their orientation and policy focus, governments and higher education institutions employ different definitions for each of these phenomena. For example, many countries regard completion within the nominal (stipulated) study period plus one extra year as an indication of study success. Realising that the transition from the first to the second year of study is a crucial step in students' educational pathway, other countries focus on retention (or dropout) during the first year in higher education.

There is great variety in the funding, information and organisational measures facilitating study success in Europe

There is great variety in the policy instruments countries use to increase study success. Across Europe, over 170 national and institutional policy instruments have been identified in 35 countries. These may be grouped into 22 typical policies falling under three main policy headings:

- **Funding and financial incentives:** Financial rewards or sanctions to change the behaviour of students and/or institutions towards study success.
- **Information and support for students:** The provision of information and any other kinds of (non-financial) support to (prospective) students by national organisations or higher education institutions in order to improve their decision-making and study behaviour. Examples include counselling, career guidance related to study and future job opportunities, tutoring, etc.
- **Organisation of higher education:** Putting in place structures and procedures related to the organisation of teaching and learning in order to improve study success, for example addressing the duration of study, types of degrees offered (short degrees, Bachelor, Master's), quality assurance and accreditation, etc.

There is a lack of systematic knowledge, data and indicators on study success in Europe

Although there are many studies focusing on factors that may have an impact on the study success of individual students, research on study success policies and their effectiveness is rare, particularly research taking an international comparative perspective. In addition, the data that is available across Europe on study success is diverse in terms of availability, data collection methods, definitions, and usage. Cross-country overviews of completion rates, let alone other indicators of study success such as retention, dropout and the average time to complete a degree, are barely available. Overviews, such as the ones presented by the OECD in Education at a Glance, have to be interpreted with care due to differences in underlying indicator definitions as well as differences in national contexts and institutional arrangements between countries. Our own inventory of existing national data collections demonstrates that only 12 out of 35 European countries regularly report a national indicator of completion. Even fewer countries report on retention and dropout rates and time-to-degree. A recent report on computing and collecting data on completion rates and average duration in higher education concludes that the monitoring of study success and its calculation method need to be harmonised across Europe (ICON and QUANTOS, 2015). Only this would allow meaningful comparisons to inform the various stakeholders interested in higher education. The same need for systematic knowledge, data and indicators is also felt in Australia and the U.S.A.

A clear definition of study success is the first step towards a more effective policy design

A central finding of the current study is that in many countries study success is only implicitly defined, making the objectives and relevance of the related policy instruments unclear. However, countries that place study success high on their policy agenda and have a clear vision on what they want to achieve seem to have a more effective combination of policies in place than countries that do not show this engagement. The effectiveness of the policies is heavily dependent on the policy mix – some policies explicitly addressing study success need supportive policies to become effective. For example, policies aimed at improving the match between (prospective) students' demands and the programmes offered by higher education institutions are more effective when institutions are also required to improve their counselling and service structures.

Though many countries and higher education institutions are actively stimulating study success by means of one or more policy instruments, the general impression from the current study is that policies are likely to be more effective if there is a mix of policy instruments each addressing different aspects of study success. A policy mix that includes strengthening students' choices, promoting their social integration in the programme, monitoring and counselling, and rewarding successful completion – is more likely to be successful. In addition, countries and institutions need to be consistent, both in terms of policy instruments and over time, with respect to their overall study success objectives and incentives. For example, if governments reward institutions for successful degree completions, the student financial support system should include similar incentives for students.

Increased institutional responsibility is seen as a requirement for study success, but funding is not a miracle cure

The use of study success related indicators in funding formulas and performance agreements is becoming more widespread. This form of performance-based funding is generally directed at changing institutional behaviour and shifts more responsibility for the success of students towards the institutions as they are rewarded for the number of graduates, their students' credits or for student retention. Many countries make additional funding available to encourage their institutions focusing more on study success. An example is the 'Student Opportunity Allocation' in England that encourages institutions to improve study success. In Germany, the 'Quality Pact for Teaching' helped improve student-staff ratios and stimulated innovations in teaching and learning and improved the qualifications and training of teachers. The French 'Plan to Successfully Obtain a Bachelor Degree' prompted institutions to develop innovations in teaching and learning. In the former Yugoslav Republic of Macedonia additional funds were invested in upgrading educational resources and infrastructure such as scientific books, manuals and teaching laboratories, to encourage students to succeed.

Performance-based funding mechanisms, however, require a careful design. If the mechanism is complex and incorporates numerous indicators, it may not be fully aligned to various policies, such as in Denmark and Austria. If it involves open-ended funding with possible unintended side-effects as in Norway, or if the budget involved determines only a small proportion of total funding, then its impact is less significant. In the Netherlands, between 1993 and 2011, 50 per cent of the teaching funds was distributed along the relative number of graduates per institution. This incentivised institutions to implement measures to reduce the average duration of study.

Some countries also include performance related incentives in the student financial support schemes to encourage students to spend more time on their study and thus to

achieve sufficient progress. Examples are imposing a limited period for grant availability; providing scholarships to high achieving students; or rewarding completion, for example by turning loans into grants. Such incentives may be less effective in reducing time-to-degree if the total support received by students is relatively small and students have to supplement their monthly income with significant amounts of paid work. In the U.S.A., current policy debates focus on the high tuition fees and the high debts these may incur. Not all graduates are expected to get jobs that enable them to repay their debt. Government therefore initiates policies such as employment guarantees, saving schemes for tuition fees, tax reductions and free community college education. In Australia, the income-contingent loan scheme for students is seen as an important feature underlying study success, because the high financial investments stimulate students to engage with their study.

Monitoring students creates a foundation for institutional action

Students' individual and social characteristics have a strong impact on their probability of success in higher education. In this light, some institutions have initiated systematic monitoring of students' attendance and their individual study progress to identify students at risk and facilitate institutional follow-up actions through personal counselling, coaching and mentoring. Some institutions have developed this into more general mandatory systems for personal tutoring and peer-mentoring among students to stimulate the relationship between students and their programme by creating a community and a sense of belonging and engagement among students. A key idea behind several of these initiatives is the closer alignment of programme objectives, teaching and learning activities, and examination and assessment of students. Australian higher education institutions very actively monitor, consult and advise students, particularly in the first study year. This is found to be the key institutional activity to improve study success for a diversified student population.

Matching and social integration create a solid basis for study success

While matching students with the most suitable study programmes is less of an issue in selective systems of higher education, some institutions in less selective, relatively open systems have launched initiatives to familiarize students with their programme of choice before they are admitted to the institution (interviews, trial lectures in the institution, online self-assessment tests, informing student choice, etc.). To facilitate social integration and student engagement, many higher education institutions throughout Europe have established special welcome programmes for students.

Social integration of students into higher education is an ongoing responsibility for institutions and in mass higher education systems there is a need for more tailored and individualised follow-up of students to provide them with a sense of belonging and increase their engagement with their studies. For example, in France, more personalised support and career services for students have been introduced by institutions, providing students with a 'one-stop service' where both academic and social challenges can be considered and addressed.

Various countries have integrated new types of programmes, or new alternatives within existing degree structures, to better accommodate diverse target groups of students. Short degree programmes in Portugal and the Netherlands offer students short routes towards a profession with the option to continue to a Bachelor degree. Other countries or institutions offer students an introductory orientation phase or a less-specialised Bachelor programme with a broader range of subjects, as in Austria, France, Norway and some German universities. This allows students to make their final choice of specialisation later and more carefully, thus preventing them from making a switch of programme or institution early on in their education career.

Integrating study success outcome data in publicly available platforms, e.g. on quality assurance and student choice, helps institutions and (prospective) students to make the right choices

To allow students and institutions to learn from examples elsewhere, several countries have set up platforms to facilitate the sharing of experiences. England, Finland, Germany and Montenegro have set up organisations (such as the Higher Education Academy in England) and structures in which good practice examples of study success are shared through discussion papers (Finland) or dissemination projects (Nexus in Germany). The Netherlands recently highlighted several good practice examples in its 2015 Strategic Agenda for Higher Education and Research. Some countries have set up student choice databases and information systems, including the *Key Information System* in England, *Studiekeuze123* in the Netherlands, the *'Zeit Ranking'* in Germany and the Bulgarian University Ranking. In the US, a national College Ranking of about 5,000 higher education institutions includes study success performance indicators next to other information. Such systems stimulate study success if reliable information on dropout, retention, completion, time-to-degree, or even student satisfaction about lecturers, the quality of programmes, etc. is included. Informing prospective students as such will make institutions programmes pay attention to the impact of their study success record on their reputation.

As quality assurance and accreditation systems emerge and develop, they are gradually becoming a platform for more sophisticated policy making. Study success is increasingly becoming part and parcel of quality assurance through integrating completion, retention and dropout rates in self-evaluation reporting structures. Croatia, Flanders, France, Hungary, Ireland, Italy and Montenegro are recent examples of this. Study success rates are important for reaccreditation, but in many cases are also published on national websites. This serves benchmarking purposes and thus pushes institutions to care about study success.

Recommendations

Based on the outcomes of this study we identify some generic recommendations that provide a broad menu for informing future policy-making to increase study success. These recommendations highlight possible actions to be taken at European, national and institutional levels.

The need for an increased European effort to facilitate study success

The current study has clearly shown that while study success is high on the policy agenda in Europe, systematic knowledge of various national policy initiatives and their impact is limited. In general, there is a need for more coordinated action across national borders to acquire a more solid knowledge base on what works.

- There is a need to create a Europe-wide arena for discussing issues related to study success. Given the diverse understandings of study success, one of the aims of such an arena could be to generate agreement on key definitions and explicit indicators for study success.
- As there is currently limited knowledge on the impact of policies specifically aimed at study success, there is a need for more systematic and comparative empirical research on the effectiveness of these policies.
- There is also a need to link the (inter)national study success agenda to related policy areas such as modernising higher education institutions, quality assurance, graduate employability, etc. One could start systematic monitoring of study success indicators using specific benchmarking instruments (such as U-Multirank) and create a European platform for national and institutional good practices.

The need for conscious national policy designs to boost study success

As many countries currently define their study success aims in an implicit way, there is a need for more conscious national policy designs meeting the following criteria:

- National governments can be clearer and explicit on the specific study success orientations that they regard as important and the reasons for these priorities.
- National governments can develop policy designs based on an underlying behavioural model that specifies the links between a specific study success orientation, the policy instruments used, the roles of stakeholders and the expected impacts.
- European countries can think of systematic efforts to collect and monitor indicators of completion, dropout and average time-to-degree at agreed-upon levels and based on shared definitions. Such indicators are more useful when they reflect the diversity of institutions and study programmes.
- The public availability of performance information can help to boost public interest in study success, to hold higher education providers accountable for promoting themselves in a responsible way, and to facilitate student choice.
- Governments can consider developing national policy designs that reflect a mix of financial, informational and organisational policy instruments and address both students and higher education institutions. The policy instruments need to support each other, for example more flexible educational pathways need clear rules for the recognition of previous learning and study achievements.
- It is suggested to enable institutions to monitor pathways of individual students to identify students at risk of dropout. This also helps them understand specific patterns underlying dropout and completion and will inform future policy-making.

The need for comprehensive institutional strategies to boost study success

Because the European higher education landscape is diverse and includes institutions with very different profiles and characteristics, study success priorities differ between types of institutions and study programmes. Furthermore, as institutions increasingly have to strategically position themselves in a more competitive sector, they gain more responsibility for their students' success. This calls for comprehensive institutional strategies to boost study success, based on the following recommendations:

- Higher education institutions' strategic plans could specify how issues of study success relate to their profile and what actions will be taken on areas such as internal quality assurance.
- With growing institutional responsibility for study success, institutions and students will benefit from student monitoring, counselling and mentoring systems as well as from structures to socially and academically integrate students.
- Institutions can consider publishing key institutional indicators on study success on their webpages to assist future students in making the right study choices as well as to raise and sustain institutional awareness of study success.
- Institutional responsibility for study success can also include measures and facilities to assist students in their learning process.
- Institutions will benefit from institutional research on the specific patterns underlying dropout and completion. This will enable them to formulate adequate measures to address study success within their own context.

1 Introduction

1.1 Background and objective of this study

This is a large scale comparative study on dropout and completion in higher education in Europe that provides insight into the policies that European countries and higher education institutions employ to explicitly address study success, how these policies are being monitored and whether they are effective. Pulling together evidence from existing research, surveying national and institutional experts and stakeholders across 35 European countries as well as exploring national definitions and data on various aspects of study success makes this ground breaking research.

In the perspective of the Europe 2020 Strategy, including the ambition to have at least 40% of the 30-34 year olds holding a tertiary education qualification by 2020, the issue of increasing educational attainment is gaining importance in the national and international debates on higher education. Reducing dropout and increasing completion are regarded prime strategies to achieve higher attainment levels. A key concern is that too many students in Europe drop out before obtaining a higher education diploma or degree. This is a problem across the EU, as success in higher education is vital for jobs, social justice and economic growth. Particularly in times of economic austerity, the pressure for effective and efficient use of resources is necessary, from governmental, institutional as well as student perspectives. The 2011 Modernisation Agenda rightfully states that it takes a joint effort of all Member States, higher education institutions and the European Commission to take a pro-active approach in working towards the objectives and increasing participation and attainment in higher education.

Widening access and improving completion rates accordingly have been on the Bologna Process agenda since the Prague Communiqué (2001) and became a priority for 2012-2015 (cf. Bucharest Communiqué, 2012) as well as the Yerevan Communiqué (2015-2018). In Yerevan communiqué the EHEA objectives put an even greater emphasis on the quality and relevance of learning and teaching and making higher education more inclusive to widen opportunities for access and completion (European Commission, 2015). A number of governments have taken initiatives to increase the attractiveness, quality, efficiency and diversity of higher education. For example, various countries – such as Denmark, Germany, the Netherlands and Scotland – have implemented profiling and performance orientation policies to better align higher education institutions and programmes with the demands and needs of students and the labour market (De Boer *et al*., 2015; Vossensteyn *et al*., 2011).

Obviously, there is tension between the policy aims of increasing participation rates and maintaining high completion or low dropout rates: higher education has to accommodate larger enrolments and more diversity among learners, yet keep more students in the system and assure they can achieve the learning outcomes needed for completing a degree. This calls for a stronger knowledgebase on what countries and higher education institutions can do in order to effectively achieve the objectives of reducing dropout and increasing completion. However, the current understanding of study success, its determining factors and policies that can effectively reduce dropout and increase completion is limited, due to various reasons:

- The aims to increase access may be at odds with increasing quality and study success

- Selectivity and flexibility of access to higher education differs across countries in terms of study places available and selection processes before or in higher education
- Study success – including dropout and completion – is not a top priority in all countries or can be avoided politically
- Cultural values and believes on studying, dropout, completion and transitions between study and work differ
- There can be various reasons that can refrain students from making the right study choices
- The extent of research into factors that drive study success and into the effectiveness of study success policies is limited in many countries

As such, this study explicitly aims at providing an analysis of available national and institutional policies – and their effectiveness – to stimulate study success in higher education in Europe. The **value added** of this study is threefold:

1. To provide an up-to-date literature review including international, national and institutional research and policy-oriented documents addressing the wider concept of study success
2. To provide both an overview of and structure to the many policies that are put in place for addressing the issue of study success in higher education in Europe, how these are monitored and whether these are effective in reducing dropout and stimulating completion. Also good practice examples in stimulating study success are identified.
3. To suggest indicators to monitor and internationally compare different aspects related to study success resulting in national study success profiles.

1.2 The concept of study success

Study success is a multidimensional phenomenon that can be viewed upon from various angles and perspectives. When referring to the phenomena of dropout and completion, in this study we use the term **study success** in order to address the full complexity of dropout and completion and all factors that may have an impact on it. Not only is study success a multidimensional concept — including dropout, retention, study progress, study duration, completion and transition into the next-level study or the labour market — it also is influenced by a wide variety of factors at various levels, such as education structures and pathways to higher education, national policies, financial and other incentives, institutional structures, teaching and learning approaches, curriculum design and student background characteristics and the interrelations between all of these.

Study success, however, means something different in various national or institutional contexts or from various stakeholder perspectives. Some governments give priority to efficiency and time-to-degree, others to reducing dropout or the transition into the labour market. Students may be particularly interested in high grades, while rector's conferences may be interested in completion rates. Though we recognise all this diversity, an international comparative study like this requires a clear working definition of the phenomenon studies. To limit the focus of this study the working definition puts primary focus on a few elements of study success. It only includes elements that directly relate to the student life cycle from when they started studies till they leave higher education, either or not with a degree. The study further focuses on national and institutional policies to stimulate study success. Based on these notions we define study success as follows:

Study success comprises all major achievements of students in the higher education system, including dropout/persistence, completion of a degree and time-to-degree.

One has to acknowledge that study success as defined can be influenced by many factors and policies, either directly or indirectly. To further limit the focus of this research we will only include national and institutional policies that are meant to explicitly and directly influence study success.

1.3 Research questions

This study analyses the range of policies that governments and higher education institutions explicitly use to address study success in terms of dropout and completion in higher education and whether these policies are monitored and effective. In addition, it explores the (inter)national statistics and databases regarding the alternative approaches used to measure various types of study success outcomes. To achieve the objectives of the study and to clarify the relationships between policies and study success, the following research questions guide the various parts of the study:

1. How do governments, institutions and other stakeholders define study success? To what extent are these definitions shared within and between countries in Europe?
2. What factors are regarded important for achieving study success?
3. What kind of policies do countries and higher education institutions develop to reduce dropout and improve study success? Can these policies be clustered in groups of policies and what are the commonalities and differences in the policy mixes used to stimulate study success across European countries and institutions?
4. Which policy approaches and instruments appear to be effective in reducing dropout and improving completion?
5. What alternative data and indicators are used at national level to measure study success outcomes that are interesting in an international comparative perspective?

1.4 Research approaches and methodologies

To answer the above mentioned research questions the study has been divided into five main work packages applying a mixed methods research strategy using desk research, surveys among national experts and interviews with key stakeholders in various countries and higher education institutions.

The **Literature Review**, providing an up-to-date overview of the knowledge on study success, particularly concerned desk research exploring national and international academic and policy oriented documents like articles, reports, policy papers, etc. published in the last decade. The search for European scientific literature on study success and dropout in undergraduate education explored a number of well-established bibliographic data banks by using combinations of keywords associated with study success. European literature was supplemented with study success literature from the USA. We have augmented the scientific literature with grey literature identified and summarised by our national experts in their survey responses.

The **National Study Success Policies** to a large extent draw on three rounds of surveys among selected national experts using an open approach that was likely to give the most accurate picture of policies that were explicitly designed for improving study success from 2005 onwards. For each country, one expert – sometimes supported by additional experts – has identified the relative importance of study success in the national policy agenda and the dominant study success orientations used by various stakeholders. They further indicated the national policies that have been explicitly designed to address study success (since 2005), whether and how these are monitored, and what evidence is available on the effectiveness of these

policies. Their information provision was validated against other data sources and (inter)national policy reports such as the NESET report (Quinn 2013), reports from Eurydice (European Commission/EACEA/Eurydice 2014; 2011), OECD reports and with national policy makers from our networks. Based on the responses from all national experts, the national experts were re-asked – in a sort of Delphi-method[1] – to indicate whether no policies explicitly designed for study success were missing for their country. This has resulted in a relatively complete overview of explicit study success policies for the period 2005-2014 in 35 European countries. Two national experts from Australia and the USA provided similar-type of information leading to two *policy briefings* on these two countries.

The third research approach consist of the eight **In-depth Case Studies** on the Czech Republic, England, France, Germany, Italy, the Netherlands, Norway and Poland. The selected national experts were intensively supported and supervised by a strict case study protocol and each by a core research team member in order to guarantee as much comparability of the data collection across the eight case studies. In the case studies various important stakeholders at national level were interviewed. Also two interesting and representative higher education institutions were selected to explore institutional approaches in translated or self-initiated study success policies. At the case-study institutions, interviews were conducted with institutional leaders, academic and support staff as well as students.

The fourth research approach is formed by **Monitoring Study Success** and the national **Study Success Profiles**. These have been partially composed based on the data collected from (inter)national databases concerning some key statistics on the higher education system level. These were added with information from the surveys among the national experts, particularly addressing the use and definitions of the most common study success indicators per country. In successive rounds, either the national experts or the core research team collected the national data.

1.5 Considerations on some limitations of the study

Regardless of the thorough and intense research approach, the core research team also encountered some research limitations. To generate a full overview of all study success policies and the evidence for policy effectiveness is complex and time consuming. First of all, the research has focused only on policies that have been explicitly designed for improving study success. Though we acknowledge that almost all countries do have a quality assurance system that may have an impact on study success, in some countries it has been explicitly designed to stimulate study success, while in other countries accreditation systems may have been set up to comply with minimum quality criteria. For the first group of countries, quality assurance is included in the policy overviews while this is not done for the latter group of countries, even though accreditation might have had an indirect effect on study success.

A second limitation is that the research only focuses on policies that were developed between 2005 and 2014. This implies that policies developed before 2005 or since 2015 are not included in the overviews.

A third limitation of the study is that – within the scope of this study in terms of time and resources – we could intensively collaborate with only one national expert for each of the 35 countries. Regardless of the efforts to validate all information as explained above, this bears the risk of not taking on board all relevant policies and information. However, in the eight in-depth case studies we have for each integrated the perspectives, expertise and oversight of up to ten national stakeholders and two higher education institutions.

[1] http://spectrum.library.concordia.ca/976864/1/OkoliPawlowski2004DelphiPostprint.pdf.

A final limitation of the study concerns the wide variety in perceptions, understanding and expectations concerning study success priorities that are rooted in the traditions, culture and beliefs across different countries.

Based on these limitations, the research team acknowledges that the policy overviews presented in this report may miss some study success policies that should have been mentioned. The research team did its utmost best to limit this risk. In some cases, national experts consulted other national experts, in other cases the research team used its policy networks to validate the information. Despite a few minor omissions, the research team hopes that the evidence presented spurs the debate on dropout and completion in higher education in Europe.

1.6 Structure of the report

This report is primarily structured along the main elements of the entire study. Chapter 2 addresses the literature review providing a state-of-the-art overview of the research evidence on study success. Next to the world-wide research results publicly available it presents the main findings from the grey literature in national languages and from individual institutions collected through the network of experts used for this study. Chapter 3 presents the analytical framework of the study, which provides direction to the empirical research and analyses conducted in the framework of this study. In Chapter 4 the analysis of databases, definitions and statistics available on study success outcomes at national and international level is presented. In Chapter 5 we present the national study success policies providing an overview of national policies that explicitly address study success, how these are monitored or evaluated and the evidence available on their effectiveness. Some good practice examples are provided in the texts. Chapter 6 summarises the main findings from the eight in-depth case studies as well as the policy briefings for Australia and the USA. Some good practice examples are integrated in text boxes. In Chapter 7 we present two examples of a multi-indicator based *national study success profile*. Chapter 8 presents the main overall conclusions that can be drawn on the basis of the results from the different parts of the study. Based on the conclusions, in Chapter 9 we formulate the recommendations for the stakeholders at European, national and institutional levels.

2 Previous Knowledge on Study Success

This chapter presents the main outcomes of the literature review. The full review is presented in Annex 1 to this report. The aim of the literature review is to identify the factors that contribute to study success (and dropout), and to categorize the types of national policies and practices that are found to contribute to improving study success in countries across Europe. Though the review primarily explores existing scientific literature, policy reports and data bases in European, this has been augmented with literature from the USA. The majority of published studies deal with reasons for dropout, especially in relation to individual student characteristics. Studies dealing with the impact of national policies and practices regarding study success are less common (see also Larsen *et al*., 2013).The summary provides key information in relation to: the factors affecting study success and dropout at system, institutional and individual levels, interpretations and definitions of study success across Europe, and conclusions about the categorization of policies to improving study success.

2.1 Findings from the literature review

This section of the summary literature review considers the factors that influence, on the one hand study success, and on the other, dropout. The review considers evidence at three levels: national, institutional and individual levels.

2.1.1 National system factors contributing to study success

Variations across the European higher education systems contribute to promoting study success for students, including selectivity, flexibility and student fees and support.

Selectivity of the higher education system

Selectivity (i.e. who has access to HE) varies significantly across Europe. Selectivity shapes the academic attainment of the student cohort that in enrols, which, as is discussed below, has a direct effect on retention and withdrawal. Increasing student diversity through widening access policies may reduce study success, e.g. as a consequence of lack of study skills or preparation for higher education (Heublein et al., 2003). There are also differences between countries in how many entry routes there are to higher education – which can contribute to study diversity. In Italy, Greece and many of the Central and Eastern European countries there is only one entry route to higher education, while many countries in Western Europe have alternative routes to higher education, other than completion of upper secondary school (European Commission/EACEA/Eurydice, 2014: 22). Alternative routes increase opportunities for more non-traditional students to enter higher education, but these students may not be as well prepared for higher education and this can have a negative impact on retention and completion (Helland, 2005; Heublein et al., 2003).

Flexibility of the higher education system

Flexibility, which can be defined as the opportunity to move between programmes and institutions and to transfer credits, can influence retention and completion (Houston, McCune and Osborne, 2011) either positively or negatively. In several of the Scandinavian countries, credit transfers are widely accepted, which means that

students can start one degree and then switch to another. In the UK, credit transfer is not widely accepted, and students who leave higher education often do so because of an incorrect choice of programme (Yorke and Longden, 2004), and this is more often than in Norway (Hovdhaugen and Aamodt, 2009). Flexibility can cause study delays and a higher average duration to complete a degree, e.g. in Norway (Hovdhaugen, 2012) and Denmark (Danish Ministry of Higher Education and Science, 2013).

Student financial support and tuition fees

There is considerable variation between European countries in when tuition fees are applied, the level of tuition fees, and student financial support systems (OECD, 2011). However, there is no direct link between the level of tuition fees and completion rates (OECD, 2008). On the one hand, students that pay for their education may be more committed to completing their education, on the other hand, paying tuition fees may slow completion as students need to engage in paid work, or they may leave higher education being unable to meet the direct and indirect costs (Orr *et al*., 2014). There is little research suggesting that tuition fees force students to leave higher education, although there is evidence that without some appropriate student financial support, tuition fees hinders access to higher education for some student groups (Fitzsimons *et al*., 2015). The evidence about the impact of fees and student finance on dropout/retention and completion is ambiguous. However, engaging in employment has a negative impact on study success (Vossensteyn *et al.*, 2013) although studies in Estonia and Norway indicate that only students working more than 20-25 hours per week during term-time have a higher risk of dropout (Beerkens *et al*., 2011; Hovdhaugen, 2014).

2.1.2 Factors impact on study success the level of the HE institution

Much of the research on improving student completion and success, especially in the USA, points to the role of the HE institution, for both procedural and structural issues.

Procedural aspects of higher education institutions

Institutional commitment and strategy

Evidence from the UK (Yorke and Longden, 2004; Thomas, 2012), Germany (Ulriksen, Madsen and Holmegaard, 2010) and Netherlands (Inspectie van het Onderwijs, 2009) identifies institutional commitment to improving study success to be vital. This includes the priority given to study success and the associated expenditure; the choice and organisation of academic programmes; a strong culture of student-centred learning and teacher professionalization (e.g. support, development, reward and recognition); and the provision of additional support; and is associated with higher levels of internal monitoring.

Academic integration, learning, teaching and assessment

Evidence from across Europe (Germany and UK in particular) points to the importance of learning, teaching and assessment within academic programmes and an institutional culture that values teaching (Georg, 2009; Thomas, 2012). This promotes student engagement and academic integration (Thomas 2012 and Hovdhaugen *et al*., 2013).

Social integration and student support services

Research from the UK, Germany and Norway finds that students' social integration contributes to student retention (Thomas, 2012; Georg, 2009; Frølich *et al*., 2013).

Student support services (including pre-entry preparation, study skills development, pastoral support, counselling, financial planning and budgeting skills, health services, disability support, career guidance and much more) similarly have an impact on improving student completion and success (e.g. Sellers and Van der Velden, 2003; Cahalan, 2013). Evidence suggests it should be integrated into the curriculum (Powney, 2002; Warren, 2003; Thomas, 2012) to maximise the impact on those student who do not voluntarily use support services (Woodfield and Thomas, 2012; Duty 2011).

Matching expectations of students and programmes about study programme

The congruence between expectations about the study programme, the capabilities of the student, and the realities and requirements of the study programme have a crucial impact on study success and dropout. Research from Austria (Unger *et al*., 2009), Flanders (Goovaerts, 2012), Germany (Heublein *et al*., 2008), the Netherlands (Meeuwisse *et al*., 2009), Switzerland (Wolter *et al*., 2013) and UK (Lowis and Castley, 2008) point to the need to improve the process of decision making and study choices to reduce the number of incorrect or inappropriate choices and to improve the match between student and their study programme.

Tracking and monitoring of students and study success

Tracking and monitoring of students aims to reduce the number of students who drift away, especially in their first year (Quinn, 2013). Data itself will not improve study success, but enables targeted interventions (Heublein *et al*., 2008; Thomas, 2012). In the UK context, Buglear (2009) finds that poor data often underpins the institutions' inabilities to intervene adequately to improve retention, and improved tracking is recommended by Larsen *et al*. (2013).

Structural aspects of higher education institutions

In the US context Chen (2012) distinguishes three structural aspects of higher education institutions that influence study success. Although there is little European research, these factors may be relevant here.

Composition of the student population

Certain student characteristics (discussed below) are associated with differential study success, and thus, the composition of the student population within an institution will have an impact too. Different combinations of students can make a difference too, with positive effects being associated with balanced, heterogeneous populations (Meeuwisse *et al*., 2010, Severiens and Dam, 2012). However, selective institutions have higher rates of persistence (Titus, 2004). While small institutions have more capacity to engage with students (Berger, 2002), promoting academic and social integration.

Institutional expenditures

In the US context Chen (2012) found that institutional spending on student services has a positive effect, while expenditure on instruction and academic support are less important.

Study organisation (teaching infrastructure and resources)

Poor study conditions may contribute to early departure in the German context (Heublein *et al*. 2003). And UK part-time students have lower rates of completion.

2.1.3 Individual level factors impacting on study success

Much of the research examines the impact of student characteristics on study success, and their intersectionality. It is often not these factors per se that affect study success, but their correlation with other factors, such as lack of access to other resources (structural disadvantage).

Socio-economic (family) background

Students from lower socio-economic status (SES) backgrounds are less likely to complete their study programs and achieve other study outcomes (Department for Business, Innovation and Skills, 2014a; HEFCE, 2013). SES is related to the economic, cultural, social and previous academic resources students can draw on (Georg, 2009).

Gender

In many countries, female students outnumber and outperform male students in general, and where one gender group is a minority in the study programme (e.g. females in male-dominated fields of study/study programmes or males in female-dominated fields of study/study programmes) dropout or course switching is more frequent among the minority students (Severiens and Dam, 2012).

Ethnic Origin

Ethnic origin strongly interacts with other individual student characteristics, especially with students' socio-economic background and gender (Reisel and Brekke, 2010). For example, in Bulgaria the lower rates of study success of Roma students is associated as much with their social class origins as their ethnic origin (Tilkidijev *et al*., 2011). There are similar findings in the Netherlands and Germany with respect to students from ethnic minorities (Meeuwisse *et al*., 2009; Heublein, 2010).

Cognitive competencies and motivational disposition of student

The preparedness of the student for higher education and their competence are seen as major determinants for study success, using different predictors, such as final school grade/examinations or competences like diligence, motivation and capacity to concentrate. Studies in Germany, UK, and Spain demonstrate that students who were low achievers in high school are more likely to drop out of higher education (Lassibille and Gomez, 2008; Department for Business, Innovation and Skills, 2014a; Heublein *et al*., 2003). Student motivation, self-efficacy and related indicators have also been shown to impact on the probability successful completion. In Finland for example, it was found that students who were committed to the content of the study programme, its academic culture, the more instrumental aspects of their study programme and/or their career interests, were more likely to complete their study programme than students who only had low commitment to the programme or career interests (Mäkinen *et al*., 2004). This implies the value of good information and the development of realistic expectations: unmet expectations lead to attrition (see for example Heublein *et al*., 2003; Department for Business, Innovation and Skills, 2014a).

Student's educational pathway

Students with straightforward educational trajectories are more successful in higher education than those following less direct or interrupted pathways. The effect of undertaking vocational training before entering higher education on study success is ambiguous: in Germany there is no negative effect (Heublein *et al*., 2003), while a Spanish study found a negative impact (Lassibille and Gomez, 2009).

2.2 Conclusions, implications and recommendations

Conclusions

This literature review has shown that study success and dropout are studied in some European countries in particular. The literature has tended to focus on the individual student characteristics associated with lower rates of study success, and to a lesser extent institutional approaches that ameliorate these negative effects. In summary, the main findings are as follows:

- At the *individual level* it is clear that the socio-economic and demographic background (age and gender) of students and their academic capabilities play a crucial role in study success. In addition, these students' background characteristics are strongly related to each other and often interdependent. Research on the cognitive competencies and motivational dispositions of students has shown that study success is highest when there is congruence between the students' expectations and their self-estimation of their own capabilities, the reality of the study programme and its requirements and student effort.
- At the *institutional level*, the creation of a culture of commitment among students as well as teachers and management is crucial for study success. Commitment can be achieved through different instruments: teaching and learning policies and support services to the student are important here. The institutional context also counts: the composition of the student body, the size and selectivity of the institution as well as its resource allocation policies all impact on study success.
- At the *level of the higher education system* different aspects of the system are influential, including access and selectivity; flexibility and opportunities for movement within the system; and alternative models of funding higher education and financial support.

Implications for this study

Across Europe there is very little research or systematic evaluation of policies and practices to improve study success. However, drawing on the evidence that does exist, the following types of approach to improving study success can be identified:

- Funding and resources within the higher education sector can be directed to institutions and/or students. Within institutions, funding allows greater spending on learning and teaching, and associated activities – including the professionalization of teaching - that contribute to the quality of the student experience. Alternatively, funding can be directed to students to reduce the potentially negative consequences of a lack of economic capital, and to reduce the need for reliance on paid employment. (NB nothing in the literature mentions using student funding incentives to reduce time to completion).
- Policies and approaches that provide information and support enable students to gain a good knowledge about the realities and requirements of study programmes and a fit between the students' capabilities and the requirements of the programme contribute positively to completing the study programme. This approach can be formalised to improve the match of students with study programmes.
- Much of the evidence about improving study success is on institutions, in particular identifying institutional commitment to the student experience and study success as a common denominator. Policies include improving teaching and learning to encourage academic engagement and integration, professionalization of teaching staff, provision of support services, and better facilities for the social integration of

students. The tracking and monitoring of the study progress of individual students is an important instrument to help identify students that are at risk to drop out.

Recommendations to improve study success

The following recommendations can be drawn from the literature:

- There is a relatively limited body of European research about student dropout and study success, from a small number of countries. Further research about study success is needed in different European higher education contexts to inform the development of a national strategy and policies.
- The majority of the literature focuses on the causes of withdrawal and non-completion, with a particular focus on the individual level characteristics (which cannot be changed). There is very little research about effective policies and interventions. More research is needed at European, national and institutional levels to evaluate interventions and develop understanding of effective practice.
- Evidence is required about whether different policy types are more effective than others, or whether they all need to be implemented and aligned.
- More national data about who enters higher education and their outcomes is required to further develop this area of policy analysis.

3 Analytical Framework of this Study

This study analyses the range of policies that governments and higher education institutions use to address study success in terms of dropout and completion in higher education and whether these policies are effective. The analytical framework clarifies the relationships between policies and study success and provides a structured analytical approach to conduct the empirical research for answering the main research questions of this study:

1. How do governments and institutions define study success?
2. What kind of policies and policy mixes do countries and higher education institutions develop to improve study success?
3. Which policy approaches are effective in improving study success?

The analytical framework builds on the results of the literature review and identifies various study success orientations applied by governments, factors influencing study success and policy dimensions reflecting potential patterns in study success policies. The analytical framework results in three "reflective questions" that connect characteristics of policy mixes to the study success objectives. These serve to interpret and structure the outcomes of the empirical research conducted in the National Study Success Policies, the in-depth case studies and study success profiles.

3.1 Defining the concept of study success

The dependent variable in this research project is study success. As discussed in the literature review, study success is a concept that includes many aspects, such as persistence/dropout, completion, time-to-degree and transfer to the labour market. This study puts primary focus on a few elements of study success:

- The first focus is to include only elements that directly relate to the student life cycle: from when students have started till they drop out or successfully complete a degree. This implies that we will not analyse policies that address entrance into higher education (like access and selection instruments) or policies addressing the transition into the labour market and employability of graduates, e.g. if graduates find jobs that match their qualifications.
- The study further focuses on national and institutional policies to stimulate study success. Acknowledging that study success outcomes measured at the level of programmes, institutions and countries are the result of the collective behaviour of individual students, we leave aside the level of individual students in the analyses.

Regardless of these limitations, our definition of study success still includes a wide spectrum of study success orientations. First of all, we address study success in terms of dropout from higher education or from a study programme. Persistence is the flip-side of dropout and reflects re-enrolment in the next year or level of study. The second study success orientation used in this study is graduation or completion of a degree. The third and final study success orientation used is time-to-degree, being the average period students use after first enrolment to obtain their degree. Based on these study success orientations we define study success as follows:

STUDY SUCCESS COMPRISES ALL MAJOR ACHIEVEMENTS OF STUDENTS IN THE HIGHER EDUCATION SYSTEM, INCLUDING DROPOUT/RETENTION, COMPLETION OF A DEGREE AND TIME-TO-DEGREE.

3.2 Factors influencing study success

As an intermediate step we briefly summarise the main factors that are generally regarded important with regard to study success and are often used in policies that explicitly address study success. The study success literature (see Chapter 2) reveals many factors that influence study success in a positive or negative way. These different factors are clustered in four main groups of factors: 'personal background', 'effort and ability', 'belonging' and 'expectations'.

- **Personal background**: Personal background characteristics like gender, ethnicity, parental education and family wealth are often related to different forms of capital (cultural, social and economic capital) that help construct students' perceptions of the value of education and as such influences their study behaviour. Sociological approaches stress the influence of socio-economic family background on the motivation, aspirations and expectations with relation to education. Economic approaches show that access to sufficient financial resources to pay for the costs of higher education – such as tuition fees and living costs – can positively affect the decision to enrol, continue and complete studies. In addition, economic psychology tells us that – compared to students from a higher socio-economic background – students from lower socio-economic backgrounds perceive education costs to be too high, benefits too low and their chances to complete a higher education degree too low. Therefore they are less likely to complete a degree.
- **Effort and ability**: 'Effort and ability' includes factors like academic preparedness, cognitive abilities, difficulty of study programmes and the number of hours students invest in studying. Academic preparedness refers to the qualifications and grades students obtained before, while cognitive abilities indicate students' talents, intelligence and skills. 'Better prepared students' generally achieve higher study success, although abilities of students should match with what is required in a particular study programme. For example, language skills are not the prime competencies to succeed in an engineering programme. In addition, students who put more effort in their studies are generally more likely to persist, complete or complete a degree faster.
- **Belonging**: Belonging relates to the extent students identify with their programme. This can either be done through motivation, academic integration, social integration or the homogeneity of their "class group". The literature review revealed that academic and social integration are crucial in preventing dropout and stimulating progress and completion.
- **Expectations**: It is important what expectations students have about the content and the structure of the programme, the level of difficulty, the types of instruction used as well as future employment opportunities. The better the match between the programme characteristics and the students' expectations, the bigger is the chance to achieve study success. Therefore, it is important for students to receive and acquire accurate and reliable information about the content and structure of the programme. Students that do not have sufficient information or realistic expectations are more likely to drop out from their study.

3.3 Policy areas and analytical framework

In this section we define the types of policies we aim to analyse in this research. The literature review as well as the surveys among national experts revealed a great variety of study success policies. To organise and structure the analysis of this variety of policies we distinguish policies by level and by policy area.

Firstly, study success policies can be defined in various policy arenas at institutional, national and supranational levels. This study predominantly focuses on the national

and institutional level policies[2] which results in three types of study success policies: national policies (generally initiated by ministries), own policies of higher education institutions and national policies that are translated by the institutions. The National Study Success Policies (Chapter 4) will predominantly focus on national policies, while the eight in-depth country case studies also include the institutional level.

Secondly, we identify "policy areas" that refer to the kinds of study success policies being employed. Based on the range of study success policies identified by the national experts, one can discern three main areas of study success policies: 'funding and financial incentives', 'organisation of higher education' and 'information and support for students'.

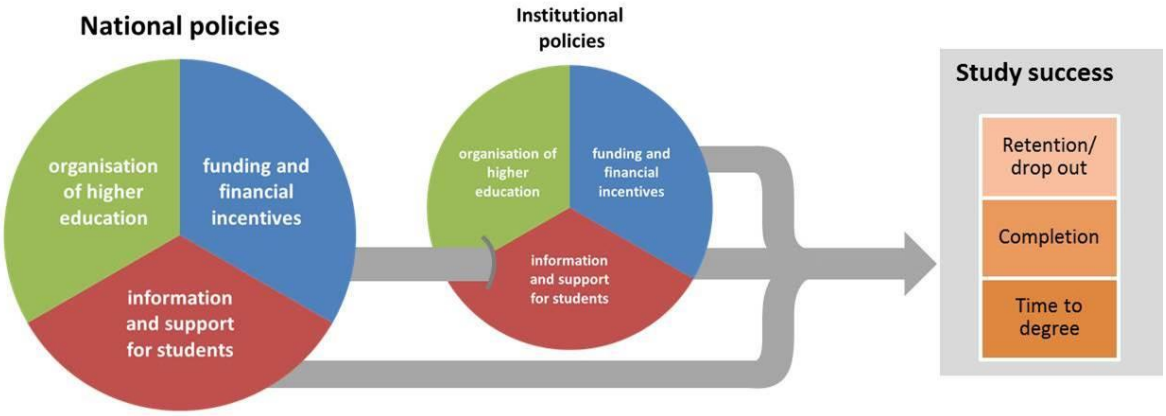
- **Funding and financial incentives:** Financial policy instruments often include incentives to stimulate desired behaviour of students and institutions, or to prevent undesired behaviour. National funding policies and incentives can directly target students, e.g. by tuition fees, grants, scholarships or loans. National funding policies and financial incentives that target institutions mostly work indirectly as they stimulate the institutions to formulate and implement their own policies that improve study success. One example is performance based funding which rewards higher education institutions for the number of degrees awarded or credits completed. Consequently, higher education institutions are expected to implement their own instruments that stimulate students to be successful. Thus, national funding incentives are often translated into institutional study success policies. Institutional funding and incentives often follow the same logic as the national incentives. They can also provide scholarships, e.g. for excellent students. Their internal allocation models can try to influence study success by rewarding sub-units for completed degrees or credits. These units then are expected to implement instruments to support students in being successful.
- **Organisation of higher education:** This policy area refers to structures and procedures related to the organisation of teaching and learning. Organisational policies and instruments at the national level are often related to regulate access to higher education (e.g. selection), pathways to higher education and within higher education (e.g. rules for transition between institutions and programmes). It also includes structural characteristics such as the duration of studies or the types of degrees offered (short degrees, bachelors, masters). Furthermore, organisational regulations concern the quality and accreditation of teaching and learning. Some national organisational policies only define broad objectives and leave the exact policy design to the institutions. One example is that since 2012 Dutch institutions must provide a 'binding study advice' to students who want to transfer from year 1 to year 2, but the institutions can define the criteria when students have to leave the programme because of poor study results. In addition to national regulations, institutions often can and do develop their own teaching and learning policies to stimulate study success. One can think of student-teacher ratios, class size, the number of contact hours, assessment regulations, the professionalization of teachers, regulations for transfer and switch between study programmes, pathways towards a degree or "soft selection mechanisms" such as intake interviews.

[2] We know that there is a wide variety of stakeholders that directly or indirectly influence study success outcomes. Student unions, rector's conferences, employers, political parties and many others influence the behaviour and outcomes of policymakers and students. The relevance of the various stakeholders will differ between countries. For reasons of clarity and simplicity, we will only use the role of these other stakeholders for explaining why certain policies are more effective than others and/or in what context.

- **Information and support for students:** This area refers to policies that include information for (prospective) students and any kind of support for students that is beyond financial assistance and not related to the organisation of teaching and learning. Information and support policies relate to different stages in the student life-cycle. Information addresses prospective students, students switching between programmes or those transferring from a bachelor to a master. It also includes career guidance related to study and future job opportunities. Information provision helps students to form realistic expectations about study opportunities, programmes and later careers, and as such puts high emphasis on good decision making by students. National instruments can include information tools like campaigns and easily accessible student choice and employment databases through websites. Institutions develop support instruments that can address students' academic development and success (e.g. tutoring, academic support, exception rules for students with disabilities), personal well-being (e.g. counselling, healthcare, mental support, etc.) or professional development (e.g. selection of modules, career guidance, work experience, internships, etc.).

Figure 3.1 presents the basic model that will guide the further analyses to identify national and institutional policies that stimulate study success and their effectiveness.

Figure 3.1: Relationships between policies and study success orientations



3.4 How policies are expected to improve study success

Study success policies comprise a number of underlying concepts, rationales and relationships that are expected to improve study success among students. Below we discuss how policies in the different policy areas address the factors that influence study success (as presented in Section 3.3).

- **Funding and financial incentives**: Funding instruments that directly address study success include particularly student financing issues. Providing financial support to students with a lack of economic capital enables them to spend more time on their studies which is expected to make them more successful in persisting and completing their studies. In addition, financial support may also help change the cost-benefit analysis of students. Tuition fees may be used to make students more sensitive about the costs of (delaying) studies and thus to choose more carefully and to study efficiently. Public funding to higher education institutions often includes incentives to make institutions pay attention to study success, for

example through performance-based funding that rewards successfully passed credits or completed degrees. In addition, specific funds can be made available to introduce new organisational structures, types of programmes, selection mechanisms or quality instruments that help enhance the study experience.

- **Organisation of education**: Through policies in the area of the organisation of education, governments and institutions influence study success by impacting on the group composition and homogeneity of the student population, for example by selection, "matching instruments", didactical approaches and flexible pathways that allow students to reorient and to also adjust their education career. More homogeneous groups show less dropout. Selection is also meant to create a better fit between the level and disciplinary content of programmes and (cognitive) abilities and interests of students. More diverse programme levels – e.g. short degrees – offer a greater variety to students in terms of flexibility to switch, to "academically socialise", to qualify for a next level or to manage expectations of students and labour market needs. One could offer broad programmes ('liberal arts') for students who are uncertain about what they like as well as very specific programmes for students already determined about their study or future profession.
- **Information and support policies**: Through information and support, such as counselling, institutions try to increase the identification and match of students with their study programme and institution as it also manages students' expectations with regard to their studies and future employment careers. This includes national information services, like student choice portals, league tables or institutional matching instruments, capability- and interest tests. Some institutions offer extra-curricular courses to enhance skills, competencies and academic preparedness of students, e.g. in reading, writing and language skills. Many countries and institutions also have special support provisions for students with a physical or learning disability. The main rationale underlying such policy instruments is that a better match between students and programmes as well as a growth in competencies are regarded as prerequisites for successful study.

3.5 Reflective questions

The best way to analyse policy effectiveness would be to relate policies to measurable study success outcomes such as dropout rates, completion rates and average time-to-degree. However, reliable international comparative data is too limited to test hypotheses on the effectiveness of study success policies in various countries. Therefore we have formulated a few "reflective questions" that guide the further analyses of the effectiveness of policy mixes in stimulating study success in the empirical parts of this study. Based on the analytical framework, the complex relationships between policies and study success outcomes can be analysed by three key characteristics: the match between policies and the study success orientations; the number of policies and relative spread over policy areas; and the consistency between various policies in a country.

Match between policies and study success orientations

As explained previously, countries use different approaches and definitions of study success in terms of retention/dropout, time-to-degree and completion. It is expected that national and institutional policy instruments that match with the study success orientations defined in a country or institution are more effective. For example, if a country has an overall objective to increase the number of completed degrees, but most policies are designed to reduce time-to-degree, one can expect that the policies are less successful. This leads to the following reflective question:

***RQ1**: To what extent do the explicit study success policies address the study success orientations defined as important in a country (or institution)?*

Variety in policy instruments

The variety of policy instruments used to explicitly address study success of students is determined by the number of policies and the number of policy areas being covered. It is expected that countries or institutions taking a more holistic policy approach towards study success will have better study success outcomes. In addition, it is also expected that the intensity of the policies (e.g. in volume of resources invested or the number of institutions or students addressed) as well as the number of study success factors being addressed (outreach) positively impacts on study success outcomes. This results in the following reflective question:

***RQ2**: To what extent do countries/institutions differ in the variety, intensity and outreach of the explicit study success policies?*

Consistency between policy instruments

The third important characteristic of policy mixes concerns is the consistency between various policy instruments applied. In other words: do they lead to a combined impact on study success or work in opposite directions? It is expected that policy instruments setting incentives in the same direction are more effective than policy instruments that contradict each other. For example, if universities are financially rewarded for graduates that complete their degree within the nominal duration of studies but students receive student financial support without any time constraints, one can imagine study success ambitions may not be achieved. This leads to the following reflective question.

***RQ3**: To what extent do policies designed for study success appear to be aligned or contradictory?*

These three reflective questions addressing the expected relationships between the characteristics of policy mixes and their effectiveness in terms of study success outcomes will be used to inspire the further analyses of this study.

4 Monitoring and Evaluating Study Success in Europe

In this chapter we present an overview of the empirical material that exists in 35 European countries about three indicators of study success:

- **Completion**: The completion rate relates the number of students who have successfully completed a study programme at a higher education institution to the number of students who started the study programme at the higher education institution.
- **Time-to-degree**: This indicator refers to the average number of years taken to complete a degree programme.
- **Retention**: The retention rate refers to the number of students who after entering and starting the study programme, re-enrol in subsequent years of the study programme. The retention rate is the flipside of the drop-out rate that refers to the number of students who leave the study programme/higher education system.

In the next section we discuss some earlier attempts to measure and compare study success indicators across different countries. This is followed by a description of the outcomes of a survey completed by the national experts involved in our HEDOCE project. The survey provides an inventory of indicator definitions and the most recent data (if any) for each of the three indicators. In the final section we present some conclusions on the state of the art with respect to data gathering on study success outcomes across Europe and on how to improve data gathering on this issue.

4.1 Existing study success indicators across the OECD and Europe

There are very few examples of cross-country overviews of completion and dropout rates. Quoting a recent Eurydice report that covers 34 countries (European Commission/ EACEA/ Eurydice, 2014):

> *…a significant number of countries (13) do not systematically calculate completion and/or drop-out rates. This includes countries that have policies addressing retention and completion, but clearly lack basic data to analyse their impact. Even when completion rate data is collected, it is hardly ever differentiated by specific student profiles or characteristics. (EC/EACEA/Eurydice, 2014, p. 10)*

An earlier Eurydice report on the Bologna Process Implementation progress (EACEA; Eurydice; Eurostat; Eurostudent, 2012) includes data on completion rates. Its data was used in the NESET report on dropout and completion in higher education in Europe (Quinn, 2013). Currently, the only regular overview of data for several countries on the issue is included in the OECD publication *Education at a Glance* (EAG), based on the UOE-Database, the UNESCO, OECD, EU data collection on education systems. However, the OECD does not collect data on completion rates on a yearly basis. Its most recent data on completion rates is found in Education at a Glance 2013 and relates to the year 2011.[3] This OECD overview covers only 14 countries out of the 35 in our HEDOCE study (see table 4.1). The completion rates reported range from 53% to 83%. However, these numbers should be interpreted with caution. Firstly, two very different methods are used to calculate completion rates. Secondly, the national context needs to be taken into account when comparing indicators and countries.

[3] See: http://dx.doi.org/10.1787/888932848495.

Table 4.1 OECD data on completion rates

	Education at a Glance 2008				Education at a Glance 2013			
	Method	5A Year for new entrants	5B Year for new entrants	Completion rates 2005	Method	5A Year for new entrants	Year for new entrants	Completion rates 2011
Austria	Cross-section	2000-03	m	M	Cross-section	2006-08	m	m
Belgium (Fl.)	Cross-section	1998-2001	2003-04	82	True cohort	2007-08	2007-08	73
Bulgaria	m	m	m	M	m	m	m	m
Croatia	m	m	m	M	m	m	m	m
Cyprus	m	m	m	M	m	m	m	m
Czech Republic	Cross-section	m	m	M	True cohort (ISCED 5A), cross-section (ISCED 5B)	2001	2001	72
Denmark	True cohort	1995-96	1995-96	85	True cohort	2000-01	2000-01	81
Estonia	Cross-section	2003	2003	63	m	m	m	m
Finland	True cohort	1995	1995	72	True cohort	2000	a	76
France	True cohort	1996-2003	1996-2003	79	Longitudinal survey	2002-09	2002-09	80
Germany	Cross-section	2001-02	2003-04	77	True cohort (ISCED 5A), cross-section (ISCED 5B)	1999-2002	2008-09	m
Greece	m	m	m	M	m	m	m	m
Hungary	Cross-section	2001-04	2004-05	55	Cross-section	2006-07 / 2009-10	2009-10	53
Iceland	True cohort	1996-97	1996-97	70	m	m	m	m
Ireland	m	m	m	M	m	m	m	m
Italy	True cohort	1998-99	1998-99	M	m	m	m	m
Latvia	m	m	m	M	m	m	m	m
Lithuania	m	m	m	M	m	m	m	m
Luxembourg	m	m	m	M	m	m	m	m
Macedonia	m	m	m	M	m	m	m	m
Malta	m	m	m	M	m	m	m	m
Montenegro	m	m	m	M	m	m	m	m
Netherlands	True cohort	1997-98	1997-98	71	True cohort	2003-04	a	72
Norway	True cohort	1994-95	1994-95	65	True cohort	1999-2000	1999-2000	59
Poland	Cross-section	2001-04	2003-04	64	Cross-section	2006-09	2008-09	62
Portugal	Cross-section	2001-06	2004	69	Cross-section	2006-10	2009	67
Romania	m	m	m	M	m	m	m	m
Serbia	m	m	m	M	m	m	m	m
Slovak Republic	Cross-section	2000-03	2003-04	70	Cross-section	2006-09	2008-10	71
Slovenia	Cross-section	2001-02	2001-02	65	m	m	m	m
Spain	m	m	m	M	cross-section	2008-09	2007-10	m
Sweden	True cohort	1995-96	1995-96	69	True cohort	2002-03	2002-03	53
Switzerland	True cohort	1996-2001	1996-2001	M	m	m	m	m
Turkey	m	m	m	M	Cross-section	2007-08	2009-10	75
United Kingdom	Cross-section	2003-04	2003-04	64	Cross-section	2007-08	2007-08	72

Source: OECD, Education at a Glance 2008, Education at a Glance 2013.
Indicator A4.1, amendments by CHEPS-NIFU, m=missing data.

The completion rates shown in Table 4.1 are based on two calculation methods, which makes it difficult to compare data. The cross-section method refers to the number of graduates in a particular year divided by the number of new entrants into these programmes in the year of entrance, that is: a few years before. The method can take

into account different programme durations. The true-cohort method calculates completion rates longitudinally by tracking the students who begin a programme. The method is based on panel data that – as a natural consequence of the method – is usually quite old, as it takes time for students to complete. Policy developments that took place during the last five to ten years will therefore not have been picked up by the data.

The latter points at the policy context surrounding study success data. For both methods it makes a difference what time span is used in calculating completion, as in some countries students use (much) more time to obtain a degree than the normative period. In addition, one needs to acknowledge that not all countries have the intention of retaining all students in higher education until degree completion. As illustrated in the country case studies (chapter 6), this is particularly an issue in countries that do not operate rigorous selection processes when admitting students to higher education. Rather than pre-entry selection some countries operate a system of post-entry sorting, e.g. through academic failure and involuntary withdrawal. Several German-speaking countries have a higher education system that is rather open to all qualified applicants. The first year in higher education serves as a selection mechanism, as only those who do well in the first year may continue to the second. Thus selectivity (upon entrance or in the first year) affects completion, drop-out and other measures of study success. Other contextual issues that prevent a straightforward use of study success data relate to the degree of flexibility in a country's higher education system and its opportunities for a smooth transfer from one institution/programme to another.

4.2 An inventory of national study success indicators

Our HEDOCE national experts were asked to complete a questionnaire on study success monitoring activities in their country and to provide (links to) any recent data that is publicly available on our three indicators of study success, i.e. completion rate, retention rate and time-to-degree. The results of the questionnaire are shown in the tables below and highlight the indicators that are monitored and publicly available. When an indicator is published (table 4.2), experts were asked to provide a definition and check for the types of institutions and groups of students covered by the indicator (tables 4.3-4.5). They were also requested to provide the value of the indicator for the most recent year; when time series data is available this was indicated in addition.

While 12 countries publish an indicator for *completion*, 23 do not, even though for some of them in principle the data to calculate such a completion rate are available. Only six countries reported that some kind of *retention rate* is publically available in their country, although for one of them (Denmark) the indicator actually refers to dropout, the flip-side of retention. For only a quarter of the countries we did manage to find information on *time-to-degree*.

Table 4.2: Overview of available indicators on study success

Indicator	Indicator available/used on national level
Completion rate	Austria, Denmark, Germany, Flanders, France, Iceland, Luxembourg, The Netherlands, Norway, Sweden, Switzerland, UK (England, Northern Ireland, Scotland, Wales)
Retention rate	Austria, Ireland, Norway, Sweden, UK and Denmark (drop-out rates)
Time-to-degree	Austria, Czech Republic, Denmark, Finland, Flanders, Germany, The Netherlands, Spain, Switzerland

Source: Reporting from national experts (2nd HEDOCE questionnaire, 2014).

Comparing table 4.2 to table 4.1 we conclude that actually more countries report study success indicators to the UOE-database than there are countries that publish and use these indicators on the national level for the monitoring of their higher education system. It seems that either study success is not a prominent issue in many countries or that national discussions are based on different information or indicators, such as the absolute number of graduates. However, the 2014 Eurydice study (EC/EACEA/Eurydice, 2014) reports that most countries measure completion rates as part of their external quality assurance processes – even while they do this rather sporadically and do not report an overall national picture of this measure.

Another aspect is that among the countries reporting nationally on completion, hardly two countries use the same definition or base their indicator on the same group of institutions, types of (degree) students, or the same observation time span (table 4.3). France reports its completion rate four years after the students' first enrolment, other countries after five or even ten years. Iceland reports the completion rate for every year up-to ten years. The Netherlands bases its calculation only on students re-enrolled after the first year of entry. Because of all these variations, some countries do not publish an overall completion rate but provide very detailed ratios on programme level and for certain groups of students (for example Denmark). Most countries in Table 4.3 have measured completion rates more often. We do not present those time series as definitions often change between years, measurement is infrequent and thus difficult to compare.

A recent report commissioned by Eurostat (ICON/QUANTOS, 2015) reveals that 22 countries have been monitoring completion rates for the 2012 OECD/Eurostat survey. Here it has to be noted that our questionnaire used a different approach; it asked for indicators that are monitored and used for national policy making.

Table 4.3: Completion rates

Country	Comple-tion rate	Method	Time span	Type of degree	Definition	Time series ?
AT	85,6%	CS	Graduates of 2012/13 compared to beginner cohort X years ago, where X is the average duration of a study	BA, Dipl	Only public universities. Only first degree (not necessarily the programme the student started in). Including national and foreign graduates.	Yes
AT	52.1%	O	Beginner cohort 2003/2004 surveyed every year, data refer to completion after 10 year	First degree	Completing at least one academic degree 10 years after first enrolment	Yes
DK	79% (BA) 85% (MA)	TC/O	Beginner cohort 2008	BA or MA	Students who entered higher education in a given year and who complete a degree measured against all students who entered higher education in that year (data is based on a combination of actual figures and prognosis). Interruptions of up-to 15 months are neglected.	
DE	75,9%	TC/O	Graduation until 2012 of beginner cohort 2004/05	All first degrees	First degree students at Universities and Universities of Applied Sciences. Only students with a German school leaving certificate. Estimations for those still studying.	Yes
BE (FL)	64,5%	TC	Beginner cohort 2006/07, graduated within 5 years	BA	Percentage of students graduating as a bachelor (not necessarily the programme the student started in), in relation to the number of first-time entrants five years ago.	
FR	39,4%	TC	Beginners of 2008-09 receiving their first	BA	Share of beginners receiving a Bachelor within 4 years (not	Yes

Country	Comple-tion rate	Method	Time span	Type of degree	Definition	Time series ?
			degree within 4 years (2012)		necessarily the programme the student started in). Excluding preparatory classes for Grandes Écoles. Only national students.	
IS	54,7% after 5 yrs 69,1% after 10 yrs	TC	Beginner cohort of 2002, tracked till 2012	All first degrees	Students who entered tertiary education for the first time are tracked for 10 years, and their first graduation at the tertiary level in the Statistics Iceland Register of Graduations is recorded. Including national and foreign graduates.	yes
LUX	49,6% (BA 180 ECTS) 92,4% (BA 240 ECTS) 81,5% (MA 60 and 120 ECTS)	TC/O	Beginner cohort 2008/09, share who finished till 2014	BA or MA	Completion rate indicates the percentage of a certain beginner cohort who have completed till 2014. Different rates are provided by duration of programme and type of programme.	
NL	70,9% (univ.) 65,2% (UAS)	TC	Beginner cohort 2010, after 4 years	BA	The number of national students who get a bachelor degree C years after re-enrolment after the first year of entry, where C is the standard period of study (UAS: 4 years, university: 3 years).	Yes
NO	71,5% (BA) 67,0% (MA)	TC	BA: Beginner cohort 2008, after 5 years; MA: beginner cohort of 2009 after 4 years	BA or MA	Share of graduates in 3-Year, full-time BA programmes, five years after beginning in 2008 (rates after 3 and 4 years are also available). Beginner cohort 2009 of 2-Year, full-time MA programmes after four years.	Yes
SE	41% - 91% depending on programme (average: 68%)	TC	Beginners of 2001/02-2007/08 (depending on program duration), graduation till 2011/12	Short courses, BA, Dipl	Number of graduating national students from a programme compared to number of admitted students (new program entrants). From 2011 the graduation rate is calculated by using information about when students started in a programme and the number of qualifications awarded at the end of the programme's nominal length + 3 years.	Yes
CH	University - BA: 66% - MA: 93% UAS: - BA 83% - MA 83% PH: - BA 87% - MA 73%	TC	Data refer to completion in 2012 Beginner cohorts: University - Bachelor 2005 - Master 2006 UAS and PH: - Bachelor 2008 - Master 2009	BA	Starting from an entry cohort, the proportion of BA-students is measured which acquire a degree on the observed level of study. Only students with a Swiss authorization ID. At UAS: Only full-time students.	Yes
UK	85,6% expected	O	Beginner cohort 2011/12	All first degrees	The sector averages for the UK and its constituent countries are obtained by taking a (weighted) average of all the relevant institutional values. UK domiciled full-time students starting first degree courses 2011/12	yes

Methods: CS – cross section, TC – true cohort, O – other.
Source: Reporting from national experts (3rd HEDOCE questionnaire, 2014).

The *retention rate* indicates the proportion of a cohort of beginners that continue their studies. This is usually measured per semester or year. Sometimes the retention rate is seen as the complement of the drop-out rate (e.g. Denmark). The UK and Sweden publish their retention rates only for students still registered after the first semester (Sweden) or year (UK). Table 4.4 shows some information for the few countries that pay attention to the issue of retention. Only very few countries use the *time-to-degree* indicator to monitor study success in their higher education systems (see Table 4.5). An important issue here is which groups of students and degree programmes are covered in the indicator and how students that switch between programmes are taken into account.

Table 4.4: Retention rates

Country	Retention rate	Method	Time span	Definition	Time series available
AT	Yearly rates: 87,8% (after 1st year), 73,1%, 68,1%, 60,1%, 50,6%, 38,4%, 27,8%, 20,4%, 14,7%, 10,3% (after 10 y) 52,1% graduated after 10 years	TC	Beginner cohort 2003/04, yearly data on retention (till 2012/13), drop-out and graduation	Retention, graduation and drop-out refer to the whole university system, i.e. switches of programmes or universities are neglected. Only universities, only students enrolled for first time. Bachelor (3y) and Diploma programmes (4-5y)	yes
	also dropout rates after 3 semesters Bachelor U: 40.8% Dipl. 33.5% Bachelor UAS: 18.1%	O	Beginner cohort 2011/2012	Students that are not studying their original subject three semester after first enrolment	yes
DK	Retention rate only available indirectly, because cumulative yearly dropout rates by type of degree are reported	O	Beginner cohort 2006-2010	The students who entered a higher education programme in a given year and who continue as students in the programme, measured against all students who entered the programme in that year. Monitoring focuses on the drop-out rate, which is largely complementary to the retention rate.	
IRL	Higher Education Authority reports on Non-Progression rates 16%	O	Beginner cohort 2010/2011 in undergraduate studies at universities and IoT	Students who are not registered for a second year of study (includes students who transfer to a different institution).	yes
NO	41,1% (after 3y), 23,2% (after 4y), 14,8% (after 5y)	TC	Beginner cohort 2008	Proportion of HE entrants to 3-Year, full-time BA programmes who are still enrolled after 3, 4 and 5 years (also available for MA).	
SE	71%	TC	2011/12	Proportion of HE entrants who are still registered in higher education after their first semester.	yes
UK	93% (90,9% continue or qualify at same institution and 2,1% do so at another institution)	TC	2012/13	Continuation following year of entry: UK domiciled full-time first degree entrants.	yes

Methods: CS – cross section, TC – true cohort, O – other
Source: Reporting from national experts (3rd HEDOCE questionnaire, 2014).

Table 4.5: Time-to-degree

Country	Time-to-degree	unit	Degree	Year	Definition	Time series available
AT	7,9	Sem.	BA	Completion in 2011/12	Median of study duration (from enrolment until graduation) of all ordinary students in semesters. Students who graduated 25% quicker than the minimum legal study duration are excluded. Public universities only.	yes
CH	3,9 (Univ) 3,5 (UAS) 3,2 (Teacher Training)	Years	BA	Completion in 2012	Average number of years between enrolment and degree (for a specific entry year – in this case 2006). Also available for MA. Only refers to students that completed secondary education in Switzerland and who did not switch courses.	yes
CZ	net days used to complete a first degree: 1166 gross days used to complete a first degree: 1675	days	Time until first graduation	Published 2014	Time spent on a publicly funded study place, corrected for interruption of studies (i.e. net time) for first graduation. Numbers refer to the average/median of days used by students completing a degree in 2014	yes
DK	3,5 (BA) 6 (BA+MA)	Years	BA, BA+MA	Completion in 2011	The average number of years that students take to complete degree programmes.	
BE(FL)	3,15	Years	University BA	BA starting 2006/07	Mean time it takes a student from entrance into higher education to graduating as a bachelor (any bachelor degree, not necessarily the programme the student started in). Only students who graduated within 6 years.	
DE	7,0	Semes-ters	BA	Completion in 2012	The total time (median) till completion of a BA degree. Also available for other degrees and particular subjects (without switches).	yes
FI	5,8	Years	All degrees (excl. PhD)	2009	Mean duration of studies (all universities and programmes): average across institutions	
NL	5,1 (UAS) 5,3 (Uni)	Years	UAS: 1st BA Uni: 1st MA	Beginners of 2013	Expected time-to-degree.	yes
SP	4,66	Years	University	2010	Average duration of higher education	

Source: Reporting from national experts (3rd HEDOCE questionnaire, 2014).

4.3 Conclusions and recommendations

Data on study success are diverse in terms of data collection, definition, presentation and general use. Cross-country overviews of completion rates, let alone other indicators of study success such as retention, drop-out and time-to-degree, are rare. These overviews, such as the one produced by the OECD in its Education at a Glance, have to be interpreted with care due to differences in underlying indicator definitions and differences in context and institutional arrangements across the countries' higher education systems. From our own (HEDOCE) inventory of existing national data and definitions of study success indicators it became apparent that only twelve out of 35 European countries regularly report an indicator related to completion. Even fewer countries report on retention rates, drop-out and time-to-degree. This illustrates that the monitoring of study success is not yet a prominent issue in most countries – at least not on the national level.

Yet international comparisons can play a useful role in starting a debate on study success and its constituent sub-dimensions. Such comparisons will highlight the differences between countries in perceptions about the multi-faceted concept of study success. They allow for learning about definitions and – as a next step – agreeing on a common definition that will help in making useful comparisons of indicator scores. But preceding all this is to start measuring the progress of students – tracking the educational careers of different groups (cohorts) of students – and constructing a database holding publicly accessible data on completion, drop-out, retention and study duration. Data and uniformity of underlying definitions across countries is essential for those stakeholders wishing to tackle study success. A recent study commissioned by Eurostat to advise on "methodological developments for computing and collecting data on completion rates and average duration in higher education" reviewed the different approaches for calculating completion rates and time-to-degree. Based on the findings that the approaches differ enormously between European countries, the report recommends to harmonise the monitoring activities, data collection and indicator calculations across Europe (ICON/QUANTOS, 2015, p. 38ff).

Since improving study success will become an important issue in the years to come as national higher education systems mature and reach a post-massification phase, coordinated efforts should be undertaken by European countries to collect and monitor completion, drop-out and time-to-degree. These indicators are useful for informing policy-making, benchmarking higher education institutions and informing student choice. It makes sense to calculate indicators based on data that refers to one particular type (i.e. level) of degree (say, bachelor, master, professional), because publishing an overall rate for the system as a whole is a rather heroic exercise, given the diversity in programmes, institutions and students. The more disaggregated the study success indicators are, the more useful they will be for informing policymaking, benchmarking and informing (prospective) students.

5 National Study Success Policies

This chapter provides an overview of frequently used as well as noteworthy national study success policies. In addition, it reports on the importance of study success in national higher education policy agendas and the prevailing study success orientations in European countries. The aim of this overview is to provide a consolidated and - to the extent possible - an up-to-date overview of national policies and measures that explicitly aim at reducing dropout and improving completion rates in higher education in Europe. Further, it aims to provide insights in the effectiveness of policies and measures, based on the experience of the countries included in the study. The chapter draws on various data sources: two surveys among national experts from 35 European countries[4] and complementing information from the in-depth country case studies (see chapter 6). The findings were verified and consolidated with desk research. This report provides a snapshot of national policy instruments that were implemented between 2005 and 2014. It focuses on national policies that were explicitly and originally designed to address study success. As the data was mainly collected in surveys among national experts there is the risk that for some countries an explicit and original national study success policy is missing in the overviews. We also refer to the fact that some national policies that (indirectly) contribute to improving study success are not included in our overviews because they were originally not designed to explicitly address study success but served other purposes in higher education.

The chapter starts with an investigation of the importance of study success (section 5.1) and the study success orientations prevailing in the European countries (section 5.2). In section 5.3 we present an overview of explicit national study success policies. As such, we clustered more than 170 national policies into 22 typical national study success policies divided over the three policy areas: funding, organisation and information policies. Besides these overviews we describe in the text many interesting study success policies using their main rationales, ways of implementation and where possible their effectiveness. In section 5.4 we present an overall overview of the explicit national study success policies for each of the 35 European countries. In section 5.5 we discuss four good examples of how national policies are combined and support each other in addressing study success. In section 5.6 some overall conclusions are formulated, addressing the following reflective research questions:

- Which policies address study success effectively?
- Is there a match between policies and study success orientations?
- Do countries use a variety of policy instruments and are these consistent?

5.1 Importance of study success on national policy agendas

Based on the surveys among national experts we conclude that study success is an important issue across Europe. In 75 per cent of the countries experts indicated that study success is important, and in 45 per cent of the countries the experts reported that study success is high or very high on the higher education policy agenda. For Greece, England and France experts reported study success being very high on the agenda. In 25 per cent of the countries the experts indicated that study success is less relevant on the policy agenda (see table 5.1 below).

[4] Liechtenstein was not included in the survey.

Table 5.1: Importance of study success on national higher education policy agendas

Importance of study success	Countries
Very high or high on the agenda	Denmark, England, Estonia, Finland, Flanders (Belgium), France, Greece, Hungary, Italy, Former Yugoslav Republic of Macedonia, Malta, Netherlands, Norway, Serbia, Slovenia, Sweden
On the agenda	Austria, Croatia, Czech Republic, Germany, Ireland, Luxembourg, Montenegro, Poland, Portugal, Romania, Spain, Switzerland
No or little relevance on the agenda	Bulgaria, Cyprus, Iceland, Latvia, Lithuania, Slovak Republic, Turkey

Source: Reporting from national experts (1st HEDOCE questionnaire, 2014).

5.2 Prevailing national study success orientations

The analysis reveals that 'time-to-degree' is the most frequently used study success orientation underlying national policy making. In 19 countries experts considered it the most important study success orientation.[5] 'Completion' is the most important study success orientation in 11 of the reviewed countries, while Ireland focuses on 'retention' only. The remaining countries combine study success orientations. In France and Italy for example, both persistence *and* time-to-degree are equally important for gauging study success. Malta's study success orientation cannot be assigned to one of the definitions used in this study as the expert reported that study success is focused around acquiring relevant competences for the labour market.

Table 5.2: Study success orientation of countries

Study success orientation	Prevailing in country:
Time-to-degree	Croatia, Cyprus, Denmark, England, Estonia, Finland, Flanders, Greece, Hungary, Luxembourg, the former Yugoslav Republic of Macedonia, Montenegro, Netherlands, Norway, Portugal, Romania, Serbia, Spain, Switzerland
Completion	Austria, Bulgaria, Czech Republic, Germany, Iceland, Latvia, Lithuania, Poland, Slovakia, Slovenia, Sweden, Turkey
Retention	Ireland
Mix type of study success orientation	France (completion, time-to-degree and retention) Italy (completion and retention)
Study success orientation beyond typology	Malta (strong focus on labour market relevant competences)

Source: Reporting from national experts (1st and 2nd HEDOCE questionnaire, 2014).

[5] The analysis does not include those statements of experts addressing the transition of graduates to the labour market. In particular, countries with high unemployment rates among young people (under 25-30 years) and/or among HE graduates report employability as an important study success orientation. These countries, such as Italy and France, also have study success policies that address different aspects of employability.

5.3 Overview of typical study success policies

The two surveys among national experts and the further desk research identified a variety of national policies that explicitly address study success in Europe. This data collection among experts and relevant policy oriented literature employed an open approach in order to provide the most accurate picture of national policies that are explicitly and originally addressing study success from 2005 onwards. The survey results were double-checked against other data sources such as the NESET report (Quinn 2013), reports from Eurydice (European Commission/EACEA/Eurydice 2014; 2011), OECD reports and sources that have already been used in the literature review. In total more than 170 policies that explicitly and originally address study success have been identified. These policies have been clustered into 22 'typical policies' that are most noteworthy and frequently used in the 35 countries studied. Noteworthy policies are those policies that are not widespread yet (for example only implemented in one or two countries) but that represent an interesting approach. Frequently used policies are those that are implemented in more countries and that are based on similar rationales across these countries. In the following we will present the 'typical policies' for each of the three policy areas identified in the analytical framework. The presentation will also address the study success orientation mainly served by the policies; this includes that the policy will also address other study success orientations.

5.3.1 Typical national financing policies for study success

Study success policies in the funding and financial incentives area can work in different ways. Obviously, governmental funding of institutions differs from student funding. Secondly, funding may have positive or negative incentives – for example rewarding certain forms of activity or penalising others. Finally, funding can be provided as additional money to stimulate new focal areas of institutional activity and behaviour, such as the quality of teaching and learning.

Within the financing area we clustered the reported policies into eight typical funding instruments. Most of the funding instruments are already in use for some time and serve, besides study success, other objectives (for example widening access). In particular, 'financial support for students in general' has to be mentioned here because this is usually associated with enhancing access to higher education for underrepresented groups. But it can also address study success as it intends to enable students to spend more time on their studies and thus increases their probability to complete their studies. The table below lists and briefly describes the typical financing policies, indicating their expected effects, which study success orientation they address and in which countries these are implemented.

Table 5.3: Typical explicit national study success policies in the area of financing (2005-2014)

Policy	Description of policy	Expected effect	Main study success orientation	Countries implemented
Additional funds for specific students enrolled	These additional funds provide higher education institutions money for enrolling specific groups of students. These can be non-traditional backgrounds students or special needs students. With these additional funds HEIs can improve the study conditions and develop appropriate instruments and measures.	Better institutional support for students at risk of early withdrawal. Improved access, retention, completion, attainment and progression of students from lower SES groups (and other institutional target groups).	Retention	Czech Republic, England, Flanders
Additional funds for teaching	Additional funds for teaching are provided to institutions to improve the quality of teaching. From the quality improvement it is expected that it will contribute to study success. In this respect additional funds for teaching are provided for different purposes: teaching staff, educational infrastructure & resources and development of services.	The improvement of study conditions will increase the quality of teaching and learning – this is expected to have a positive impact on study success/completion rates.	Completion	Czech Republic, Flanders, France, Germany, the former Yugoslav Republic of Macedonia
Financial support for students in general	Provision of public scholarships, grants and loans for students on a need or merit base. Also paying tuition fees or registration fees for students from low-income families can be included.	Students will better concentrate on their studies, do not need to spend too much time on paid employment. It is expected that students will better concentrate on their studies and that this will reduce their likelihood for drop-out because of bad performance or they cannot afford higher education.	Completion	Austria, Bulgaria, Czech Republic, England, Estonia, Germany, Ireland, Italy, Norway, Romania, the former Yugoslav Republic of Macedonia, Serbia, Turkey
Additional student financial support budget	Increase the budget for scholarships to subsidise students' living costs and accommodation	Enhance access of students from non-traditional backgrounds. Reduce the risk of dropout for students from lower socio-economic backgrounds	Completion	France
Funding model rewarding quality, study progress and (timely) completion	These funding instruments mostly comprise performance-based funding or performance agreements. Such funding formulas include indicators for the number of graduates (completing in the nominal study period), the number of re-enrolments and achieved credit points. This policy type also includes funding instruments that penalize dropouts. Performance agreements often include a wider set of indicators or areas where institutions seek improvements in order to strengthen education quality and study success. This includes also teaching qualifications, innovative teaching methods as well as dropout, retention and completion rates.	Stimulating higher education institutions to take greater responsibility for developing instruments to better address the study success of their students	time-to-degree	Austria, Croatia, Denmark, Estonia, Finland, Flanders, France, Germany (majority of the states), Greece, Iceland, Netherlands, Norway, Slovenia, Spain, Switzerland

Student financial support rewarding study progress and (timely) completion				
Progress dependent financial support for students	These kind of funding policies for students make the financial support dependent on the progress or achievements of the student. This is mostly done continuously, i.e. students have to prove that they have achieved the required number of credit points after every semester/study year. These policies reward extra funds or bonuses for completion in the nominal study period or even earlier.	Faster study progress and reduced time-to-degree	time-to-degree	Croatia, Denmark, Finland, Hungary, Iceland, Lithuania, Montenegro, Netherlands, Sweden, Spain,
Turning loans into grants	Student funding is used to reward desired behaviour or to penalize undesired behaviour of students. Rewarding means that loans are turned into grants when a student meets pre-set requirements (for example completing a degree within a certain period of time or passing a given proportion of credits per year).	Faster study progress; more students that complete; more students that complete within the nominal duration of studies and high/outstanding grades.	time-to-degree	Netherlands (1996 - 2015), Norway (since 2003)
Waiving or charging differential fees to reward study success	Students who achieve a set of targets (for example completing their degree on time, completing with outstanding grades) will have to pay no or less tuition fees than students who do not achieve the targets	More students to complete their studies in time. Fewer transfers/switches between different study programmes. Better reflected study choices.	time-to-degree	Croatia, Estonia, Hungary, Lithuania, Poland, Serbia, Slovakia, Slovenia, Spain, Turkey

Source: Reporting from national experts (2nd HEDOCE questionnaire, 2014).

Financial policies mainly addressing retention

Additional funds for specific groups of students

Currently, England provides additional funds to institutions for enrolling specific groups of students with the 'Student Opportunity Allocation' (previously: Widening Participation Premium). This noteworthy policy aims at increasing retention among students with a higher risk of dropout. The policy draws on studies in 2002 2004 that showed that retaining some students is more expensive than retaining others. These additional funds are provided in two ways: First, a formula is used that accounts for higher dropout rates among identifiable groups of students based on age and entry qualifications). Second, through performance agreements higher education institutions can apply for additional funds for specific study success initiatives.

Bowes *et al*. (2013) found that this funding made an important contribution to the efforts of institutions to improve retention and success. There, however, is no proof for causal relationships between this investment and student outcomes. Nevertheless, non-continuation rates have declined from 9.1% in 2003/4 to 5.7% in 2012/13, and retention/completion rates have improved.

In addition, English higher education institutions are required to submit an Access Agreement to the Office for Fair Access (OFFA) which specifies how a proportion of additional fee income is to be spent to ensure the access and success of disadvantaged student groups. This must include outreach work, financial aid and spending to improve retention and success among students at risk (including progression beyond higher education). Access Agreements must be approved by the Director of OFFA, although in reality approval is not withheld and changes to the agreements occur through informal discussions.

The Czech Republic provides specific funds to higher education institutions to support special needs students, for example students with a handicap ir order to allow them to devote sufficient time to studying and to complete (Ministry of Education, Youth and Sports (2015).

In Flanders an 'encouragement fund' ("*Aanmoedigingsfonds*") was established in 2008. This provided earmarked funding (€3 million yearly) for each institution to set up measures regarding the participation and performance of underrepresented groups (low socio-economic backgrounds, disabled students and *second chance-students*. Due to budget cuts throughout all public policy domains, this encouragement fund was abolished by the Flemish Government at the end of 2014. However, the general funding formula still awards (proportionally) additional funding to institutions with a higher percentage of students from underrepresented groups. These funds are meant to cover the costs of more intensive counselling activities as well as to develop specific access and retention activities.

Financial policies mainly addressing completion

Additional funds for teaching

Additional funds for teaching intend to improve teaching quality and, concomitantly, study success. Such funds can be provided for different purposes as for example hiring additional teaching and support staff, developing student support services, developing educational innovations or improving educational infrastructures. Mostly national governments provide the funds based on explicitly formulated needs and spending of higher education institutions, or in competitive settings where the best proposals to improve the quality of teaching and learning become funded. These funds thus stimulate higher education institutions to take more responsibility for improving study success. Though such additional funds can serve a variety of measures at institutional level, they appear to be most often used to achieve improved completion rates. France, Germany and the former Yugoslav Republic of Macedonia provide such additional funds for higher education institutions to innovate and improve their teaching and learning.

France, implemented in 2007 the "*plan pour la réussite en licence*" (plan for success in obtaining a bachelor degree). This multi annual funding scheme included a number of measures for the 2008-2012 period. For example, the ministry published different calls inviting higher education institutions to propose innovations in teaching and learning and developing instruments to increase the success rate of their bachelor students. Positively reviewed proposals became funded. Evaluations of the effectiveness of the 'plan' state that the additional funds have motivated universities to better adapt to the needs of their students and to invest in supporting them. No proof was found that this contributed to an increase in the completion rates of university bachelor students (*Cour des comptes*, 2012, p. 658). Though the 'plan' was not prolonged, in France additional funds for teaching are still provided to universities. With the implementation of the new higher education law in July 2013 the ministry supported its teaching quality objectives with extra budget for additional academic staff positions at universities. France plans to hire 5,000 additional support staff and professors between 2013 and 2017. In 2013, 1,000 additional staff were already hired, about 45% were support staff and 55% were teaching staff (MESR 2013c, p. 8). There is no evidence yet of the effect of the additional staff on bachelor completion rates.

Germany has implemented the "Quality Pact for Teaching" (*Qualitätspakt Lehre*) for the period 2011-2020. "The overall goals of the programme are to achieve a better student-staff ratio in HEIs, to support the qualifications and training of staff and to

ensure a further development of the quality of teaching at HEIs" (BMBF 2011). With the Quality Pact the federal government and the federal states jointly invest €2 billion in 186 selected higher education institutions. These funds are awarded on the basis of a competitive selection of proposals for planned innovations in teaching and learning as well as the needs for additional teaching staff. An expert committee reviewed the plans and selected the most promising ones. Higher education institutions developed different projects that meet their own special needs. Amongst others, they included support in writing for students, training professors and new forms of teaching. Currently, the funded projects are subject to a midterm self-evaluation. Projects that get their self-evaluation accepted will be funded until 2020. In addition, an overall evaluation of the implementation of the Quality Pact is being conducted and in 2015 an impact assessment of the programme beyond its goals started (*Begleitforschung zum Qualitätspakt Lehre*). As the evaluations are ongoing there is no evidence available yet, but in the German case study most stakeholders report increased institutional awareness of the need to improve and maintain teaching quality.[6]

The "Higher Education Pact" (*Hochschulpakt*) is another German initiative to provide additional funds for teaching to higher education institutions. The federal government and the States cooperatively financially support all higher education institutions for enrolling extra students beyond the regular numbers and quota. This funding scheme started in 2007. The first and second funding periods (2007-2010/2011-2015) aimed to 'expand' higher education by hiring additional (teaching) staff to train the increasing student numbers. From 2016, the third funding period will use part of the funds (10%) for improving study success through relating funds to study progress and retention of students. It is expected that this new logic will strongly stimulate institutions to develop instruments addressing study success.

In the Former Yugoslav Republic of Macedonia, additional funds aim to improve educational resources and infrastructure. The money was for example used to translate professional scientific books and manuals in various academic disciplines (e.g. pharmacy, dentistry, and IT) in order to give students access to the most recent academic knowledge. Up-to-date equipment was also procured to improve teaching in science and technology. The underlying rationale is to improve study success by enhancing the teaching and learning environment.

In general, providing additional funds to stimulate institutions to develop new approaches in teaching and learning, to increase the number of teaching staff or to enhance learning infrastructures is a rather new development across Europe. Hence, evaluations of the impact of these measures on study success are not available yet. One can notice that such additional funds result in a huge variety of individual institutional instruments. Though they may not all be equally effective, they may enable institutions to respond to their specific problems. Nonetheless, the provision of additional money for teaching and learning has **effectively increased institutions' attention** to the quality of teaching and learning, and thus for study success. The temporary nature of the additional funds, however, often are criticised for being too short to achieve significant and sustainable changes in teaching and learning.

Financial support for students in general

Providing financial support to students is a widely used policy in Europe. This policy includes various kinds of financial support for students as for instance universal grants, scholarships, loans or the introduction, increase or abolition of tuition fees by the state. Financial support is generally provided for a limited period of time and often dependent on (parental) income or merit (student's achievements).

[6] The case study includes an analysis of two institutional projects funded by the Quality Pact (see Chapter 6).

The most important forms of financial support consists of loans and scholarships or grants. In Bulgaria, England and the Netherlands for example, financial support is mainly provided as a loan of which the interest rate is often subsidised by the state. Other countries concentrate on the provision of scholarships which are given directly to students, such as in Belgium, Austria and Germany. In other countries such as Latvia, Romania and the Czech Republic scholarships are awarded by institutions which themselves assess student eligibility.

Besides widening access to higher education, financial support nowadays is more often used to promote study progress and completion of studies. While it definitely has contributed to widening access, the effectiveness of financial support for study success, in particular completion, is more ambiguous. In Germany research has shown that a lack of financial means is not an important factor for students to drop out of higher education. Dropout is more strongly related to organisational issues such as curriculum design or academic readiness (Heublein *et al.*, 2008). Slovenia also reports only a weak impact of financial support as the grants provided do not cover a significant amount of living costs. Students then work part-time besides studying.

However, other research has shown that student financial support can have an impact on dropout and completion depending on the conditions under which it is provided to students. One recurrent theme in the literature is that the amount of funding needs to be sufficient to prevent students from spending too much time on working. Evidence from Norway (Hovdhaugen, 2014; Opheim, 2011) and the Netherlands (Vossensteyn, 2013) shows that students who exceed a certain threshold of working hours per week are more likely to dropout from higher education or to extend the duration of their studies. The effect of student financial support also becomes stronger when the money is provided with some legal restraints for the student. Some countries stimulate completion by regulating that scholarships, grants or study allowances need to be repaid when the student does not complete his or her degree. Further, providing support as loans might lead to more conscious study choices, therefore less dropout and more frequent degree completions as it increases the opportunity costs related to dropout or switching study programmes.

Additional student financial support budget

'Additional student financial support' refers to increasing the public student financing budget. Such additional funds might be intended to increase the number of supported students or to increase the average amount provided per student. As such, financial support can be used to widen access to higher education or to help students to devote sufficient time to study instead of working part-time. Consequently, financial support aims to increase the number of disadvantaged students and tries to prevent dropout due to a lack of financial resources.

In France, the 2013 law that aims to improve quality in higher education also regulated a strong increase in the student financing budget, including an increase of the budget for grants, students housing, a new provision for selected groups of students to get accommodation deposits as well as the establishment of 30 university health centres (MESR, 2013). No evidence of effects on study success is available.

Financial policies mainly addressing time-to-degree

Institutional funding rewarding quality and study success

Performance based funding of higher education institutions has become widespread in Europe. A few countries use study success related indicators in their funding formulas or performance agreements. How study success indicators are incorporated into funding varies but usually institutions are rewarded for the number of graduates,

credits passed and/or retention of students. Penalties for failure to meet retention targets are less frequently used. For all of these measures the underlying rationale is that higher education institutions are encouraged to take more responsibility for the success of their students.

The impact of performance based funding on the change of institutional behaviour has hardly been evaluated regarding study success issues. There are also no evaluations of the impact of performance based funding on study success outcomes. In Austria, for example, an evaluation of the performance based funding model revealed the model did not achieve its goals. The main reason was that the funding model was too complex and it did not reward the achievements of higher education institutions (see the country report in Annex 2). The evaluation also revealed that a performance based funding model is not enough to make higher education institutions introduce student monitoring and other study success instruments. Such efforts were often triggered by other influences as for example the increase in student numbers or the growing importance of the quality of teaching (Unger, 2013). The extent to which study success indicators stimulate higher education institutions also depends on the proportion of the funding formula that is related to study success and other indicators used in the formula. If only a small percentage of funding depends on study success it may not have a significant impact on the extent to which institutions take responsibility in this area. This will be even more so if institutions can easily compensate poor study success performance with high achievements on other indicators such as research output.

Hovdhaugen *et al*. (2013, p. 166) state that in Norway the implementation of performance based funding – among other factors – has increased institutional attention to completion and dropout as funding became dependent on the number of graduates. An evaluation of the Norwegian funding model (rewarding study progress and the number of graduates) has shown the impact is moderate because of the open-ended nature of the funding. Students – stimulated by the institutions – took more publicly funded credits without a significant increase in the number of graduates (Aamodt and Hovdhaugen, 2011).

In the Netherlands the number of successfully completed degrees between 1998 and 2011 determined 50% of teaching funds. This, together with various other policy instruments to improve education quality and study success, has led to a slight increase in completion rates as well as a notable decrease in time-to-degree from 6.5 to 5.8 years on average for a 5-years bachelor-master trajectory. Since 2012, 5 per cent of the governmental teaching budget relates to performance agreements about promised (and after 2016 realised) improvements in study success and teaching quality. The performance of higher education institutions is monitored annually by a "review committee" that liaises closely with the institutions (discussing the current state of study success). A final evaluation of the performance contracts will take place in 2016. A 2014 interim review has shown that institutions have become increasingly active in addressing study success (Reviewcommissie, 2014).

Thus, there is only little evidence on the potential impact of performance based funding on study success. Nonetheless, some lessons can be drawn about changes in institutional behaviour. In their analysis of performance based funding models, In der Smitten and Jaeger (2012, p. 85ff) find that governments should set goals preferably in areas where institutions are not strongly engaged yet. Goals that are clear, reachable but challenging and belong to the institution's area of influence are most promising. Furthermore, there should be clear indicators to measure whether institutions have realized their objectives. Potential and significant sanctions for not realizing goals should be included. Also, to the extent possible, governments should reward the successful realisation of goals. De Boer *et al*. (2015, p. 23) give further

recommendations for successful performance agreements and performance funding. The most important recommendations read as follows:

- The government needs to have a strategic agenda for the higher education system (vision)
- Institutions must be involved throughout the process and have to be committed (otherwise efforts must be made to increase commitment)
- Both government and institutions need technical and operational expertise as well as sufficient resources.

These principles might also be important for changing institutional behaviour in addressing study success.

Student financial support rewarding study progress and (timely) completion

Various instruments can be categorized as student financial support rewarding study progress and (timely) completion. In the following we distinguish between 'progress-related financial support for students', 'turning loans into grants' and 'waiving/charging differential fees to reward study success'.

Progress-related financial support for students

Besides supporting students to complete their studies, financial support can also stimulate students to demonstrate sufficient progress and complete faster. Across Europe there are different student financing models that help students with paying (part of) their tuition fees and/or to cover living costs. Indeed, the NESET report notes that there is a remarkable diversity of fee and financial support systems ranging from countries where students pay no fees and most receive financial support, to those where all pay fees and only a few receive financial support (Quinn, 2013, p. 81). Our survey revealed that in Croatia, Denmark, Finland, Hungary, Iceland, Montenegro, the Netherlands, Poland, Serbia and Spain financial support to students (loans, grants or fellowships) depends on academic achievements. As such, students have to meet set targets to receive funding, e.g. passing sufficient numbers of credits per year or completing a degree in a limited period of time.

In Croatia a student has to have accumulated a minimum of 45 ECTS points in the previous academic year to be eligible for a scholarship. In Denmark financial support stops when students fall more than six months behind their study plan. In Montenegro the ministry issues cash prizes and awards as incentives to students who have achieved certain results. In Spain students from low socio-economic backgrounds receive a full grant if they perform at the top level. A new funding model recently introduced in Finland allows students to obtain an additional loan to avoid having to take paid employment. Those who complete on time receive a reduction in the amount they have to repay.

In order to reduce time-to-degree and to increase completion rates, Denmark introduced the 'Study Progress Reform' in 2014/15. Students have to demonstrate sufficient study progress to stay eligible for student funding. All Danes older than 18 years in youth or higher education programmes are eligible for funding for the prescribed duration of their chosen study plus 12 months (maximum 70 months). Two thirds of the support is provided as grants, one third as a loan. However, students have to continuously report on their study activities. Higher education institutions are allowed to control students' activities and can specify some of the study progress reform's regulations according to their own needs. A main element of the reform is that students have to enrol for a minimum of 30 *new* ECTS each semester. If they enrol for fewer ECTS the university places the student in suitable courses till s/he accumulates 30 ECTS. Students have to take the exams for the courses they are

enrolled in. They can only withdraw from examinations for strict and limited reasons such as serious illness of top-sport obligations. All students have to pass a mandatory examination at the end of the 1st year to be entitled to continue their studies. As this reform is only recent there is no evidence whether it has achieved the objectives.

Turning loans into grants

The Netherlands and Norway use 'turning loans into grants' policies to reward study progress and timely completion among students. Both countries turn loans into non-repayable grants if students are successful, if not the students will have to repay all support. This intends to reward successful study and to penalise failure. In Norway, depending on the number of completed credits, part of the student loan is turned into non-repayable grants, which can be worth up to €4,800 a year. Besides this performance condition, a student's income should also not exceed a certain limit to remain eligible for grants. Even though the incentive is substantial, it did not have a significant impact on study delays in Norway. The time-to-degree has even increased after the 2005 implementation of the performance-related students support regime (Aamodt *et al*., 2009; Opheim, 2011). Opheim (2011) found that students from the 2005 cohort were less frequently concerned (29%) about accumulating high debts than students from the 1998 cohort (39%). She also found that students from the 2005 cohort spent more hours on working than the 1998 students (see also Aamodt *et al.*, 2009). This latter development can be the result of the fact that since the 2005 reform students were allowed to earn more before they would lose their grants. The researchers conclude that the combination of incentives for students to study faster was not well chosen: "*This seeming paradox (= delays in study despite progress-dependent funding) could be related to the other aspect of the study support reform, increasing the limit for how much students are allowed to earn before they lose grants. The immediate gain from the earnings from a part-time job may overrule the risk that time spent on work may cause problems for the study progression. Also, students may be less worried about their loan and debt due to the improvement in the macro-economic conditions from 1998 to 2005….*" (Aamodt *et al.*, 2009, p. 231). A further argument on the small impact of progress-dependent student funding was that the amount of funding did not sufficiently cover the living expenses of students which implied they had to work anyhow (Opheim, 2011, p. 54).

In the Netherlands, the introduction of the *performance-related grant* in 1996 implied that all basic grants given to full-time students were initially provided as loans. These would be turned into non-repayable grants if students obtained a degree within 10 years after first enrolment. Among other policies, this has helped students to reduce time-to-degree from 6.5 years in the 1990's to about 5.8 years nowadays. It did not increase completion rates. From autumn 2015 onwards, all basic grants are replaced by loans without the opportunity of being turned into grants anymore.

College affordability is also an important issue in the U.S.A. because graduates often accumulate very high debts for paying tuition fees while they cannot find adequate employment after graduation to repay their debt. A number of policies to reduce debts have been implemented such as "tax credits", the "gainful employment" campaign and "free community colleges". These initiatives promote access to higher education but also aim to reduce dropout due to financial difficulties.

The American Opportunity Tax Credit provides a credit of up to $2,500 per student per year for "qualified tuition and related expenses" that can be deducted from an individual's tax liability.[7] Up to 40 percent of the credit is refundable, meaning that even if the taxpayer had no tax liability, they would receive that amount of money in the form of a cheque. The credit does phase out for individuals with incomes above

[7] http://www.finaid.org/otheraid/tax.phtml.

$60,000 or $120,000 for those filing jointly. A "Lifetime Learning Credit" provided in the legislation allows for a 20 percent credit on the first $10,000 of "qualified tuition and expenses" to be deducted from a taxpayers tax liability. Such tax credits primarily aim at middle-income families who have tax liability. The Gainful Employment initiative targets at for-profit institutions that have many students accumulating federal Pell Grants and student loan to help them pay very high tuition fees while the degrees of these institutions do not offer good employment prospects. In 2011 the government set limits to the 'income-debt ratio' for graduates. Since 2014 institutions must ensure that graduates can maximally pay 20 percent of their discretionary income on student debt repayments and that no more than 30 percent of graduates would default on their loan repayments. If institutions or programs fail to meet these requirements, their students cannot use federal grants and loans at those institutions. Finally, Free Community Colleges are an initiative of the Obama administration to make two-year public community colleges free to students. It is expected that over 9 million students could benefit and save an average of $3,800 in tuition and fee charges per year. Also pre-savings of tuition fees are supported by the state.

In Australia there are positive experiences with the implementation of the income contingent loan scheme that accompanied the increase of tuition fees. Though higher tuition costs are feared to deter disadvantaged students, at the same time they are expected to stimulate students to be more motivated and engaged in the study programme as they have to invest more individually. It was also found that Australia's income-contingent student loans scheme is a buffer between tuition fees and debt allowing students to have successful access to, progress in and departure from the higher education system without major financial concerns.

Waiving or charging differential fees to reward study success

Charging differential fees is used in some countries. It rewards students financially who have achieved specific targets, such as completing a study programme within a given time. Such policies – that can also penalise students who do not meet the targets – aim at students to complete, to do so within a limited time period, to minimise programme transfer and to make more careful study choices.

This instrument was mentioned as explicit study success policy for Croatia, Lithuania, Poland, Serbia, Slovakia, Slovenia, Spain, and Turkey. The policies are practised in different ways. In Slovakia, students who do not complete their degree within the nominal study period (3 years for bachelor programmes, 2 years for Master's, and 3 years for full-time PhD's) have to pay an annual tuition fee of around 1,000 Euros. Students who enrol in two study programmes at the same time have to pay tuition fees for the second programme. In Serbia students exceeding the nominal study period also have to pay tuition fees. Polish students have to pay fees after they enrol for the 11th semester (nominal duration of study for Bachelor and Master's Level + 1 semester). In Croatia students have to pay tuition for those study years in which they did not complete at least 55 ECTS. This may affect students from disadvantaged backgrounds as they are in a less favourable position to acquire the required 55 ECTS. So far, in the countries mentioned there was no evaluation of the policies' impact yet.

Effectiveness of student financing rewarding study progress and time-to-degree

Overall, the few evaluations available have shown that these kinds of funding instruments have only little impact on study progress and timely completion. To become effective the rewards for timely completion need to be significant and must be accompanied with study conditions that enable students to complete their studies within the nominal study period. Nonetheless, financial support for students is not a key factor for improving retention and completion. Though students find financial support important for retention and completion, dropout is often related to other

factors than lack of financial resources. In an interim evaluation report on the English National Scholarship Programme (NSP) Bowes *et al.* (2014, p.8) state that: "*The majority of NSP award recipients confirm that they would have found it difficult to remain on their course without financial help and that they are more likely to complete as a result of receiving it. Our cohort survey confirms that those who received an NSP award in their first year only are finding it more difficult to meet the costs of HE and more likely to undertake part-time work than those who continue to receive some form of support either through the NSP or another source. However, a lack of financial aid is not necessarily the main reason why students leave HE; factors relating to family circumstances, the course and/or the institution can also play a key role in the decision*." In a recent literature review (funded by OFFA) on the impact of institutional financial support on access and study successes a similar result was found (Nursaw Associates, 2015, p. 4): "*Students receiving financial support have comparable non-continuation rates with students who do not receive financial support. Yet institutional findings show that students in receipt of financial support report that it has enabled them to stay on course and that they consider withdrawing less than their peers. This may mean that there is a difference between attitude and behaviour.*" The report also states that the strength of impact is related to the way financial support schemes operate in terms of the variety of financial support, the timing and availability of information, and whether outreach activities are coordinated.

5.3.2 Typical explicit national 'organisation' policies for study success

Policies in the 'organisation of higher education' area mostly have a direct impact on the study experience, for example by selecting specific groups of students or setting minimum entrance requirements. National organisation-related policies and instruments often regulate access to higher education. Such policies aim to limit access to higher education or to achieve a good match between students and study programmes. Organisation policies also include the creation and organisation of (flexible) pathways to and within higher education. It also can address the duration of study, the implementation of the BA/MA structure or the implementation of short degrees. Table 5.4 provides an overview of policies that have been designed explicitly for improving study success in the 2005-2014 period. One has to realise that particular policies are not assigned to countries if the national experts did not indicate the policy as 'explicitly and originally designed for improving study success' in the past decade. This does not mean a particular country does not have such a policy. It indicates that such policies were aimed at other objectives initially or were developed before 2005. Even though they may have an (indirect) impact on study success they have not been included in this study.

Table 5.4: Typical explicit national study success policies in the area of 'organisation of HE'

Policy	Description of policy	Expected effect	Main study success orientation addressed	Countries implemented
Central organisation of admission	Measures to nationally organize the admission process to higher education/study programmes.	A better distribution of students across the higher education system. More informed study choices	Retention	France (Norway since longer)
Integration of study success in quality assurance system	In national quality assurance procedures the accreditation of study programmes or institutions, dropout/retention and completion are considered.	To increase institutional attention for completion and dropout as important performance indicators in higher education. To stimulate institutions to have more measures/instruments to address study success.	Completion	Croatia, Flanders, France, Hungary, Ireland, Italy, Montenegro
More flexible educational pathways	Measures to implement flexible regimes for study programmes and to enable the previous educational achievements of students to be more widely recognized within the higher education system. This allows students to transfer more easily between institutions and study programmes as prior achievements can be utilised.	To avoid the waste of resources through double learning, to allow a deliberate choice of study programmes and institutions. To better value prior learning experiences. To facilitate pathways in higher education.	Completion	Bulgaria, Denmark, Flanders, Germany, Hungary, Italy, Lithuania, Switzerland, former Yugoslav Republic of Macedonia
Allow institutions to restrict access to higher education	Policies that allow higher education institutions to select the best/most suitable students for their study programmes, mostly based on their prior academic achievements.	To stimulate more deliberate study choices among students. To select students with adequate cognitive and motivational competences to complete the programme. To increase students' costs to switch between programmes.	Completion	Austria, Netherlands, Sweden (England/Ireland have this tradition longer)
Access - matching students and study programmes	Measures to achieve the best fit of the student's competences, motivations and expectations and the requirements of the study programme	Achieve a better match of students' competences and requirements of the study programme. Stimulate reflected study choices. Stimulating early dropouts. Shorten time-to-degree	Time-to-degree	Netherlands
Changes in degree structure	Changes in the degree structure to address different demands of students: e.g. more professionally and vocationally oriented courses; provides students extra time to specialise or to even build their own study programme.	Shorten time-to-degree. Avoid dropout and increase completion by better meeting the demands of students, including more vocationally relevant offers. Allow students to specify their study choice while studying. Avoid dropouts caused by overspecialisation, and allow easier recognition of diploma by future employers.	Time-to-degree	France, Netherlands, Norway, Portugal, Serbia
Curriculum design	Changes in the academic curriculum to better address the needs and requirements of students	Continuous assessment supports students to develop self-awareness of their competences. To force early dropouts/switches rather than late ones. Special design of the early phase of study in HE to help students develop academic competences, to integrate in the program and to inform their choices	Time-to-degree	Austria, Estonia, France, Germany, Netherlands, Romania, Serbia, Sweden
Limiting study periods	Limiting the maximum time of enrolment for students. Those who exceed this maximum cannot enrol in higher education any longer.	Decreasing time-to-degree. Decreasing the number of non-active students	Time-to-degree	Greece
Mandatory study plans	Full-time students must enrol for 60 credits per year, and if necessary will be done automatically. Students cannot withdraw from examinations.	Faster completion	Time-to-degree	Denmark

Source: Reporting from national experts (2nd HEDOCE questionnaire, 2014).

Organisational policies mainly addressing retention

Central organisation of admission to higher education

In Europe a number of countries, for example Norway or Hungary, have a centrally organized admission to higher education. From these countries only for France the central organization of the admission procedures is mentioned an explicit study success policy by the national expert. In France, students have to apply to higher education via a central national online admission system (ABP - www.admission-postbac.fr). By centrally registering students' applications it aims to distribute students equally across the system and to avoid a strong concentration of students at the most popular institutions and programmes, in particular at the *grandes écoles*. ABP also offers online consultancy services to better inform student choice and, as such, to improve retention. The website ABP has recently been evaluated for its functionality (Opinion Way, 2013). This revealed that the website is positively received by students and parents for its support in the application process. However, perceptions are less positive about the consultancy function and the information provided on study programmes. Students and parents would like more personalized consultation. No evidence on the impact of ABP on retention is available. Based on these results the website has been changed in 2014-2015 and now includes new services such as a free phone number of the official *academic information service and guidance* (S.A.I.O.). APB will also extend the number of institutions covered beyond the main institutions.

Organisational policies mainly addressing completion

Integration of study success in quality assurance system

Study success can be integrated in various ways in quality assurance. Some systems require reports on indicators such as recent dropout and completion rates, others also require a description of measures that have been implemented to address dropout and completion at the institutional level. It is expected that such regulations stimulate the institutional responsibility for increasing the quality of teaching and thus to positively contribute to study success. They also stimulate institutions to develop more study success oriented initiatives by making reaccreditation dependent on this. Such policies were found in Croatia, Flanders, France, Hungary, Ireland, Italy and Montenegro.

Croatian higher education institutions have to complete a self-evaluation report including information on their completion rates and teacher-student ratio for the institutional reaccreditation. It is expected that this will lead to increased completion rates. As 2015 marks the end of the first round of institutional reaccreditations in Croatia, there are no results on the realized effects available yet.

In Italy dropout and completion are integrated in the legal regulations for quality assurance since 2013, both for system- and programme accreditation. In this new AVA system, institutions have to report on selected indicators, including dropout and completion. However, the system is already criticized for this focus on performance indicators. Because graduate employability is currently of high national importance, indicators for learning outcomes are regarded more important.

In Montenegro, the Law on Higher Education implemented in October 2014 requires higher education institutions to annually conduct self-evaluations of the quality of study programmes, including completion rates in accordance with the statutes of the institution. These reports are submitted to the Ministry and the National Higher Education Council who then calculate national completion rates. In the coming years based on the results, the National Higher Education Council will rank the institutions and publish the results on a central website to inform study choices of prospective

students. It also aims to stimulate higher institutions to develop instruments improving study success. As this is a rather new development, evidence on its effectiveness is not available yet.

Ireland also uses completion and/or dropout rates as a criterion for quality assurance at the institutional level as part of an overall performance evaluation framework. Integrating study success indicators and measures in quality assurance and accreditation are expected to have strong effects on the institutions. These will have to monitor students' achievements and to reflect what factors or measures contribute to successful completion of a programme. Publishing these indicators on websites managed by central authorities is expected to have a positive impact on institutional activities to address study success. This may help them to profile themselves as excellent in teaching and learning. It might also have an impact on study choices. Currently, no hard data are available on the regulations' impact on study success performance.

More flexible educational pathways

Policies to organise flexible pathways to and within higher education are meant to facilitate access, retention and completion of students acknowledging their various backgrounds, interests and capacities. Flexible pathways can enable students to use their prior learning qualifications and, as such, to avoid duplications in their learning experiences. Implementing a National Qualifications Framework is an important measure in this area. In particular, Italy uses a Qualifications Framework as an important study success instrument.

Other policies aim to achieve more flexible study plans and schedules which allow students to better adjust schedules to their needs. It is expected that more flexible study plans avoid delays and inefficient use of time and resources due to unnecessary 'double' learning. Reducing the workload for students that switch programmes or institutions is regarded important to stimulate completion.

Of the countries where national experts explicitly noted the importance of flexible pathways for study success, Flanders is interesting as their 2004 '*decree flexibilité*' introduced several instruments that allow students to freely choose the courses they want to follow. This regulation empowered students to take courses at different higher education institutions without dropping out or discontinuing at their main institution. The decree also regulated recognition of informal and formal prior learning to facilitate entry into higher education. Regardless of the fact that the decree facilitates access to higher education, it has slightly negative effects on study success. The effects of the '*decree flexibilité*' have been examined in some evaluations in terms of the cost of implementation (Departement Onderwijs en Vorming, 2013; Werkgroep 'Studievoortgangsbewaking', 2014), the flexibility realised (Departement Onderwijs en Vorming, 2013), and its impact on widening access, completion and time-to-degree (Werkgroep Studievoortgangsbewaking, 2014). The evaluations concluded that the implementation of flexible pathways has led to an increase in administrative costs and in the work load of teachers. Such costs particularly relate to the increase in communication and information provision about pathways and recognition of previously obtained qualifications. The second evaluation reports a positive impact on widening access and the growth of the overall number of graduates, as well as an increased number of switches between professional and academic programmes. However, increased flexibility also leads to an increase in time-to-degree and in dropout due to the complexity and the lack of transparency in the regulations for the accumulation and recognition of study achievements. In addition, the flexibility regulations hinder institutions in taking actions in case they identify problems with study progress. Therefore it is recommended to simplify recognition rules and to

enable institutions to better monitor and inform students on progress (Werkgroep Studievoortgangsbewaking, 2014, p. 84ff).

The Danish implementation of the 'study progress reforms' included measures to allow students to transfer between programmes and institutions by making it easier to have credits obtained recognised and transferred elsewhere. The reforms also envisage the opportunity to start in the spring semester.

U.S.A. policies attempt to improve the integration of educational levels, such as through 'Common Core State Standards'. These standards define college and work readiness of students across the U.S.A and should provide more transparency in what students need to know and have achieved by high school graduation, ensuring that they are prepared for future education and workforce options.

Restricting access to selected higher education programmes

Countries or institutions often aim to limit access to higher education through selection procedures that select students for certain study programmes based on their prior achievements (and other factors). Selection procedures traditionally were used to limit the massive increase of student demand for some study programmes or to control access to certain professions (for example in medicine). The rationales for limiting access to achieve better study success outcomes are on the one hand to select the best students for a study programme that have a higher probability to complete the programme. On the other hand, restricting access also aims at students making their study choices more carefully resulting in less students switching to other programmes. Experiences have shown that completion rates in selective programmes are higher than in non-selective programmes (see Chapter 2).

At national level, selection processes generally allocate students to a limited number of study places based on their prior learning achievements. At the institutional level, prior educational attainment may be supplemented by aptitude or motivation tests, particularly in artistic disciplines. Selection or restriction policies are not per se study success policies. For example, in Austria[8] selection and restriction policies primarily had the goal to harmonize student numbers and capacities. However, it is also hoped that the number of dropouts reduces and that the number of graduates will stabilize or even increase when study programmes are not overcrowded. Since 2005, Austrian universities are allowed to set their own admission rules. A growing number of programmes apply selection procedures which sometimes limits the number of first-year students/new enrolments in the programmes. The effects of institutional selection procedures are currently evaluated.

For the Netherlands a change in the selection procedures is planned for 2017. Currently 10 per cent of the programmes are '*numerus fixus*' programmes for which there is a central weighted ballot system giving GPA ≥ 8.0 giving a 100 per cent acceptance guarantee (*centrale loting numerusfixusopleidingen*). In 2017 this will be substituted by a decentralized selection mechanisms giving institutions more freedom to select students applying for programmes with limited enrolment capacity. This should increase completion rate because students will then be selected based on school results (like before), their motivation and personality traits as well as criteria that fit the purposes and goals of the institutions or programmes.

[8] In general access to higher education is open in Austria, nonetheless universities are allowed to restrict access in some selected programmes.

Organisational policies mainly addressing time-to-degree

Access - matching students to programmes

The rationale of this policy is to achieve the best match between the study programme and the student for her or his competences, motivations and expectations. Matching procedures can be understood as a mild or soft form of selection that can take place before enrolling in higher education and during the first year of higher education. The main difference between the selection and matching is that selection is predominantly applied when only a limited number of study places is available and the programme wants to get the "best" students in. Matching policies try to achieve the best fit of student and study programme and focus on whether the students are well-prepared for a study programme and able to complete it. Matching also aims to stimulate more reflective study choices as students have to consider their competences, and higher education institutions have to provide clear and honest information about courses. Matching procedures are often based on previous experiences of institutions with 'similar' students. Once enrolled, student's achievements and experiences will provide a good indication whether s/he will be able to complete the degree.

Currently matching procedures are used in the Netherlands only, and since 2008 various institutions apply matching mechanisms before enrolment. Since 2014, when it became obligatory that students have to enrol in their preferred study programme before the 1st of May, students have the right to assess whether they make the right study choice. Therefore all higher education institutions have to offer a procedure that helps them evaluate their study choice. Institutions and study programmes are free to choose how they would like to advise students, for example with a digital aptitude test, intake-interviews or offering a "one day student experience". Most institutions offer intake interviews. After enrolment a second matching activity takes place in the form of the also obligatory individual 'binding study advice' at the end of the first study year. "*In the Netherlands, the legal instrument to dismiss non-performing first-year students is the binding study advice (BSA). It has been introduced gradually in many – but not all – bachelor programs at Dutch research universities following the Bologna-induced introduction of the bachelor/master structure in 2002. … According to Dutch law, a student receiving a negative BSA is not allowed to reregister for the program in which he or she is currently enrolled in the next three academic years. Students are, however, allowed to switch to other programs offered in Dutch higher education. The law leaves it to the institutions to set the performance threshold below which students will receive a negative BSA.*" (Arnold, 2015, p. 1070). During the first study year of a bachelor programme students are monitored for their achievements based on which the study advisor provides the binding study advice.

Matching procedures before enrolment have not been subject to evaluation yet, at least not in terms of their impact on study success. However, the binding study advice has been evaluated (Arnold, 2015). Results show that the binding study advice has different impacts depending on the size of study programmes. In large study programmes the effects on time-to-degree is stronger than in study programmes with a low number of students. The results also demonstrate the binding study advice does not necessarily achieve a better fit between student and study programme but makes effectively a distinction between stronger and less strong students. Students with a negative advice who switch to other study programmes fail more often than students who voluntarily transferred to another study programmes. Due to the binding study advice dropout now takes place in earlier study phases.

Changes in the degree structure

'Changes in the degree structure' refers to those policies that intend to better match the diploma and degree structures in a higher education system with the demands and needs among an increasingly diverse student population. This can comprise a total overhaul of the traditional degree structure as was done with the introduction of the BA/MA system as part of the Bologna process in most European countries since 1999.[9] Such policies, however, can also be the introduction of new types of degrees, such as short degree programmes and 'student-designed programmes' enabling students with a clear study objective to collect adequate programme elements. Changing the degree structure is expected to reduce dropout of students that do not fit traditional degree programmes.

In Portugal, technical short cycle degrees called TESPs - *Cursos Técnicos Superiores Profissionais*, ISCED level 5 – have been implemented from the academic year 2014/2015 onwards. These are two-year higher education courses specialising in areas of skills shortages (OECD 2015:9). The courses intend to produce graduates with skills that are needed in society and the economy, and to improve completion as the degree programme is explicitly linked to employment. In the Netherlands, the implementation of the 'Associate degrees' programmes in 2006 enabled graduates from vocational upper secondary education to enter UAS for two-year practice-oriented programmes to get a higher education experience and to easier transfer into and complete a bachelor degree afterwards (De Graaf en Van den Berg, 2011).

Norway introduced more structured programmes through the 'quality reform'. Instead of accepting students at a faculty/school and let them combine subjects themselves, universities now offer programmes that are designed on the basis of certain subject combinations. This intends to increase completion rates and to reduce dropout and time-to-degree. In a study on the effects of structured study programmes Hovdhaugen (2011) found that completion rates in such programmes were not higher than in other ones. However, the number of students switching to other institutions has decreased. Hovdhaugen explains the effects as follows: "*the changes in programme structure made them more attractive to students, presenting them with interesting combinations of courses and appealing degrees. In addition, higher education institutions have made explicit potential employability options for students completing such programmes. The overall consequence of these structural changes is that fewer students transfer to a different institution, and there is a reduction in overall student departure from institutions, due to the reduction in transfer rates.*" (Hovdhaugen, 2011, p. 249).

Curriculum design

This policy type includes instruments and regulations that allow higher education institutions to better meet students' demands and needs through innovative curricula. The range of measures include changes in the assessment and grading procedures as well as introducing compulsory extra study courses or a (additional) semester or bridging year (with a special study plan) that needs to be successfully completed before the student can really start in the first year of study. These add-ons aim to better prepare students for academic study and to ensure a better understanding of the requirements of the programme. This also makes students aware if their capacities and achievements are in line with the demands of their chosen study programme. Such curricula design instruments not only inform and improve study choices, they

[9] In Italy for example the introduction of the BA/MA Structure was seen as an opportunity to reduce time-to-degree. The change in study programmes would better allow addressing the needs of students (shorter programmes, more specialized programmes).

also support students to integrate better in their programme or to drop out early. We found interesting measures in curriculum design in Austria and France.

In 2009, all Austrian university study programmes had to implement a compulsory introductory study phase (*Studieneingangs- und Orientierungsphase*). During this phase the student has to attend introductory courses that provide insight into study and research methods and the contents of their study programme. The courses equal 15 to 30 ECTS. Students cannot continue with their study programme unless they have successfully completed these courses. The aim of this introductory phase is to prepare students for their studies and to make them reflect on their study choice. A recent evaluation of the 'introductory phase' has shown that it does not lead to a reduction of dropouts. Rather it helps dropouts to make better decisions of what to do afterwards. When it comes to reducing the number of dropouts itself, the study recommends to apply more effective counselling of students before they enter higher education (Österreichischer Wissenschaftsrat, 2014, p. 21ff).

In France the recent introduction of broad bachelor programmes addresses students who are uncertain about their study choice (Measure 2 of the 2013 law on higher education). Broad bachelor programmes offer the opportunity to study a broader discipline in the first study year and to specialize in a subject in the second year and after. Universities are autonomous to decide about the organisation of such broad bachelor programmes. This instrument will be explained in more detail in Chapter 6.

Finally, some countries, such as Germany, indicated that the continuous assessment and grading integrated in the new curricula implemented due to the Bologna-reforms contribute to study success. Before the Bologna reforms students were only assessed in the middle and at the end of their studies. This made it difficult to assess whether students were 'on track' within their programme. Continuous assessment allows them to better know and understand their academic progress, and whether they are likely to complete their degree. This encourages early switch of study programmes as well as early dropout rather than later in the programme. The Dutch implementation of the Binding Study Advice at the end of the first year of studies generates a similar result.

Limiting study periods

Restricting study periods is a noteworthy instrument introduced in Greece in June 2014. This regulation stipulated that students who enrolled in higher education for the first time in 2006 and had not yet completed a degree must discontinue their studies. Since 2014, Greek full time students have to complete their study within a maximum time period of the nominal duration (ranging between 8 and 12 semesters depending on type of programme and discipline) plus four semesters. Part-time students cannot take longer than double the nominal duration of a programme. The expected effects are a reduction in the high number of non-active students and average time-to-degree. At the time of this research, the regulation was not yet introduced.

Mandatory study plans

Mandatory study plans were already mentioned when discussing the Danish study progress reform related to national funding instruments. Mandatory study plans are an interesting policy option as it obliges students to enrol for courses equalling 60 credit points each study year. It they do not sign up for sufficient numbers of credits, they are assigned to courses automatically and cannot withdraw from the exams. Non-passed courses will not account for the mandatory study plans of the next year. Each year students have to choose 60 new ECTS. This regulation should increase study progress and completion. So far, effects of the regulations have not been evaluated.

5.3.3 Typical national 'information & support' policies for study success

The policies discussed in this section focus on the provision of information and support to students – both prior to and after enrolment. They also include non-financial forms of support to students that are not related to teaching and learning.

The first category of policy instruments concerns the provision of information that helps students make well-informed study choices with respect to what students can expect in terms of the content of study programmes, the organisation and requirements, planning, future career prospects and whether this all matches with the student's interests and capacities. This can include brochures, marketing activities, early information campaigns and public student choice websites.

When students are enrolled, support policies in particular become relevant. These include instruments to prepare prospective students for study at the higher level such as summer courses. Further, support policies include processes that help students to socialise in university life, for example introduction camps, academic integration courses, tutoring, mentoring etc. Finally it is about helping students when they encounter problems and need help with overcoming disadvantages of a handicap (e.g. dyslexia), or if they need advice and counselling services or even mental and psychological support. Governments often make such services obligatory and the higher education institutions have to implement them. Table 5.5 provides an overview of the typical policies on information and support for students.

Table 5.5: Explicit national study success policies on 'information and support for students'

Policy	Description of policy	Expected effect	Main study success orientation	Countries implemented
Comparative data and information	Comparative data provide students with information on the quality of study programmes and/or institutions, including variables such as: completion rates, satisfaction of students, graduate employment rates, etc. In some cases the information is used to rank institutions on a national basis. The measure has a twofold aim: 1) it intends to inform students and contribute to their study choice; 2) it intends to stimulate competition between HEIs and/or courses ('marketise' HE).	- More deliberate study choices - Encouraging higher education institutions to take responsibility for study success, quality of teaching (via competition)	Retention	Bulgaria, England, Flanders, Germany, Hungary, Ireland, Netherlands, Norway, Portugal
Student monitoring	Policies addressing study success are more successful if they can be based on reliable data that helps to explore the main reasons for dropping out of higher education or transferring to other study programmes. Regulating and collecting data on students' achievements, educational pathways and later careers.	Better identify students at risk for dropping out Design more adequate measures to address study success Adjust study programmes more to the labour market	Retention	Finland, Flanders, Hungary, Ireland, Netherlands, Norway, Portugal, Sweden
Student support services	Provide support for students - at national or institutional level - beyond study choice information, but rather includinf psychological and health support as well as career counselling.	Better integration of students in higher education institutions Support for students in health, mental problems, housing, etc. Preventing students to dropout because of better knowledge of job opportunities through career counselling	Retention	Flanders, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Montenegro, Netherlands, Norway, Poland, Romania, Serbia, the former Yugoslav Republic of Macedonia

Support for study choices	Providing clear information about study programmes to (prospective) students to inform study choices, i.e. inform students about requirements of the study programme and adjust expectations about the study programme.	Stimulate more deliberate study choices	Retention	Austria, Cyprus, Czech Republic, Denmark, England, Estonia, Flanders, France, Germany, Greece, Ireland, Italy, Lithuania, Netherlands, Portugal, Romania the former Yugoslav Republic of Macedonia,
Support institutions to disseminate good practice	The dissemination of good practices is intended to encourage and enable higher education institutions to develop policies and practices to improve study success.	Support institutions in developing innovations for teaching and learning by disseminating knowledge/good practices.	Completion	England, Finland, Germany, Ireland

Source: Reporting from national experts (2nd HEDOCE questionnaire, 2014).

Information policies mainly addressing retention

Comparative data and information

Comparative information and data differs from institutional information about programmes because the former tends to provide more objective information than the marketing information through institutional websites and prospectuses. It intends to enable potential entrants and parents to objectively judge relative performance across prescribed indicators (for example on level, duration, practice periods, study abroad, retention and completion rates, employability, etc.).

As such comparative information often leads to a sort of league table and push higher education institutions to perform well. The content of such information sites (and league tables) differs substantially between countries. In England the Higher Education Statistics Agency (HESA) collects data about non-continuation and completion from the institutions and makes it publically available annually. HESA calculates a 'benchmark' for every institution (taking into account their subject portfolio, entry qualifications and student diversity). This is published alongside actual performance of the whole institutional student population and sub-sections of that. National newspapers use this data to produce league tables about retention and the information also feeds into wider league tables about the 'quality' of individual higher education providers in England and the UK. An evaluation found that this approach helped to reduce retention rates (Longden 2012). In addition, England also has introduced the Key Information System (KIS) for students. KIS provides comparable sets of information about all full and part-time undergraduate courses on items that prospective students have identified as most important to inform their decisions. The information is published on Unistats website. The KIS includes information from various data sources, among them are:

- student satisfaction from the National Student Survey
- student destinations on finishing their course from the Destinations of Leavers from Higher Education survey
- how the course is taught and study patterns
- how the course is assessed
- course accreditation
- course costs (such as tuition fees and accommodation).

In the Netherlands "Studiekeuze 123" provides prospective students with relevant course information through an extended national web portal. Studiekeuze 123 is based

inter alia on the National Student [satisfaction] Survey (NSE) and allows students to compare student satisfaction scores for selected programmes. The portal also links to the websites of the programmes at their institutions, and provides information on open days and similar events, links to online tests, etc.

In Germany the "Centrum für Hochschulentwicklung" (CHE) and the weekly published journal "die Zeit" have developed the "Zeit-Ranking" for students choosing their study programme. The ranking identifies different fields of study and HEIs are assigned to groups that are categorised by their performance.

Bulgaria has introduced the Bulgarian University Ranking helping school leavers to choose HEIs by specialisation for example. The ranking uses more than 60 indicators, each selectable so that a user specific ranking can be made.

In Ireland data on drop-out and completion rates that have been gathered in quality assurance and accreditation processes feed into a detailed profile of each HE institution that is published by the Higher Education Authority. This is part of the development of a broader evaluation framework to support strategic planning at institutional and system levels and to provide on-going monitoring of the profile of students and their progression rates. In 2014 the Higher Education Authority published a report on "*progression in Irish Higher Education institutions in 2010/2011*".[10] This report does not rank higher education institutions with regard to their achievements in study success but allows higher education institutions to benchmark their non-progression rates against other institutions. These publications do not mainly inform student choices but function as a lever to stimulate higher education institutions to take more responsibility for teaching and learning.

The need for detailed data on performance of institutions and study programmes is also reported for Australia and the U.S.A. In Australia there is a need for greater information to prospective students and other stakeholders about how to engage and succeed in higher education. In 2014 it was announced by the U.S. Department of Education that it would create a college-rating system for approximately 5,000 colleges and universities. The purpose of that system is to provide systematic and transparent details on postsecondary institutions for consumers. The college rating will include information on graduation and retention rates, student loan debt, enrolment and graduation of low-income and first-generation students. The ambition is that the system will encourage colleges and universities to improve their equity, affordability and quality records. The first draft of the rating is expected in late summer 2015.

Student monitoring

Statistical data is often used to inform policy and interventions that address study success. There are two ways to monitor students' progress. First there are monitors using aggregated data: study success and progress are investigated for various levels such as discipline, sex, age, or cohort. Second, there are ways to monitor individual students, i.e. taking stock of the achievements and educational pathway of individual students. This individual monitoring helps to identify students who are at risk to drop out, who switch to other programmes or who show too little progress. Collecting data on individual students' achievements is used in some countries, however, in other countries this is not possible due to concerns around privacy. In the latter group of countries it will be difficult to collect data on vulnerable groups and to take individualised action. In the in-depth country case studies in countries with very strict privacy regulations (for example Germany) respondents claim that an opportunity to

[10] It was found that across all sectors and levels 16 per cent of new entrants (1st year students) in higher education in 2010 did not progress one year after entrance to higher education. Compared to the study year 2007/2008 the non-progression rate was stable, then 15 per cent did not progress to the second year.

monitor individual students would be very helpful to better understand dropout and completion and to design more adequate policy instruments to address study success.

International practice shows that monitoring information is used for various purposes. In Norway and Sweden the tracking of students is used to identify inactive students. Norwegian institutions contact low achieving students and ask for explanations. Such students in some institutions and programmes risk losing their place in the programme. In Ireland the data is used for publishing detailed profiles of each higher education institution, including the dropout rate. The data is also used for evaluation purposes and strategic decision making. In Finland students' achievements are continuously monitored to identify students at risk of dropout and to take early actions to prevent it. Each university is obliged to sort out the students at risk of dropout by means of statistics and reporting with the intention of achieving lower dropout rates and quicker completion. The data is also used to inform the funding of students and institutions. In addition, Finnish HEIs also introduced a monitoring tool through a personal study plan (PSP) that helps to better manage completion of the degree as students plan and schedule their courses for the entire study period. The plan is reviewed and updated annually together with a coordinator or mentor.

Student support services

Student support services are mostly established at the institutional level. These services can range from (career) counselling as well as improving the academic preparedness of students, and health and welfare. Countries such as France and Denmark have support services implemented at the national level. A number of countries, as for example France, the Netherlands and Hungary have policies requiring HEIs to implement student support services which should address certain topics. However, the details of such services have to be organised by the institutions according their own ideas and wishes. A new trend is that HEIs establish career centres to provide information, advice and guidance to students about study and employment careers.

Student support services are expected to improve the social and academic integration of students in higher education, in line with Tinto's argument that positive integration of students contributes to study success. In addition, it is expected that the career services help students to make more informed and appropriate choices about their study plans, which become aligned with labour market opportunities.

The French implementation of the "*plan pour la réussite en licence*" foresaw the introduction of personalised support and career services for students. Institutions received 'seed funding' to establish or reform careers services. Many French universities accordingly reorganised existing units or established new ones to organise personalised services such as career advice, accommodation and other administrative support in a more coherent way. Besides institutional services, the *Centre régional des œuvres universitaires et scolaires* (CROUS) delivers several student support services at the regional level such as administration of bursaries, housing, student restaurants and cultural activities. The 2013 law on higher education stipulated a strengthening of student support services, building 30 health centres at universities and establishing cultural and meeting centres at higher education institutions (MESR, 2013, p. 23ff).

In the Netherlands the introduction of the binding study advice was supported by the mandatory improvement of academic counselling and service structures at higher education institutions, particularly focusing on the needs of first year students.

In Hungary, since 2005, higher education institutions are obliged to have student support services in place. Italy organises the provision of (additional) student support services at the national level. The Azienda ESU di Padova (ESU) is a legally supported company offering integrated services to support students with their studies.

In Germany student support services are organized via the "*Deutsches Studentenwerk*". Its services are available at every German higher education institution and it helps students with housing, financial support, student catering, study advice, consultation and psychological consultancy.

Irish higher education institutions offer a broad range of services: students can access orientation programmes, remedial courses if needed, receive help with study skills and exam preparation, one-to-one meetings with student advisors, social gatherings, mentoring, advise about grants, scholarships and bursaries when available. These services are organised voluntarily by the higher education institutions. This approach is very similar to England.

In general, student support services are evaluated in terms of student satisfaction but not in terms of impact on study success. However, countries that recently introduced student support services report that study success has improved (e.g. in Hungary).

Support for study choices

Reliable information on study programmes and higher education is crucial for students who make a choice of what and where to study. Research has shown that a lack of clear information is a major cause of dropout from higher education. The majority of countries have introduced national instruments to improve the provision of clear and objective study choice information. The support of study choice is the most frequently used national study success policy across Europe. The establishment of websites that list study programmes and information about the study programmes is most frequent among the instruments implemented. Also the provision of printed material is frequently used. However, in France and Denmark study choice has been integrated into the curricula of upper secondary schools. Other countries have established regional centres counselling on pathways in the education and training system.

In England information is provided for prospective students by KIS as already stated above. Similarly, the Portuguese website of the application system offers students information on the performance of study programmes in terms of completion rates and labour market outcomes of graduates.

In North Rhine-Westphalia (Germany) the government has established the website "studifinder.de" to support study choices. The website addresses two information needs of students. Firstly it offers a number of online competences- and interest-tests. Based on test results the site recommends disciplines and study programmes. Secondly, the site provides information on the contents of study programmes – often by transferring the student to the official website of the programme.

In France, the "*plan pour la réussite en licence*" and the 2013 higher education law included the "Bac-3/bac+3" initiative providing study choice consultation services in the curriculum of upper secondary education. Students continuously receive information during the study choice process: the first advice about study/career choices starts three years before completion of the upper secondary school certificate. This consultation is done collaboratively by universities and upper secondary schools. It is expected that this early counselling will result in more informed and deliberate study choices, better matches between students and study programmes, and a better distribution of students between institutions. In Romania higher education institutions are required to provide counselling and career orientation to students by law.

Most of the information provision is evaluated in terms of student satisfaction rather than for its impact on study success. Evaluations investigate if the information provided is clear and answers the questions of students, is up-to-date and easily accessible.

Information policies mainly addressing completion

Support for institutions

England, Finland, Germany and Montenegro are among the countries that disseminate good practice information to encourage and enable higher education institutions to improve study success. This is often done by rector's conferences or other associations of higher education institutions. In the UK, the Higher Education Academy (HEA) was established by Universities UK (representing all universities) and the four UK funding bodies to improve the quality of learning and teaching. While improving retention and study success was not an outspoken part of HEA's remit, the National Strategy for Access and Student Success (BIS 2014) identifies learning and teaching as a primary approach to improve retention and success. As such, the National Strategy references various HEA publications and the HEA's impact on influencing national policy and institutional practice (Brooks *et al.*, 2014).

In Finland the Ministry of Education in 2007 issued a discussion paper presenting reasons for dropout and different approaches to reduce dropout at all education levels. The paper suggested the following measures to be taken:

- Better counselling at all education levels to prevent wrong educational choices
- Better information on studies and future career perspectives to prevent wrong expectations that often result in dropout, study delays and motivational problems
- Implementation of study counselling and psychological services
- Personal study plan tools
- Continuous tracking of study progress and a register to store the data.

The discussion paper stimulated Finnish higher education institutions to implement most of the suggested instruments, as stated by a recent report of the Finnish Ministry (2015). A survey among universities showed that increasing the graduation rate is currently the most important strategy area for Finnish universities and UAS (Finnish Ministry, 2015, p.45, p.59). Regardless of the importance put on improving completion rates, an international committee reviewing the Finnish higher education system questioned the strong focus on output indicators. The committee recommended putting less emphasis on graduate numbers and student satisfaction as central (funding) indicators and to pay more attention to learning outcomes. They also recommended to strengthen attention for life-long learning, system flexibility and requirements of the labour market when implementing education innovations (Finnish Ministry, 2015, p. 88ff).

Finally higher education stakeholders actively identify and disseminate knowledge and good practices to address study success. The German rectors' conference (HRK) is actively identifying good practices for teaching and learning. The HRK 'nexus' project – funded by the German Federal Ministry for Research and Education – identifies good practices to improve study success throughout the student life-cycle. The German Stifterverband has awarded prizes to stimulate the development of innovations and good practices in teaching and learning. These innovations have led to publications such as a 'charter for good teaching' (Jorzik, 2013) and 'Handbook Study Success' (Berthold, Jorzik and Meyer-Guckel, 2015). Also the VDMA funded similar projects, (see Chapter 6 for a detailed description of the VDMA-Project 'Maschinenhaus'). There has not been an evaluation of the effectiveness of the dissemination of good practices yet, but stakeholders indicate that exchange and collaboration among higher education institutions within such projects as well as the prestige of becoming one of the laureates in such competitions strongly stimulates a greater attention of institutional leadership for the quality of teaching and learning.

5.4 Overview of national approaches

Based on the previous presentation of national policy instruments to stimulate study success, Table 5.6 presents the overall overview of all national study success policies by policy area as identified in the HEDOCE study. The table includes all policies that were reported by national experts as national policies that were designed explicitly to address study success in the last decade. Though one might expect some policies to be also included for countries where they are not reported for in Table 5.6, this is generally due to the fact that such policies were not originally meant to improve study success. For example, not all funding mechanisms or quality assurance systems have been designed to reduce dropout or improve completion rates.

Table 5.6: Overview of all explicit national study success policies by policy area and country

Country	Funding and financial incentives	Organisation of higher education	Information and support for students
Austria	• Financial support for students in general • Institutional funding rewarding quality, study progress and (timely) completion	• Restricting access to higher education • Curriculum design	• Support for study choices
Bulgaria	• Financial support for students in general	• More flexible educational pathways	• Comparative data and information
Croatia	• Waiving or charging differential fees to reward study success • Progress dependent financial support for students • Institutional funding rewarding quality, study progress and (timely) completion	• Integration of study success in quality assurance system	
Cyprus			• Support for study choices
Czech Republic	• Financial support for students in general • Additional funds for specific students enrolled • Additional funds for teaching		• Support for study choices
Denmark	• Progress dependent financial support for students • Institutional funding rewarding quality, study progress and (timely) completion	• Mandatory study plans • More flexible educational pathways	• Support for study choices
England	• Financial support for students in general • Additional funds for specific students enrolled		• Support for institutions • Comparative data and information • Support for study choices
Estonia	• Financial support for students in general • Institutional funding rewarding quality, study progress and (timely) completion (2016 onwards) • Waiving or charging differential fees to reward study success	• Curriculum design	• Support for study choices
Finland	• Progress dependent financial support for students • Institutional funding rewarding quality, study progress and (timely) completion		• Student monitoring • Support for institutions
Flanders	• Additional funds for teaching • Institutional funding rewarding quality, study progress and (timely) completion • Additional funds for specific students enrolled	• More flexible educational pathways • Integration of study success in quality assurance system	• Comparative data and information • Student monitoring • Student support services • Support for study choices
France	• Additional student financial support budget • Additional funds for teaching • Institutional funding rewarding quality, study progress and (timely) completion	• Curriculum design • Changes in degree structure • Integration of study success in quality assurance system • Central organisation of admission	• Student support services • Support for study choices
Germany	• Institutional funding rewarding quality, study progress and (timely) completion(majority of the countries) • Financial support for students in general • Additional funds for teaching	• More flexible educational pathways • Curriculum design	• Comparative data and information • Student support services • Support for study choices • Support for Institutions
Greece	• Institutional funding rewarding quality, study progress and (timely) completion	• Limiting study periods	• Support for study choices • Student support services
Hungary	• Progress dependent financial support for students • Waiving or charging differential fees to reward study success	• More flexible educational pathways • Integration of study success in quality assurance system	• Comparative data and information • Student monitoring • Student support services

Iceland	• Institutional funding rewarding quality, study progress and (timely) completion • Progress dependent financial support for students		• Student support services
Ireland	• Financial support for students in general	• Integration of study success in quality assurance system	• Student monitoring • Student support services • Support for study choices • Support for institutions • Comparative data and information
Italy	• Financial support for students in general	• More flexible educational pathways • Integration of study success in quality assurance system	• Student support services • Support for study choices
Latvia			
Lithuania	• Progress dependent financial support for students • Waiving or charging differential fees to reward study success	• More flexible educational pathways	• Student support services • Support for study choices
Luxembourg			
the former Yugoslav Republic of Macedonia	• Additional funds for teaching • Financial support for students in general	• More flexible educational pathways	• Student support services • Support for study choices
Malta			
Montenegro	• Progress dependent financial support for students	• Integration of study success in quality assurance system	• Student support services
Netherlands	• Turning loans into grants • Progress dependent financial support for students • Institutional funding rewarding quality, study progress and (timely) completion	• Restricting access to higher education • Access - matching students and study programmes	• Comparative data and information • Student support services • Support for study choices
Norway	• Turning loans into grants • Financial support for students in general • Institutional funding rewarding quality, study progress and (timely) completion	• Changes in degree structure	• Comparative data and information • Student monitoring • Student support services
Poland	• Waiving or charging differential fees to reward study success		• Student support services
Portugal		• Changes in degree structure	• Comparative data and information • Student monitoring • Support for study choices
Romania	• Financial support for students in general	• Curriculum design	• Student support services • Support for study choices
Serbia	• Financial support for students in general • Waiving or charging differential fees to reward study success	• Changes in degree structure • Curriculum design	• Student support services
Slovakia	• Waiving or charging differential fees to reward study success		
Slovenia	• Waiving or charging differential fees to reward study success • Institutional funding rewarding quality, study progress and (timely) completion		
Spain	• Waiving or charging differential fees to reward study success • Progress dependent financial support for students • Institutional funding rewarding quality, study progress and (timely) completion		
Sweden	• Progress dependent financial support for students	• Curriculum design • Restricting access to higher education	• Student monitoring
Switzerland	• Institutional funding rewarding quality, study progress & completion	• More flexible educational pathways	
Turkey	• Financial support for students in general • Waiving or charging differential fees to reward study success		

Source: Reporting from national experts (2nd HEDOCE questionnaire, 2014).

5.5 Four good national approaches

The analytical framework presented three reflective questions on the expected effectiveness of national policy approaches to study success: a good match between policies and study success orientations, a variety of instruments from three policy areas and consistency between the policy instruments are expected to contribute to positive study success outcomes. However, because of the limited and relatively weak international comparative data available on study success outcomes as discussed in chapter 4 we cannot classify countries as being more or less successful in addressing study success. Nevertheless, based on the policy analyses four countries stand out as good practice examples in terms of having a relatively rich range of study success instruments. These countries also provide some evidence of policy effectiveness: Denmark, England, the Netherlands and Norway.[11]

5.5.1 Denmark

In Denmark, study success is high on the policy agenda and is interpreted as completion in time. Denmark is among the top-performers in Europe with regard to completion rates – 81 per cent in 2011 according to the OECD data.

In 2013 the Danish government introduced the Progress-Reform which changed the Student Grants and Loan Scheme as well as the ways in which institutions have to monitor their students. These initiatives promote study completion, especially time-to-degree. This reform that was implemented in the summer of 2014 demands students and institutions to better document study progress (Danish Ministry of Higher Education and Science, 2013b). The reform includes a comprehensive set of instruments that are relevant for study success:

Funding:
- Progress dependent student financial support
- Institutional funding rewarding quality, study progress and (timely) completion

Information and support for students:
- Support for study choice
- More flexible educational pathways

Organisation of higher education:
- Restricting access to higher education
- Mandatory study plans

The funding of students and institutions has been made dependent on students' achievements. Therefore measures that allow and force students to study faster have been integrated in the student financing regulations. As such, institutions have to ensure more flexible pathways for students. The introduction of mandatory study plans is a further instruments. It implies that full-time students are obliged to select course packages of at least 60 ECTS per year (or 30 ECTS per semester). Students can no longer withdraw from the exams related to these courses and have to enrol for new courses every year. Even though the mandatory study plans are debated in Denmark, it is expected to reveal a strong impact on students to complete within the nominal study duration.

Because of the recent implementation of these reforms, there is no evidence of their effectiveness yet. Nonetheless, it is interesting to note that Denmark implemented a

[11] For all countries included in the study there are short country reports available in Annex 2. Additionally for the Czech Republic, England, France, Germany, Italy, the Netherlands, Norway and Poland country case studies are provided in Annex 3. There are also policy briefings for the U.S.A. and Australia included in Annex 3.

combination of consistent instruments that appears a promising approach to reduce average time-to-degree and completion.

5.5.2 Norway

In Norway study success is also high on the policy agenda. Completion rates are 71.5 per cent at the bachelor level and 67 per cent at the master level. Student completion is structurally monitored by a data register, both at national and institutional level. The Quality Reform of the early 2000s included the objective of improving study success, i.e. decreasing dropout and shortening time-to-degree. A number of policy instruments have been implemented to address the study success objectives:

Funding
- Financial support for students in general
- Turning loans into grants
- Institutional funding rewarding timely completion and study progress

Information and support for students
- Comparative data and information
- Student Monitoring
- Student Support Services
- Support for institutions

Organisation of higher education
- Changes in degree structure

The white paper underlying the Quality Reform in the early 2000s stated as one of the key objectives that "the student should succeed". Dropout and long time-to-degree were regarded as major problems. The reforms implemented used a variety of policy instruments from different policy areas. The policy mix can also be said to be harmonized and consistent but nevertheless did not entirely bring about the expected outcomes. More than a decade later, dropout and long study periods are still a problem. OECD data show that the completion rate has even gone down from 65 to 59 percent between 2005 and 2011.

The Norwegian policy mix provides a good example for a promising policy even though it did not unfold expected effects. Two major reasons have been identified in this respect. First, the open-ended performance-based funding mechanism awarding successfully completed credits and diplomas appears to have some side effects on completion as it allows students to take extra courses rather than completing a degree. The open-ended performance-based funding mechanism furthermore made it possible for institutions to develop additional "attractive" courses to attract students rather than designing well-integrated study programmes that promote study success. A clearer stimulus on completing degrees could have been more effective. A second reason was found in the fact that study choice information provided to students was very much appreciated but could include more relevant information to be really useful for students to make the right study decisions.

Unfolding success was also hindered by the positive general economic situation and well-functioning labour market. In some disciplines private companies have recruited many employees among students before they formally graduated. The well-functioning labour-market also reduced the urgency to finish education as there was a surplus off jobs available. Finally, the well-functioning labour-market lured many students into part-time jobs to cover the costs studying, resulting in delayed study progress, dropout and more indirect study pathways.

Though different factors blocked the success of the Norwegian study success policy mix, it is selected as a good national approach. The mix of selected instruments can

be said to serve the study success orientations, there was also a variety of instruments from different areas and there was consistency between the instruments. Nonetheless the Norwegian example shows that having various instruments to improve study success sometimes even is not enough. Setting the right policy incentives and dealing with a specific context appear to be very important.

5.5.3 The Netherlands

In the Netherlands study success is high on the agenda of national authorities such as the ministry of education, culture and science and higher education institutions. The most recent data (for 2013) report a completion rate of 76 per cent for university bachelor programmes and 69 per cent in the UAS sector (MinOCW, 2014). Following a long tradition of study success oriented policies, since 2011 a special set of policies addresses dropout in the first year of study and time-to-degree. A central idea repeatedly communicated is to achieve a good match between the student and the study programme: "Putting every student in the right study place", which is regarded as crucial for study success. In line with that the following instruments have been implemented:

Funding
- Progress dependent student financial support
- Institutional funding rewarding quality, study progress and (timely) completion

Information and support for students
- Quality information mechanism
- Student Support Services
- Support for study choice
- Support for institutions

Organization of higher education
- Access - Matching students and study programmes
- Limiting access to higher education

Already in 1993 the government related study progress requirements to the system of student financial support provided to all students. If students passed less than 30 ECTS per year their grants would be turned into loans. In 1996 this arrangement was changed into the performance-related grant: since then all "basic grants" were loans initially. Provided a student completes a degree within 10 years the loan was turned into a non-repayable grant. In 1998, the funding for HEIs become strongly performance-based. Until 2011, about 50 per cent of university funds for teaching was related to successfully completed degrees. Since 2011, this component has been reduced to about 25 per cent. Though no hard proof is available, both funding arrangements are said to have contributed to a gradual decrease in the average time-to-degree from 6,5 to 5,8 years for four-year bachelor-master trajectories in universities. In addition, the completion rate for bachelor students four years after their first enrolment increased from 51 per cent for the 2005 cohort to 62 per cent for the cohort starting in 2008 (VSNU data).

Because a national commission (Committee Veerman, 2010) concluded that the quality and efficiency of Dutch higher education should further increase to support the knowledge economy, the ministry initiated performance agreements with individual HEIs for the period 2012-2015. In these contracts the HEIs bid on obligatory indicators for reducing overall drop-out and study switch, increasing graduation rates for students starting the second year, drop-out/switch in the first year, and student satisfaction or other measures such as excellence of study programmes. 7 per cent of the total governmental teaching budget is redistributed based on the extent to which

HEIs achieve their ambitions on these indicators by 2016. In the performance contracts HEIs also described their instruments to improve study success.

Related to this policy approach, the government has supported the development of an elaborate online student information system (Studiekeuze123), also including national student satisfaction surveys, and implemented a "Binding Study Advice" by which HEIs had to decide how many credits a student needs to have completed at the end of the first year in order to be admitted to the second year of studies. The evaluation of this latter instrument revealed that it contributed to faster completion, particularly in programmes with a high number of students. Here the combination of the Binding Study Advice with extended counselling for students is effective.

5.5.4 England

In England study success is high on the policy agenda. Study success is widely understood as the completion of a degree in time. In recent years the completion rate has strongly increased in England. According to OECD data, completion in the UK has increased from 74 percent in 2005 to 82 percent in 2011. In England the following types of study success policies are introduced:

Funding
- Financial support for students in general
- Additional funds for specific students enrolled
- Institutional funding institutions based on tuition fees of enrolled students

Information and support for students
- Comparative data and information
- Support of study choices
- Support for institutions

One key policy addressing study success was the implementation of a new funding approach in which students were put in the driver's seat. Though students have to pay tuition fees since 1998 and substantially more since 2006, since 2012 most of the institutional funding for education comes from privately paid tuition fees up to £9,000 per annum. This change of regime aimed at improving institutions' retention and completion rates as they become dependent on students and study success for their funding. Further reasons for this reform were to improve the sustainability of funding for higher education and relate it more strongly to the engagement of those who mostly benefit from higher education, the graduates (Department for Business, Innovation and Skills, 2010). Thus higher education institutions were strongly stimulated to develop instruments improving study success. Students on the other hand now receive more relevant information to make deliberate choices about their study programme – or in other words where to spend their money. The performance of higher education institutions in teaching is published publically and helps students in making these decisions. This quality information mechanism also stimulates higher education institutions to become active in improving study success.

Another key factor is that in England equity in access to higher education does not only play a strong role in attracting students to higher education but also in retaining students. Institutions receive additional funds with regard to the profile of their student population. These additional funds have to be spent on special instruments for improving study success among the more 'risky' population. HEIs charging fees above £6,000 have to indicate in an access agreement how they spend this additional money for instruments to ensure access and success of students from lower socio-economic family backgrounds. While presenting detailed data on the development of access rates of students from disadvantaged backgrounds is beyond the scope of this study, it has to be stated that recent research indicated a positive development of these

rates also after the implementation of the new funding strategy for higher education (Department for Business, Innovation and Skills, 2014b).

The Higher Education Academy serves as an important agency that supports higher education institutions in enhancing their teaching and learning strategies and study success. Looking at the combination of policies that have been introduced we find that these address study success from different angles and that instruments support each other. Strengthening the position of students by letting them – to a large extent – decide where they would like to enrol is a strong leverage to stimulate higher education institutions to care about study success.

Evidence shows that central to the high success rate in England is firstly a fairly tight admissions system (institutional autonomy has been retained and is not regulated for example by OFFA). Secondly a widespread and embedded expectation is that completion is possible in three years except for exceptional circumstances. Institutions and students are not funded for more than three plus one years (except for longer courses), and students and their families do not expect to study for longer than the normal time period. This provides a good basis for retention and completion. National policy, guidance and funding have been directed to maintaining and improving the retention of students in the context of expansion and increased diversity, and improving employability, and more recently the attainment outcomes of students. The importance of performance indicators and league tables should not be under-estimated. The Higher Education Statistics Agency provides a 'benchmark' for every institution calculated with respect to subject portfolio, entry qualifications and student diversity. This is published alongside actual performance with regards to the total institutional student population and sub-sections of the student population. National newspapers use this data to produce league tables about retention, and the information is fed into wider league tables about the 'quality' of individual HE providers in England and the UK.

5.6 Conclusions

This overview of national study success policies shows that European countries are addressing study success. To date, there is only little research on the impact and effectiveness of these study success policies. This is also due to the complexity of dropout, completion and time-to-degree and the lack of adequate data to measure study success.

Nonetheless we found some evidence on the effectiveness of selected policies. Financial incentives can be important policy levers for study success but do not necessarily lead to the intended effect. Student financial support for example has to consider what amount of funding could help to prevent students from spending too much time on part-time work. Secondly, also the risk perception of students is important when it comes to student loans. Some students may be reluctant to take up a high loan because they perceive having high debts after graduation as too risky. Further it should be considered that student behaviour is not primarily influenced by financial incentives or characteristics of the organisation of higher education. Often issues beyond the scope of national policies – for example students' personal situations – account for dropout. Also, financial incentives to change institutional behaviour have to meet certain conditions. Performance-based funding becomes more effective when goals are clear and feasible, the amount related to study success is significant and performance is measureable. Additional funding stimulates institutions strongly in developing study success-related measures, in particular when the institutions are free to design instruments that serve their needs best.

When it comes to information policies, this study finds that only providing information on study programmes is too little to let students make deliberate study choices.

Providing data on the performance of institutions and later careers of graduates enrich the information and give students more decision criteria. Testing interests and competences help students to better orient themselves. Nonetheless, information provided should be clear and give clear guidance as the higher education landscape has become increasingly complex and might be difficult to decipher for prospective students.

Organisational policies can help to address students' needs. Short programmes may be a chance for students who are interested in a more vocationally oriented higher education without being "locked in" too long. Broad entry years may help students who were uncertain about the exact direction of their study choice. Flexible educational pathways give students the possibility to gear their study programme according to their interests. Matching students and study programmes before entering higher education is an effective 'soft selection' mechanism to get students at the 'right study place'. Matching instruments however need to be able to find the best match between programme and student rather than the best student. Continuous assessment allows students to assess their competences and probability to complete their degree successfully.

While all policies reported could be understood as self-standing, countries mostly mix policies from the three policy areas. The study revealed that some policy mixes might lead to better outcomes than others. What is important is to combine policies that support each other adequately. In the Netherlands the Binding Study Advice has become an important policy because it has been combined with the requirement for institutions to counsel students adequately about their programmes and study progress. In England students are provided with comprehensive information systems to support their study choices. This allows them to make deliberate choices where they would like to 'invest' in their education.

6 In-Depth Case Studies

In-depth case studies about dropout and study success were carried out by country experts in the following eight countries: the Czech Republic, England, France, Germany, Italy, the Netherlands, Norway and Poland. Interviews were held with policy-makers and national stakeholders, institutional leaders, academic and support staff as well as students. As part of this, the HEDOCE researchers also included per country a few higher education institutions (HEIs). This helped us get a better understanding of what the various stakeholders perceive to be the main issues with regard to study success and what their study success orientations are. The focus in this chapter is on the institutional level, since the national level was already covered in the previous chapter 5.

Rather than presenting the case studies as such, this chapter contains some cross-cutting themes and tries to extract some findings and lessons that go beyond the individual countries.[12] In doing so, we will first (section 6.1) present some findings on the study success orientations of different stakeholders: where do they converge, and what does this imply for the policies adopted? In section 6.2 we discuss some of the policies implemented by institutions in the various countries to address study success: what are some of the typical policies we encounter? A typical policy is in this case an initiative (intervention; policy) that was found at more than one institution and in more than one country. Hence, we are focusing on policies that are similar across institutions and countries. As some of these policies were encountered in very different national settings, they may be considered for adoption by institutions in other countries. From the country case studies we derived seven typical study success policies used by higher education institutions – some focussing on the organisation of teaching & learning, others on funding and financial incentives, and others on information and support to students. This is in line with the three main policy areas also distinguished in chapters 3 and 5. In addition, we identified a more comprehensive type of policy that integrates several policy areas. Throughout the text, text boxes include examples of 'good practice policies'.

A discussion of the national policies that support institutional interventions is included in section 6.3. Where some policies are initiated by institutions, others originate from the national authorities, while others are shaped in the interaction between the two levels. Conclusions, reflections and recommendations may be found in section 6.4. The reflections concern the match between policies and study success orientations and the mix of policy instruments in use. This final section also suggests some policies for supporting institutions in their endeavour to enhance study success. The conclusions will answer the following research questions:

- What do institutions do to address study success effectively?
- What are successful combinations of policies at the institutional level?
- What further policies support/enable institutions to address study success in an effective manner?

[12] The full case study reports can be found in the Annex 3 to this report.

6.1 Stakeholders' orientations to study success

As stated in the preceding chapter, countries may vary both in their orientations towards study success in general and in the importance attached to study success in policymaking. This becomes evident when comparing the orientation towards study success among different stakeholders across and within countries.

From the eight case studies we conducted, England is the only country with an explicit, agreed upon definition of what constitutes study success - a definition all stakeholders adhere to. The two measures 'completion rate' and 'continuation rate' are defined , understood, endorsed and utilised in the same way by national policy makers, institutions and stakeholders across the higher education sector. These two indicators are also measured and published on a regular basis (see next chapter).

In Germany, stakeholders have some degree of consensus on what they regard as study success - all of them seeing it as 'the successful completion of an academic degree', but this so far did not result in a broadly agreed definition as at the same time there is also a shared and strong critique with regard to the indicators used to measure study success. This contrasts to the case of England. In both countries however there is agreement that improving the quality of teaching is the key to improving study success.

In all other countries, there are variations in the definition of study success among stakeholders; several understandings of the concept exist side by side, and stakeholders choose to use the type of definition that they find suitable. In addition, in these countries stakeholders also do not share a common approach on how to address study success. For example, in France finding employment after degree completion is mentioned as an orientation of study success by some stakeholders, and it is used as the definition of success in a national survey of graduates. In Italy, several stakeholders also see finding employment as study success, but completion and timely completion are seen as important as well, probably because Italy has low completion rates and low tertiary attainment rates compared to other European countries. In other countries the government is focusing on timely completion as the most important study success factor. This is the case in Norway and the Netherlands. However, in Norway institutions do not share this view, as they regard completion as such to be more important than completion within a limited time.

Neither Poland nor the Czech Republic have a nationally agreed upon definition of study success. The Czech Higher Education Act indirectly connects it to dropout and refers to it in the context of student fees at public institutions. It considers students that are switching from one programme to another as dropout, and governing bodies as well as university management and academic staff use measures of dropout in discussing study success. In contrast, academic staff and students tend to interpret study success as being similar to programme completion or gaining employment upon degree completion.

The policy briefing on Australia highlights that currently there is no clear definition or narrative of study success. Rather, the concept relates to a number of facets that include equity in access as well as professional outcomes. A formally defined concept as well as clear indicators of study success are regarded as fruitful for of the information of stakeholders and persons who are not familiar with higher education.

These examples illustrate the divergence of interpretations of study success and its definitions across higher education systems. When we compare the different stakeholder views in countries there is no commonly agreed upon view of what constitutes study success. This in turn then makes it hard to identify or suggest policies that are directed towards a certain type of study success.

6.2 Typical institutional policies aimed at improving study success

From the institutional case studies carried out in eight countries, we identified seven typical study success policies that have been used by several higher education institutions. These may be categorised under the headings of funding, information and support and organisation of teaching & learning. The seven policy approaches will be discussed below. These will be illustrated with 4 good practice examples presented in separate text boxes. Most institutional policies belong to the policy area of 'organisation of higher education'. These institutional policies address both prospective students and students that are enrolled at the institution.

6.2.1 Enhancing information about programmes

Several institutions that we studied state that they work on enhancing the information available on their programmes in order to facilitate student choice. This is a very commom policy that addresses all prospective students and provides them with reliable information about the various degree programmes available to students who are applying for a study place. From British research it is known that quite a few students leave their programme before degree completion because they had not made the right choice of programme (Yorke & Longden, 2004:106ff). Therefore, good and adequate information about programme offerings will help students make accurate expectations about what is in store for them. Institutions are generally aware of the need to provide accurate information to help students choose a programme that matches with their ambitions and capabilities. Several institutions have implemented policies in this area. In countries such as the Netherlands and Norway this is also a policy found at the national level, as there are online public information services. These national public information services are geared at providing students with good and accurate information about higher education studies in general (see chapter 5: National Study Success Policies).

At the institutional level, examples of initiatives to provide information to students are found in France and Italy. In France, as a result of the law on higher education (introduced in 2013) that promotes early orientation by students, the University of Nantes has created an information centre for potential students. The main goal of the centre is to give information and advice on study choice to students completing upper secondary education (*lycée*). The centre also offers training for teachers and staff working in upper secondary education. Similar initiatives are found in Italy, where the University of Milano Bicocca and Sapienza University made substantial efforts in addressing orienting students from secondary school, both through an outreach programme and through university-based initiatives. At the university this is done through open days and offering study guidance in general, while the outreach programme includes visits to secondary schools, where seminars and workshops are conducted to inform prospective students. The University of Milano Bicocca and Sapienza University regard student orientation, both prior to university entry and after entry, as a key factor in reducing dropout and improving study success.

6.2.2 Matching students with programmes

In line with the previously discussed policy we encountered another typical policy that seeks to prevent flawed decision-making about study choice. Matching policies aim to improve the match between students and their degree programme, helping them in making conscious and deliberate study choices. Through organising matching activities students get the opportunity to "try out" their programme before they embark on it. This may lead to a better fit between student and institution/programme.

Matching initiatives at institutional level were found in the Netherlands and Germany. Matching procedures can take different forms and be employed at different times

during the study course. The programme introduced at Utrecht University (Netherlands) involves holding interviews with students and having them take part in a one-day programme of activities that gives a taste of a particular degree programme (see the box below). The programme Mintgrün at the Technische Universität Berlin is a full one-year programme, aimed at giving students interested in STEM subjects a general introduction to various disciplines. This helps students already enrolled in the university to choose the field of study that suits them. The one-year programme also offers remedial courses to students who are interested in STEM subjects but who need to improve their academic preparedness. Students who start their higher education studies with this one-year programme and then continue within the STEM fields may transfer the credits taken into their new programme. The difference between the Dutch and German matching initiatives is that the first is aimed at prospective students while the second addresses students that already have chosen a broad field of study (i.e. STEM-subjects) but did not yet decide on any specialization.

Good practice example 1: Utrecht University - Mandatory Matching

Utrecht University was the first university in the Netherlands to implemented matching. The initiative was designed to ensure that prospective students (with a Dutch pre-university qualification) who register for a non-selective Bachelor degree programme choose a degree programme that reflects their abilities and interests. The aims are threefold: (1) to reduce dropout during the first year; (2) to support students in making a good and well-informed study choice, and (3) to establish a connection with prospective students from the very start of their relationships with Utrecht University.
Matching begins during the registration phase and takes place after the orientation phase (for example after the university's open days) and typically includes the following components:

a) Applicants must fill out a questionnaire, providing information about their previous experiences with the subject of study, grades from earlier levels of education, as well as motivation and expectations of the study. They are asked to do some study activities at home and at the university. For the latter, applicants have to participate in a real-life class or practical, linked to the programme they have applied for. This means they receive preparatory work to do at home, an assignment or a test. The assignment or test is then evaluated and discussed with a tutor in the next step.

b) An interview (either individual or group interview) is conducted with prospective students addressing the assignment results, further experiences during study activities, motivation. This leads to a non-binding advice to the applicant about her/his study choice. In principle, students are allowed to enrol in any programme (if they have the right pre-university diploma), even if they are advised to rethink their choice of programme. However, prospective students who do not participate in all the matching activities organised by their preferred study programme are not eligible to enrol in that programme.

c) The "matching trajectory", however, does not end with the enrolment decision, but continues throughout the first year of the programme, until it is clear whether the student has managed to accumulate a sufficient number of credits. The latter - the BSA (Binding Study Advice - see Chapter 4: National Study Success Policies) – is an important advice given at the end of the first year. During their first year, students have tutors, who play an important role in the matching process. Tutors receive specific training to this end. Especially, during the first ten weeks, students who appear not to perform very well receive additional tutoring.

Results from survey data hint at a positive impact of the matching activity. On the one hand, students believe that matching helps them to make a better-informed study choice. On the other hand, students do not necessarily change their choice as a consequence of the results of the matching activity. Matching is rather a way to better acquaint students with university study in a particular programme and to make them aware of the programme's expectations.

In 2014, Utrecht University implemented some improvements in the matching process in terms of more exacting tests, more feedback and stricter deadlines to steer students' registration behaviour. A good matching process, for example including a full week of study prior to commencement of the programme, is believed to provide both students and the programme with a realistic understanding of success.

6.2.3 Introducing selection mechanisms

In countries that do not have strong entrance selection for study places, and where all or most students with a completed upper secondary education are allowed to enter university, some institutions are introducing their own selection mechanisms as a means to improve study success. If countries have an open access system this may result in large numbers of students entering higher education and dropping out, especially during the first semester or first year of the programme. These high rates of withdrawal are not viewed as a systemic problem, but rather as a natural feature of an effective higher education system that leaves it to the institutions to send away those students that are not well-enough prepared to meet the requirements of the programme. By introducing a selection policy, institutions try to identify students who are not suited for the programme already and before these students start their university career. This ensures that they accept only those students who fulfil particular entry requirements that are linked to the likelihood of a successful programme completion.

Examples of typical selection policies are found in Italy and in Poland; countries with an open access system. In Italy, "guidance tests" have been implemented to assess whether students have the minimum level of knowledge required for the completion of a particular programme. This policy is in place at Sapienza University. The selection tests in the case of Italy are designed and carried out by the institutions themselves. However, the tests are not decisive; students can still enter, but if they do not meet the minimum requirements they have to take additional training to make up for that.

In Poland, the School of Humanities and Journalism in Poznan University introduced a local entrance exam to test students whether they have the basic knowledge and skills required to complete the programme. Students who do not manage to pass the test are not eligible to enter the programme.

6.2.4 Monitoring student attendance and progression

In several countries, the monitoring of students with respect to their attendance in class and/or their study progress is used as a policy to enhance study success. Monitoring can be done at the programme level, which is done in Germany, or at the student level, which takes place in England and Norway. The intention of this typical policy is to monitor how different programmes are doing in terms of completion, retention and dropout. In the cases where this is done at the student level, the information collected may be used to flag or approach students who are at risk of dropping out or lagging behind in their studies.

In England, Coventry University monitors student attendance in class, by registering participants either manually (for example by taking a register) or electronically (for example through 'swiping in'). The information collected can then be used to give institutions an early indication of students who may be at risk of withdrawal, and allow them to put in place a suitable follow up for intervention. For example, the university's central information system can produce a listing of students who have missed classes for two consecutive weeks. These students are then flagged up by the system. Coventry University monitors withdrawals and non-completions on a two-weekly basis. The data is submitted to the Deputy Vice Chancellor for Student Experience and the Associate Deans, and is discussed to identify problems and solutions. Twice a year academic teams responsible for a course receive detailed information about the performance of their programmes and students (which includes completion), and then course teams sit together to review their course and agree on how to address poor performance.

The Fachhochschule Dortmund (Germany) has a similar system. It has implemented the indicator system AREX, a monitoring system that includes indicators on the

number of re-enrolments, the number of students who complete in the nominal duration of the programme (plus two semesters of grace time) and the number who actively deregister. This information is used to highlight the performance in degree programmes in terms of retention and completion by using traffic-light-symbols. The performance indicators derived from the AREX system are used in the yearly performance talks between the university leadership and the deans. Due to privacy protection regulation it is not allowed to track individual students in Germany; the monitoring is done at the programme level, not at the individual level. The system does not inform about the reasons for discontinuation of those students who passively deregister; also information on their further educational pathways (for example transfer to another programme or institution) is not available.

In Norway, both Hedmark University College and NTNU (the Norwegian University of Science and Technology in Trondheim) use an administrative system to monitor students to see whether students sign up for a full course load in their programme, and whether they complete and pass their courses. The administrative systems are designed in a way that makes it possible to track the individual student, but data is also extracted at the programme level to monitor performance in general. However, NTNU has added an extra dimension to this, by coupling administrative monitoring with the offer of extra support to those students who are struggling with their studies. This is taking monitoring to the next level (see good practice example 2 below).

Good practice example 2: NTNU (Trondheim, Norway) - Monitoring Based Counselling

NTNU offers a broad set of counselling services, both directed at all students and at certain groups of students. As most other institutions in Norway, it monitors student progress during the first semesters. In addition to giving formal notice to students who are not meeting the standards set that they may lose their place in the degree programme, NTNU also uses the information to offer dedicated support to students who are making insufficient progress in their studies. Through this programme it offers counselling and other forms of assistance to students to help them master their studies. Based on the progress monitoring, students may be invited for an appointment with a study counsellor, who helps students to better understand their situation and who may refer them to other offices and professionals in the university, based on the problems experienced. Not all students who are offered help will accept it, but a reasonable share do so. Thanks to this system, many students who encountered problems in the early phases of their studies have received help.

At Melbourne University a comprehensive Academic Performance Policy and Progress Review Procedures has been implemented. The Academic Performance Policy provides a definition for the identification of students 'at risk' and students making 'unsatisfactory academic progress' under the university's statues and regulations. The Policy also defines academic disadvantage as 'defined, ongoing, unpreventable circumstances that hamper a student's ability to participate in academic activities and demonstrate their academic merit'. The policy governs the application of the Academic Progress Review Procedure and sets out the operational practices for faculties to notify, warn and provide support for relevant students primarily through an initial meeting with student advisors; and to identify the rights and obligations of both the student and the university.

6.2.5 Facilitating social integration and commitment

As became clear from the literature review (chapter 2) and the analytical framework of our study (chapter 3), a high degree of social and academic integration of students is seen as important for student persistence and the students' chance of completing a degree (for example, Tinto, 1993). Many institutions visited during our case study research are aware of this. They often will have various programmes in place to

strengthen the social integration among their students. Another intention of these programmes is to instil in students a sense of belonging to their institution and their programme. This, in turn, will enhance student commitment and study success. A typical policy implemented by institutions is the organisation of introductory days/weeks around the time that students start their studies, or arranging 'buddy groups' and different forms of activities where students get to know each other. These actions are important to create a sense of community and belonging among students. These initiatives are quite common among institutions in Europe, and in some cases already existed for quite a long time.

Introductory weeks and buddy programmes were mentioned explicitly as a means to reduce dropout and enhance completion at the two Norwegian institutions (NTNU and Hedmark University College), at Rotterdam University of Applied Sciences in the Netherlands, and the University of Nantes in France.

Another initiative that seeks to enhance social and academic integration is tutoring. Tutoring strengthens the students' sense of belonging to the institution and improves their chances of completion. In England, both Coventry University and the University of Leeds have in place a personal tutoring system which provides each student with an individual member of staff to deliver academic and/or personal support and guidance in relation to the academic experience in university. This policy is common at many other institutions in the UK, but not yet in place in many other European countries. However, several institutions provide peer tutoring or peer coaching, which is not just aimed at creating social integration at the start of an academic study, but also to inspire stronger academic integration during the programme. Examples of this are found at the University of Nantes, at Rotterdam UAS and the *Fachhochschule* Dortmund. A peer coach is a senior student who helps other students in their study, both on the content and in learning skills and planning. He or she is a "role model", especially (but not exclusively) for first year students. At Rotterdam UAS, students strongly appreciate this initiative. Its peer coaches are trained and paid and there are also peer coaches targeted at specific groups (for example, for mature students or students of non-western ethnic background). Peer tutoring and coaching frequently may continue for a longer time period than the general introductory phase of academic programmes.

In Australia it has turned out that individualised forms of student support by institutions are likely to play a key role in enhancing study success. At the Charles Sturt University for example, a Student Success Team has been established. It aims to reduce attrition in first year, domestic, undergraduate students from low SES backgrounds through a range of actions including phoning the student during the first weeks, and exit interviews for students who drop-out. The university's Office of Students is comprised of teams with oversight for academic success (including pre-entry preparedness); engagement (including orientation and academic support); inclusion (support for students with specific needs); and finance.

6.2.6 Addressing increasingly diverse students populations

Due to the massification of higher education, student populations are getting much more diverse. This leads to new needs among students. In systems where admission to higher education is open or at institutions where most students are accepted, initiatives to support students who are not well enough prepared academically have been put in place by institutions. Typical examples of policies in this area are found in Nicolaus Copernicus University in Poland, Hedmark University College in Norway, and, in a slightly different form, Rotterdam UAS (Netherlands) and the *Fachhochschule* Dortmund in Germany. At Nicolaus Copernicus University, remedial courses were introduced in the Math and Chemistry Departments, aimed at students who realised that their academic preparation was not sufficient to keep up with the requirements of

the university. At Hedmark University College, remedial courses are offered to students who have weak skills in some subjects, for instance in mathematics. The aim of remedial courses is to make the transition to higher education easier and to prepare students for meeting the challenges of higher education. This policy may also be targeted at mature students or at students who have been out of education for a while and may need additional courses to brush up their knowledge. Getting students to sign up for remedial courses can also be a result of the institution reaching out to students who are lagging behind in their studies, or who appear to have trouble academically in their first semester. The reason for implementing this policy is that not all institutions (or programmes) have the luxury of selecting the best students only, as they have to generally accept all candidates applying to the institution.

One approach is to offer programmes after students have been enrolled for a while. Rotterdam UAS offers remedial summer school courses for first and second year students who did not pass all exams in their first year. The *Fachhochschule* Dortmund takes a similar approach. It offers "refresher courses" to students who have failed an exam. These courses are offered to students before they take the resit for the exam. In both cases the remedial courses are not directed at students with deficiencies upon entry but rather at those lagging behind in their studies during the first two years of the programme. For Rotterdam UAS remedial courses are part of a larger, comprehensive programme to increase study success (see Good practice example 3).

In the U.S.A. remediation or developmental course work is a widespread measure to address study success. Higher education institutions aim to improve and innovate their remediate courses. This is supported by the National Conference of State Legislatures that intends to implement strategies at the K12 level to better prepare students for higher education. The Charles Sturt University in Australia has implemented STAR (Student Transition and Retention), a course that is implemented across faculties to prepare students for higher education. The course includes orientation, communication and the identification of students of risk for attrition.

6.2.7 Teaching and learning initiatives

At higher education institutions, a range of teaching and learning initiatives are aimed, at least in part, at enhancing completion and reducing dropout. Thomas (2012) showed in the final report of the research project 'What Works?' that, in England, teaching and learning is key to creating engagement among students, as it fosters belonging and commitment among students. There are many different types of teaching and learning initiatives at institutions, many of them dependent on an institution's specificities or national context. In Germany, enhancing the quality of teaching and learning has been made a national priority through the Quality Pact for Teaching (see chapter 4: National Study Success Policies). This national progamme led to a range of locally initiated projects at institutions.

Another strategy several institutions employ is curriculum redesign: rethinking the way courses are built up and combined, or how much choice students have along the way to degree completion. At Coventry University, the number of options and modules offered within programmes was reduced, in favour of a more comprehensive planning of courses/programmes. The same approach was the basis for the higher education reform in Norway in 2003: reducing the number of choices students have to make when taking a general bachelor's degree (Hovdhaugen, 2012). This is visible at both NTNU and Hedmark University College. Curriculum design seems to be an ongoing process, although obviously not all programmes can be altered at the same time.

Institutions in several countries have implemented measures that are aimed at challenging students to be active and work hard. In the Czech Republic, institutions have re-introduced obligatory presence at seminars and courses, mainly for freshmen

students. Coventry University went even further, changing regulations to force students to submit their work on time. Students who do not submit on time will receive a zero and are no longer allowed to re-sit an exam. However, there are also examples of applying the carrot rather than the stick: institutions in the Czech Republic and Norway offer online educational resources to reduce barriers for learning and to encourage students to repeat the material they have been through in class. For example, if lectures are pod-casted, students can revisit and review them as many times as they like. Many of these initiatives were also listed in two recent reports for the European Commission (European Commission, 2013; 2014).

Another typical policy encountered in many countries is to provide academic staff at universities with options to further enhance their teaching skills. At the University of Nantes, professors can request any type of professional training (from one hour to several weeks), in groups or individually, from their university's pedagogical and didactic centre. In Norway, at both NTNU and Hedmark University College, all academic staff in permanent positions have to take a class on university pedagogy. At Utrecht University, which is an institution that already for many years has given a high priority to the teaching qualifications of its academic staff, mandatory courses in university pedagogy are provided to members of academic staff. The success of this initiative inspired a national policy towards the implementation of qualifications for teaching staff in the Netherlands (the BKO, mentioned in chapter 4: National Study Success Policies). Today, in many different higher education systems there is a focus on the teaching skills of academic staff as a means to enhance study success.

6.2.8 Comprehensive approaches

Some higher education institutions have implemented more comprehensive approaches for targeting dropout and completion. In our case studies we came across examples of this approach in England, the Netherlands and in Germany. Comprehensive approaches may take many different forms, but what they have in common is that several measures are combined into a broad programme package, and that these measures are designed to work together and build upon each other. The descriptions of comprehensive approaches we have come across were initiated either by institutions themselves (Coventry University in England and Rotterdam UAS in the Netherlands), while a German initiative came from a professional organisation (see Good practice example 4).

When comparing the comprehensive approaches employed by Coventry University and Rotterdam UAS, we find that they differ slightly. The one in Coventry University targets the phase after the student has entered the higher education institution. The activities implemented consist of structuring of studies through timetabling, working on planning and delivering courses with good outcomes for students, creating social learning spaces where students can learn together collaboratively, but also changing regulations to force students to stick to the pace of the programme and not lag behind. Therefore, this programme combines "sticks and carrots" to facilitate timely completion. At Rotterdam UAS, the approach covers both the phase before the students start studying, and the phase while studying. The approach, including a range of activities, is described below (Good practice example 3).

Good practice example 3: Rotterdam UAS – Study Success Programme

Against the backdrop of a relatively high dropout rate in the first year of a programme (14 per cent within six months) and a low overall completion rate (of about 50 per cent after eight years), Rotterdam University of Applied Sciences (UAS) implemented its Study Success Programme to improve the academic achievement of its students, in particular targeting students with a non-Western ethnic minority background (of which Rotterdam has a large share). The Study Success Programme focuses on five key areas: (1) study choice, (2) social integration, (3) academic integration, (4) study motivation and academic self-confidence, and (5) an inclusive education climate.

The Study Success Programme consists of a suite of interventions that are meant to ensure that students are completing their studies within a reasonable time period. The programme includes Mandatory Matching (a mandatory intake interview with each candidate, a digital questionnaire that all prospective students have to complete), a teacher acting as Study Career Coach (mentoring students throughout the programme), and Peer Coaching (a system where senior students help other students during their studies, both on the content and in learning skills and planning). The last part of the package consists of Summer Schools (both voluntary summer schools that target prospective students, and remedial summer schools for first year and second year students who did not pass all exams in their first year).

The Study Success Programme consists of consecutive interventions to improve student integration in their higher education institution and to help them complete their studies within a certain time period. In the following, a brief description of each single intervention of the programme is provided:

a) Mandatory Matching consists of two parts: First, a mandatory intake interview conducted by a Study Career Coach with candidates prior to May 1st (in line with the national registration regulation), and second, a digital questionnaire. The outcome of this phase is a non-binding study advice. If the student has missed the deadline of the 1stof May, she or he might still be eligible to attend a study programme but the study advice can be binding.

b) Study Career Coaches are teachers who are mentoring students during their studies. Each student has regular meetings with her or his Study Career Coach, at least four times a year. At the beginning, the mentor's mandate was primarily guidance in academic matters; today, however, Study Career Coaches are expected to discuss broader issues, for example issues regarding internships and employment after studies. UAS teachers are not obliged to become mentors, but, as an institutional policy, it is encouraged and there is provision for teacher-to-teacher peer-training.

c) Peer Coaches are senior students who support other students, in particular first-year students, in organizing and planning their studies with respect to content matters and academic skills. Peer coaches are trained (there are eight meetings and students receive ECs) and paid. There are about three hundred peer coaches at Rotterdam UAS and over 2,000 students followed the peer coaching training. Students are not obligated to have a peer coach, however the system appears to be strongly appreciated.

d) There are two forms of Summer Schools. First, the "regular summer school" takes place prior to commencement; it targets prospective students and is voluntary (it may be recommended as part of the advice resulting from the Study Check). Second, the "Summer School-Propaedeutic" targets students who have not yet achieved their propaedeutic certificates. It consists of one week of intensive lectures focussing on the courses for which the students have not yet passed (or sat) their exams and it ends with an examination approved by the examination committee. If successfully passed, this examination allows students to complete their first year. According to the Rotterdam UAS Annual Report, a third of all participating students receive their propaedeutic in this way.

However, it is not only the higher education institutions that provide comprehensive programmes. In Germany, the German Engineering Association has launched a project that involves several actions for institutions that want to improve the quality of their teaching in engineering programmes (see Good practice example 4). This project only consists of carrots (i.e. no sticks), as it provides suggestions as to what institutions can do in order to improve the quality of teaching. The initiatives were developed also with an eye upon making more students succeed in the field of study that the Engineering Association represents.

Good practice example 4: The VDMA-project "Maschinenhaus"

This project is initiated by the German Engineering Association (Verband Deutscher Maschinen und Anlagenbau, VDMA). The aim of the project is to improve the quality of teaching in engineering programmes and to help students succeed. The project builds on a study of the main reasons for dropout from engineering programmes, and as a result of this work a set of actions and targets was provided, in the form of a toolbox or a catalogue of measures. The toolbox also provides a checklist for adaptation of the measures to different institutional contexts.

The project builds on the idea that different measures are relevant in different phases of a student's educational life cycle, and the toolbox includes dedicated actions and targets for each of the phases. The following phases are distinguished:

a) *Pre-study phase (1-2 years before entering higher education/the engineering programme):*
Giving prospective students clear and accurate information about the programme, so they are able to establish realistic expectations about the programme. The project provides a manual, aimed at higher education institutions, on how to provide realistic information about their programmes.

b) *Study entrance phase (first year in higher education):*
Most important here is the integration of the student in the programme and at the higher education institution, both academically and socially. Higher education institutions are challenged to establish a "Willkommenskultur" (welcoming culture). This phase also focuses on learning competences, how to improve or teach how to learn to new students.

c) *The study phase:*
Monitoring whether the study course runs smoothly and whether students make their expected progress.

d) *Transfer/international mobility:*
Supporting students in finding internships and studying abroad.

e) *Transition to the labour market:*
Support students in finding adequate employment after degree completion.

Based on the project so far, it is not possible to state the best or most efficient part of the package, as this may vary with context. However, the study entrance phase is seen as the most important phase for improving study success.

6.3 Translated policies

In our Analytical Framework, we assumed that we would find a range of national policies that would be translated at the institutional level, as a form of institutional adaptation to instructions from the national level. This indeed was found to be the case in some countries, such as Norway and France. However, in addition to finding translated policies at the institutional level, we have also found that in the Netherlands the government has taken policies originating at one institution, implementing them nationally when these institutional policies seem to be successful. Thus, the policy is then aimed at all institutions. An example of this is the matching of students and the binding study advice to students.

The translated policies found are the French policy favouring of early orientation to students who are considering to enter university. Due to this policy, which was enacted in law, all institutions now provide information services and some have outreach programmes. This was described earlier under 'Enhancing information about programmes' (section 6.2.1).

A translated policy in Norway is the introduction of written, published higher education learning outcome descriptions (HELOs), which was introduced as part of the National Qualification Framework (NQF). HELOs are descriptions of what students should learn and know after completing a course or programme, and the Ministry of Education and Research made it mandatory for institutions to implement HELOs. Even though this was a policy introduced top-down, institutions embraced the implementation as the learning outcome descriptions were seen as a way for institutions to rethink,

reorganise and improve programmes. Although it is still too early to detect solid evidence, there are indications that institutions and students have become more aware of what the outcome of a programme should be, and thus what is needed for success. Therefore, what at first may come across as a formality imposed from above to write up descriptions of learning outcomes, actually did improve awareness of what may be demanded, both from institutions and from students, in order to facilitate study success.

For the U.S.A. an increasing push towards competency-based education programmes is reported. These require that all components of a programme need to be broken down into clearly defined learning outcomes that are measureable and demonstrable. This allows for example employers to evaluate how well a student can do in practice. The idea of stackable programmes or credentials has also been discussed. The idea of stackable credentials allows students to build up their expertise. For some, the idea of a full two- or four-years toward a degree is either implausible, unaffordable, or just too unmanageable. Stackable credentials allows short-term goals to be met that, when put together, build a longer-term, more manageable approach to an education. Another advantage of a stackable credential is that the various credentials, themselves, can evolve and change quickly with a volatile economy and technological change. Whereas it is unlike a four-year bachelor's program to change much during the course of study, it is more likely, especially in both technological and health care fields, that changes will definitively change within a few years. A more fluid, evolving, and flexible approach through stackable credentials may provide more opportunities for people and also reward industry and society with quicker evolution in parallel with societal needs.

6.4 Reflection

When investigating similarities in policy approaches across institutions in different countries we do see some similarities, but also differences. All types of approaches or measures that we have come across are specific for that specific educational setting; the context that policies are implemented in is important. The analysis of the three types of approaches or policies related to the phase before students start studying can work as an example. While enhancing information to prospective students is a measure that can work in all types of settings, the introduction of selection mechanisms is only relevant in particular contexts. Hence, this type of policy is only relevant where almost all students with a completed upper secondary education have access to higher education.

Matching of students to programmes is a relatively new policy, and even though the different measures aim at the same outcome (i.e. to get a good match between student and programme), the approach chosen may be different. In the Dutch example, the institution is the one making the decision on the match, while the German example is more geared at students making the decision, based on experiences of what that study is all about. Therefore, when implementing such a policy, policymakers have to be aware of whose choice is regarded as most important. Furthermore, policy makers need to be aware that matching procedures require significant resources from the institution, they may prove to be an expensive way for institutions to select students. Furthermore, some institutions may not be at liberty to turn down students who have chosen that institution, since they need sufficient numbers of students with the attached funding to run their institution. If this is the case, it becomes unlikely that the institution will give prospective students a negative advice. On the one hand, depending on how matching is done, matching can also be an opportunity for institutions that are seen as less attractive to promote themselves to students who are considering going to that institution. Matching is a relatively new

policy, and seems to be promising, but there is limited evidence of its effectiveness so far.

A second measure that appears to be effective is the monitoring of study success. There are several positive effects found in cases where institutions monitor their students study activity and their progress. First, in order to be able to measure study success the stakeholders at the institution have to agree on what constitutes study success. Ideally there would be an agreed national measure, so all institutions can monitor study success in the same way. Nevertheless, regardless of whether there is a national agreed upon definition, the institution has to define study success in order to measure it, and this will in turn create data that can be used to further analyse the situation in specific programmes. However, there is a challenged because of the fact that not all countries allow individual monitoring. Nevertheless, monitoring at programme level will also generate useful information. Secondly, agreement on a measure and the monitoring of that measure will generate information on the situation regarding study success in the country. Currently, several countries do not regularly monitor study success (see next chapter), but doing so will provide more information for all involved parties. However, it is important not to be too focused on comparing across programmes, as differences in many cases can be explained by differences between programmes, both in structure and in what kind of students start in a programme. It is also possible that these differences among programmes vary between countries, which then makes policy transfer from one country to another less obvious. Where this is the case is not clear at present, partly due to a lack of data. Nevertheless, in all cases will monitoring at the institutional level generate more data. This, in turn, can contribute to enhancing awareness on the issue of study success.

Improving teaching and learning effectiveness is a third area that is important for promoting study success at the institutional level. The organisation of teaching and learning often is the key to student engagement, and it often appears to be important to further develop a student-centred and active learning approach. Most of these approaches are developed locally, at institutions, addressing the specific needs of that institution or programme. However, curriculum re-design, both with regard to the structure of the programme and the type of learning activities practised, can also be an important factor in improving study success.

As most policies described at the institutional level are developed locally and adapted to its particular situation, there is reason to believe that the policies employed at the institutional level are addressing the issue that the particular institution regards as a problem. This is also the case for problems with regard to study success. The type of policies in place in an institution or a higher education system also will be dependent on the specific context they are part of, and they may not in all cases be transferable. Nevertheless the fact that we were able to identify a set of typical institutional policies found in different national systems and institutional contexts leads us to believe that they are relevant for various contexts and – with some adaption to the local context – can meaningfully be considered for implementation elsewhere.

7 Study Success Profiles

One of the goals of the HEDOCE project is to bring together the key elements in the empirical material collected for the 35 countries in order to highlight the situation with respect to study success and its drivers in the various national European contexts. This information will be presented in a set of national Study Success Profiles (SSPs) - one for each country's higher education system. This SSP is a visual representation of key empirical information on study success in a condensed, graphical way. It presents a selection of study success indicators based on the data collected for each of the individual countries, as well as a mapping of the national policies and practices as far as these are related to study success and relevant higher education system characteristics. The actual profiles of all 35 countries are included in Annex 4 to this report. As such, the SSPs may act as an information tool that can be used for comparing countries, showing – in a nutshell – the key facts on countries' study success indicators and the various policies/factors/enablers that affect study success. The SSPs thus may be helpful for informing policy-making.

The next sections provide a description of the contents of the study success profile for a country.

7.1 Study success/ Outcomes

There are four indicators of study success: time-to-degree, completion rate, retention rate and drop-out rate. Information on these items is found in the upper left corner of a country's Study Success Profile (SSP – see example below). Since the information on retention rates turned out to be very limited (see chapter 4) we have decided to also include information on its counterpart, which is *dropout*. In addition, the graduation rate (according to the UNESCO database) is shown, as it can serve as a crude approximation of the completion rate.

The data on the study success indicators is drawn from a number of sources. The scope of these sources varies in terms of countries covered and definitions used. The SSP therefore provides information on the scope of the data presented in a separate box in the upper-right hand corner.

The data on the indicators is based either on our HEDOCE survey among national experts or can be found in international databases and projects (see Table 7.1).

Table 7.1: Outcome indicators used in Study Success Profiles

Indicator	Sources	Remarks
Time-to-degree	HEDOCE survey among national experts	
Completion rates	OECD, Education at a Glance 2013 HEDOCE survey among national experts UNESCO, statistical database	Two methods (true cohort (tc) versus cross section (cs)) Gross tertiary education graduation rate
Retention rate	HEDOCE survey among national experts	
Dropout rate	OECD (2010) Schnepf (2014)	

7.2 National policies and practices

The second building block of the SSPs provides a picture of what the country looks like in terms of the list of most commonly used national policies and practices related to study success. The policies considered are based on the list of 22 typical policies that were identified using our HEDOCE country surveys (see chapter 5 - in particular section 5.3). These policies may be grouped into three categories:

- Funding and financial incentives (we identified eight policy approaches)
- Organisation of teaching and learning process (nine policy approaches)
- Information and support to students (five policy approaches)

For each of these categories, the SSP shows the list of policies, with ticks (√) highlighting which of the policies are in place for a particular country. In Figure 7.1 an illustration is given for a country (X) that places a particular focus on the Support for students (3 policies), has two dedicated policies on the area of Organisation, and is emphasising the provision of Information and support to students (3 policies).

7.3 Higher education system characteristics

This part of the study success country profile describes some relevant characteristics of the national higher education system and the pathways toward higher education (HE). Table 7.2 describes these elements and their underlying rationales.

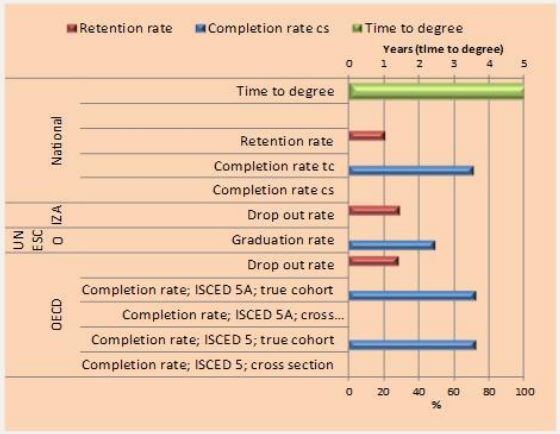
Table 7.2: Overview of higher education system characteristics

Characteristic	Rationale
Pathways toward higher education	
Structure of primary/secondary education. The way primary and secondary education in a country is organised: whether this is in terms of differentiated streams, with a common core curriculum, or as a single structure	Tracks in the pre-tertiary phase (say, segregated pathways) may create obstacles to full use of talents/access to higher education but can also facilitate entry routes into higher education.
Educational attainment (secondary education)	This indicator illustrates the potential for higher education participation. If the percentage of people with upper secondary education is high, potential participation is high.
Structure of higher education	
Providers: legal status	This indicates the presence of a private HE sector. In countries where there are many private providers, the design and impact of public policies may need to be different than in a country with public providers only.
Providers: structural diversity (subsectors in HE, such as research universities, universities of applied sciences, other types of providers)	The presence of subsectors in the HE system – in other words: *structural diversity* – can create obstacles to full use of talents/access to HE. If rigidly demarcated these could limit mobility and transferability.
Access: This characteristic refers to the degree of selectivity (as opposed to openness) of the system	In situations where there is high/excess demand for HE and a limited number of study places, access for all students may not be guaranteed (or not be guaranteed for all fields). In that case, selection is often based on the students' academic preparedness. More selectivity may lead to higher study success.
Resourcing of (higher) education: percentage of GDP spent on education and on higher education.	It is assumed that an effective and efficient higher education system needs to be adequately resourced.
Student body characteristics	
• % low SES • % female students • % mature students (older than 25 years) • % part-time students • % of students with parents holding tertiary degrees	Study success is partly determined or linked to background characteristics of students. Our literature review indicates that low SES students score less well in terms of study success than students whose parents have a higher education background. Women perform better than men and young students perform better than mature students. Part-time student are often performing slightly worse than full time students.

Figure 7.1: Example of a Study Success Profile ("Country X")

Country X

Study success indicators



Source	*Indicator*	Comment		
		level	cohort	after x years
National	*Time to degree*	Ba	2013 UAS	-
	Retention rate		No data	No data
	Completion rate	Ba	2010	4
IZA	*Drop out*	-	Adults ever enrolled reporting dropout	-
OECD	*Completion rate*	-	2003-04	-
	Drop out	-		-
UNESCO	*rate*	-		-

National policies and practices

Funding and financial incentives

- Additional funds for specific students enrolled
- Additional funds for teaching
- Additional student financial support budget
- Financial support for students in general
- ✓ Institutional funding rewarding quality, and study success
- ✓ Progress dependent financial support for students
- ✓ Turning loans into grants
- Waiving or charging differential fees to reward study success

Organisation of higher education

- ✓ Access - matching students and study programmes
- Central organisation of admission
- Changes in degree structure
- Curriculum design
- Integration of study success in quality assurance system
- ✓ Restricting access to higher education
- More flexible educational pathways
- Limiting study periods
- Mandatory study plans

Information and support to students

- ✓ Comparative data and information
- Student monitoring
- ✓ Student support services
- ✓ Support for study choices
- Support for institutions

HE system and outcomes

Pathways toward HE

Structure of primary/secondary education

- ✓ ○ *Differentiated branches/streams*
- ○ *Common core curriculum*
- ○ *Single structure*

Educational attainment 25-64 year olds



Structure of HE

Providers: legal status

- ✓ ○ *Public*
- ✓ ○ *Private*

Providers: structural diversity

- ○ *Unitary system*
- ✓ ○ *Binary system*
- ○ *Multi-sector system*

Access

- ○ *Guaranteed access to all or most fields*
- ○ *Guaranteed access to some fields*
- ✓ ○ *No guaranteed access*

Expenditure on education



Student body characteristics



8 Conclusions

Higher education provides valuable public and private benefits for Europe and study success is undoubtedly one of the most important aims of higher education, both at a system level and from an individual perspective. The current study is a comprehensive analysis of study success in higher education in 35 European countries covering available statistical data, a thorough literature review, the mapping of national policies and in-depth case studies of eight selected countries (the Czech Republic, England, France, Germany, Italy, Norway, the Netherlands and Poland) and a small sample of institutions within these countries. The study as such addresses how governments and institutions define study success; the factors that are regarded as important for achieving study success; the patterns in policy levers used to reduce dropout and improve study success; and the extent to which policy is (expected to be) effective in reducing dropout and improving study success.

The concept and importance of study success

A fist conclusion is that study success is a broad and multi-faceted concept and that definitions of study success and dropout differ widely across countries. This makes international comparisons complex. Part of this complexity stems from the diversity in the European higher education landscape in terms of national contexts, structures and traditions which lead to a great variety in attitudes towards or definitions of study success. Hence, we reduced complexity by distinguishing three major understandings of study success: a) study success understood as an increase in the overall completion rate; b) study success as reducing time-to-degree; and c) study success as a decrease in dropout rates. Reducing time-to-degree is the dominant understanding in a majority of European countries.

Regardless of the different understandings of study success across Europe, study success is plays an important role in higher education policy-making in many countries. It is an issue that is very high on the policy agenda in some countries (such as England and France), while less visible in other countries (such as the Czech Republic, Italy and Poland).

All elements of this study have shown that study success is influenced by a multitude of factors at the individual, institutional and national levels. At the national level, the selectivity and flexibility of the higher education system are the most important factors that impact on study success. At the institutional level, creating student engagement; the matching of students and study programmes; teaching and learning initiatives to develop more student-centred and active learning approaches; systematic tracking and monitoring of students' success; and the organisational context surrounding study programmes (full-time versus part-time study, rules and regulations concerning admission and progression) are considered most important. Research has further demonstrated that study success is also related to a range of individual factors. For example, the knowledge and expectations of the individual student about the study programme, the socio-economic background of students as well as the amount of paid work students do alongside studying are among the most crucial factors influencing study success.

A great variety of policies that explicitly address study success

Throughout Europe, 170 national and institutional policy instruments have been identified that were explicitly designed to improve study success. These instruments can be categorised into three main policy areas: funding and financial incentives; information and support for students; and organisation of higher education. Referring to the three 'reflective questions' of our analytical framework, we analysed the different policy mixes of countries on three aspects: 1) the match between policies and study success orientations; 2) the variety in policy instruments used by countries; and 3) the consistency between policy instruments.

Match between policies and study success orientations

The findings suggest that some countries have developed study success policies that address specific and concrete definitions of study success. This appears a successful approach. England is an example of a country that has been able to develop alignment between policy ambitions, policy instrumentation and institutional action in the study success area. In England, two specific measures of study success are defined, understood, endorsed and utilised in the same way by national policy-makers, institutions and stakeholders across the higher education sector. Other countries may be clear in their objectives, but the policy incentives may not fully support the objective. The Norwegian funding system is an example where the financial rewards for the number of credits passed by students does not fully match with the objective of higher completions rates within a limited time-to-degree.

Variety in policy instruments

The study has shown that governments and institutions that use multiple facets of study success and various policy levers are likely to be more successful in improving study success. Such a more generic approach can be found in Germany, where the "Quality Pact for Teaching" provided competitive funding to institutions to improve the quality of their educational provision and secure stronger institutional responsibility for student success by taking various initiatives. The Dutch approach combining several financial, organisational and information and support policies gradually helped to reduce time-to-degree. In Denmark, several comprehensive reforms have been implemented to boost quality and study progress. Also a new funding regime has been implemented clearly specifying the maximum time for which students can receive financial support for their studies and giving the institutions a clear role as a 'control agent' making sure students make progress in their studies. Thus, this specific funding reform has elements that are meant to align various national policy objectives, institutional responsibilities and student behaviour.

Consistency between policy instruments

Finally, it can be concluded that there is also considerable variation between countries as to whether the policy instruments used are aligned or not. Among the eight in-depth case study countries analysed, England again stands out as an example of coherent policy-making with regard to study success. Although empirical data does not allow for comparisons between countries with respect to the impact of specific policies for improving study success, it can be argued that successful policy-making is not so much about 'doing more' as it is about developing a careful policy design which includes the following elements:

- A clear and precise definition of study success;
- A careful selection of policy instruments pursuing study success;
- Stimulation of institutional responsibility for study success, not least through carefully designed funding systems;

- Systematic monitoring and analysis of institutional accomplishments, allowing for benchmarking and exchange of good practice.

Study success at institutional level

Although the current study has only looked at a limited number of institutions within the eight selected countries, the conscious selection of institutions in each country has disclosed some specific practices and approaches that institutions perceive as promising in facilitating student success:

- Matching students and study programmes. While matching is less of an issue in selective systems of higher education, some institutions in less selective systems have launched a number of initiatives to provide students with a sense of the programme before admission (interviews, visits to the institution in advance, on-line self-assessment tests, informing student choice etc.), remedial courses after admission, and systematic tutoring of students throughout the first year. The Netherlands is a frontrunner in launching matching initiatives and has implemented a system in which students are invited to a 'check' prior to entry, to evaluate their study choice, with a follow up 'check' after enrolling so that they can receive 'binding study advice' (BSA). This BSA is a tool for the individual institution in their planning process and as a follow-up of students, and is a measure that identifies students at risk of dropping out early. The Key Information System (KIS) in England is another example of providing students with more tailored information about their possible choices of study by displaying information about student satisfaction, dropout and success rates for specific courses and programmes along with information about how study is organised, assessed, and accredited.
- Monitoring student attendance and progression. Research has shown that not all students have the same risk of dropping-out and individual and social characteristics of the student play a role in study success. As a consequence, some institutions have initiated systematic monitoring of attendance and progression, allowing them to identify students that are at risk and facilitate institutional action and follow up. In countries such as Norway, Sweden, Finland and Ireland such monitoring of student attendance and progress is used systematically to track inactive students, and in Finland a recent initiative monitors students via a personal study plan (PSP) – allowing for a more individual follow-up of each student. Australian higher education institutions monitor students to identify students at risk and to provide them with individualised counselling and advice.
- Facilitating social integration and student engagement. While many higher education institutions throughout Europe have established special welcome programmes for students, some institutions have taken these initiatives one step further and established systems for personal tutoring and peer-mentoring among students, to stimulate to a sense of belonging and create engagement. For example, in France more personalised support and career services for students have been introduced by institutions, providing students with a one-stop service where both academic and social challenges can be considered and addressed. In Australia higher education institutions have established special student success teams that support students with various academic or personal problems.
- Teaching and learning initiatives. Students entering higher education may be unfamiliar with how study programmes are organised and how the curriculum is designed. To assist and facilitate student learning, some institutions have developed new curriculum designs, structuring the learning process through the use of new technology, seminars and mandatory activities. A key idea behind several of these initiatives is the closer alignment of programme objectives, teaching and learning activities, and examination and assessment of students. In

Germany, a number of research and development projects have been launched with the aim of identifying good teaching practises and facilitating student success; a number of publications on this issue have been produced and distributed within the higher education sector. In the U.S.A. there is a push towards competency-based education programmes that break down study programmes into clearly defined components and learning outcomes. Such information shows students and potential employers the competencies to be achieved by the graduates. In addition, such programmes have a modular system in which students can collect separate credentials and certificates rather than full degrees. This better serves the needs of students interested in short higher education and employers who look for specialized competencies.

The examples identified above are not mutually exclusive, which suggests that careful combinations of institutional strategies and initiatives can work quite effectively, and that comprehensive institutional approaches are likely to provide good results.

Data and indicators on study success

However, systematic monitoring of study success is not a widespread practice within Europe. This demonstrates that tracking study success is not yet a prominent issue in most countries – at least not at the national level. Some countries leave policy initiatives mainly to the higher education institutions. When looking at available data, the current study has found that cross-country overviews of completion rates, let alone other orientations of study success, are rare and do not provide a solid basis for comparing the performance of countries in the various understandings of study success. Only 12 out of 35 European countries regularly report an indicator related to completion. Fewer countries report on retention rates, dropout and time-to-degree. The cross-country comparative statistics available – such as those provided by the OECD in Education at a Glance – have to be interpreted with care due to differences in underlying definitions and differences in context and institutional arrangements across the higher education systems. In light of these limitations in the existing data and methods for calculating study success, the cross-section method of calculating completion rates may produce a crude but nevertheless useful first insight into study success, though more sophisticated indicators and methods are needed. This need was also stated for Australia and the U.S.A. where it is expected that better information and clear indicators on study success will help stakeholders to understand higher education dynamics.

9 Recommendations

The diversity of the European landscape of higher education and the various ways in which study success is embedded in national higher education contexts suggest the need for policy recommendations that are sensitive to different national and institutional priorities and practices. However, based on the conclusions of the current study, it is still possible to identify a number of generic recommendations that can provide a solid basis and a broad menu for future policy-making in this area.

Since policy development for study success is clearly dependent on the close alignment of actions and instruments, this section differentiates between recommendations at the European level, the national level and the institutional level.

The need for an increased European effort to facilitate study success

The current study has clearly shown that while study success is high on the policy agenda in Europe, systematic indicator-based data on study success and knowledge of various national policy initiatives and their impact is limited. In general, there is a need for more coordinated action across national borders to acquire a more solid knowledge base on what works.

- There is a need to create a Europe-wide arena for discussing issues related to study success. Given the diverse understandings of study success, one of the aims of such an arena could be to generate agreement on key definitions and explicit indicators for study success.
- As there is currently limited knowledge on the impact of policies specifically aimed at study success, there is a need for more systematic and comparative empirical research on the effectiveness of these policies.
- There is also a need to link the (inter)national study success agenda to related policy areas such as modernising higher education institutions, quality assurance, graduate employability, etc. One could start systematic monitoring of study success indicators using specific benchmarking instruments (such as U-Multirank) and create a European platform for national and institutional good practices.

The need for conscious national policy designs to boost study success

As many countries currently define their study success aims in an implicit way, there is a need for more conscious national policy designs meeting the following criteria:

- National governments can be clearer and more explicit in defining and communicating the specific study success orientations that they regard as important and the reasons for these priorities.
- National governments can develop policy designs based on an underlying behavioural model that specifies the links between a specific study success orientation, the policy instruments used, the roles of stakeholders and the expected impacts.
- European countries can think of systematic efforts to collect and monitor indicators of completion, dropout and average time-to-degree at agreed-upon levels and based on shared definitions. Such indicators are more useful when they reflect the diversity of institutions and study programmes.

- The public availability of performance information can help to boost public interest in study success, to hold higher education providers accountable for promoting themselves in a responsible way, and to facilitate student choice.
- To increase evidence-based policy designs, governments can stimulate more systematic research on what factors and policy instruments (positively) influence study success. Such research outcomes as well as good practice examples can be shared on national platforms such as online open-access platforms and/or conferences and workshops.
- Governments can consider developing national policy designs that reflect a mix of financial, informational and organisational policy instruments and address both students and higher education institutions. The policy instruments need to support each other, for example more flexible educational pathways need clear rules for the recognition of previous learning and study achievements.
- It is suggested to enable institutions to monitor pathways of individual students to identify students at risk of dropout. This also helps them understand specific patterns underlying dropout and completion and will inform future policy-making.

The need for comprehensive institutional strategies to boost study success

Because the European higher education landscape is diverse and includes institutions with very different profiles and characteristics, study success priorities differ between types of institutions and study programmes. Furthermore, as institutions increasingly have to strategically position themselves in a more competitive sector, they gain more responsibility for their students' success. This calls for comprehensive institutional strategies to boost study success, based on the following recommendations:

- Higher education institutions' strategic plans could specify how issues of study success relate to their profile and what actions will be taken on areas such as internal quality assurance. This can facilitate a better matching between institutions, study programmes and the students they attract.
- With growing institutional responsibility for study success, institutions and students will benefit from student monitoring, counselling and mentoring systems as well as from structures to socially and academically integrate students. This allows them to better identify students at risk of dropping out and to initiate follow-up actions.
- Institutions can consider publishing key institutional indicators on study success on their webpages to assist future students in making the right study choices as well as to raise and sustain institutional awareness of study success.
- Institutional responsibility for study success can also include measures and facilities to assist students in their learning process through didactical approaches, assessment methods and feedback mechanisms.
- Institutions can benefit from institutional research on the specific patterns underlying dropout and completion. This also enables them to formulate adequate measures to address study success within their own context, such as staff development, administrative routines, support structures, and career services.

Once again, it should be underlined that the recommendations above make up a varied menu of possible institutional, national and European actions that are not mutually exclusive. We realise that not all of these recommendations may be followed up in all countries, depending on the context. However, a careful composition and combination of elements is likely to lead to more successful outcomes. For example, institutions that struggle with completion may consider re-designing study programmes, while institutions that face problems of high dropout may consider a more careful (soft) selection and social integration of students.

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