



ADDRESSING THE COMPLETION CHALLENGE IN PORTUGUESE HIGHER EDUCATION

Summary Report

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This Policy Analysis Exercise reflects the views of the author and should not be viewed as
representing the views of the PAE's external clients listed above, nor those of Harvard University
or any of its faculty

Jonathan Williams, Harvard Kennedy School of Government
jonathan.williams@hks17.harvard.edu

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Summary

Portugal has faced a significant economic crisis in recent years that is deeply rooted in aging demographics and low productivity. It is evident that strengthening the population's skills is essential to improve competitiveness. Given this, the Government of Portugal has set an ambitious target for higher education attainment, which can only be achieved through both expanded access and higher completion. This study seeks to answer the research question: What steps can the Portuguese government take during its current mandate (2017 to 2020) to initiate a systematic increase in the higher education completion? We describe the higher education system's current performance in terms of completion and drop-out and identify key factors that undermine study success, relating to admissions, the quality of education delivery, and financing. We offer three primary recommendations to the Government of Portugal: (1) provide targeted institutional funding for services to identify and support students at risk of dropping out; (2) include performance criteria relating to study success within an institutional funding formula; and (3) tighten rules regarding academic suspension and monitor institutional compliance.

Context and Research Design

Portugal was one of the five Euro-Members worst affected by the global financial crisis.¹ Euro membership had allowed the country to access cheap credit, but Greece and Ireland's debt-related problems in the aftermath of the global financial crisis made investors conscious of the fundamental weaknesses in the Portuguese economy, as well as those of Spain and Italy. Investor confidence fell sharply. Portuguese bonds were soon classified as junk (BBB-). Rates on ten-year bonds went from 4.5% in May 2009 to a peak of 14.7% in January 2014.

The root of Portugal's difficulties has been its inability to foster sustainable growth. Annual real GDP growth has averaged just 0.24% since 2000 and only exceeded 2% in a single year.²

The OECD suggests labour trends have been subtracting from GDP since 2006, due mainly to demographic decline.³ Population growth has been negative since 2011, and is projected to remain negative for the foreseeable future primarily due to Portugal's low birthrate.⁴ The proportion of Portuguese residents above the age of 65 has increased rapidly from 16.3% in 2000 to 20.8% in 2015. The proportion aged 15-64 peaked in 2000 and has since fallen by more than 2%. The dependency ratio (the ratio of citizens over the age of 65 to citizens aged 14-64) will

¹ Mark Blyth, *Austerity: The History of a Dangerous Idea* (New York: Oxford University Press, 2013).

² OECD Real GDP Growth Data.

³ OECD, "OECD Economic Surveys: Portugal 2017" (Paris: OECD Publishing, 2017), http://dx.doi.org/10.1787/eco_surveys-prt-2017-en.

⁴ European Commission, "Database - Eurostat," *Ec.europa.eu*, March 5, 2017, <http://ec.europa.eu/eurostat/data/database>.

continue rising steeply for the foreseeable future.⁵ The major cities of Lisbon and Porto will age less quickly, many rural areas will be even worse off.⁶ Such demographic challenges are common across Europe, but affecting Portugal especially deeply.

Increased productivity is the foundation of competitiveness and economic prosperity, and practically the only means to expand wealth with a shrinking workforce. Portugal's 2015 labor productivity, measured as GDP per hour worked (constant 2010 US Dollars, PPP), was 39% below the Eurozone average, 31.8% below the EU28 average and 30.6% below the OECD average.⁷ Of even greater concern, multifactor productivity has actually been shrinking since 2000 at an average annual rate of 0.1% and GDP per hour worked has grown just 1% per year since 2001.⁸

The OECD's most recent Economic Survey of Portugal argues that low skills levels are a critical factor in Portugal's productivity challenge.⁹ One study estimated that low managerial skills alone account for around 30% of Portugal's productivity gap relative to the US. Over two-thirds of Portuguese firms report that finding employees with required skills is an obstacle to their operations.

The Government of Portugal is committed to improving educational outcomes and attainment as part of its efforts to not only strengthen the country's economy, but Portuguese society more broadly. Of special importance is the country's goal to meet the Europe 2020 target that at least 40% of 30-34-year-olds should complete tertiary level education.

At first glance, Portugal appears on pace to meet this target based on progress to date, as indicated in Figure 1.¹⁰ However, analysis completed by the Government of Portugal highlights the near impossibility of accomplishing the Europe 2020 through expanded access alone.¹¹ A convergence scenario would require 20% increases in the number of graduates in relevant age groups in 2016 and 2017, followed by 40% annual increases from 2018 to 2020, as well as an improved balance of skilled international migration. These access and migration outcomes would be almost impossible to reach on such a short timeline.

⁵ Ibid.

⁶ Hans Vossensteyn et al., "Dropout and Completion in Higher Education in Europe" (European Union, 2015).

⁷ OECD, "Level of GDP per Capita and Productivity," *OECD.Stat*, March 5, 2017, http://stats.oecd.org/index.aspx?DatasetCode=PDB_LV.

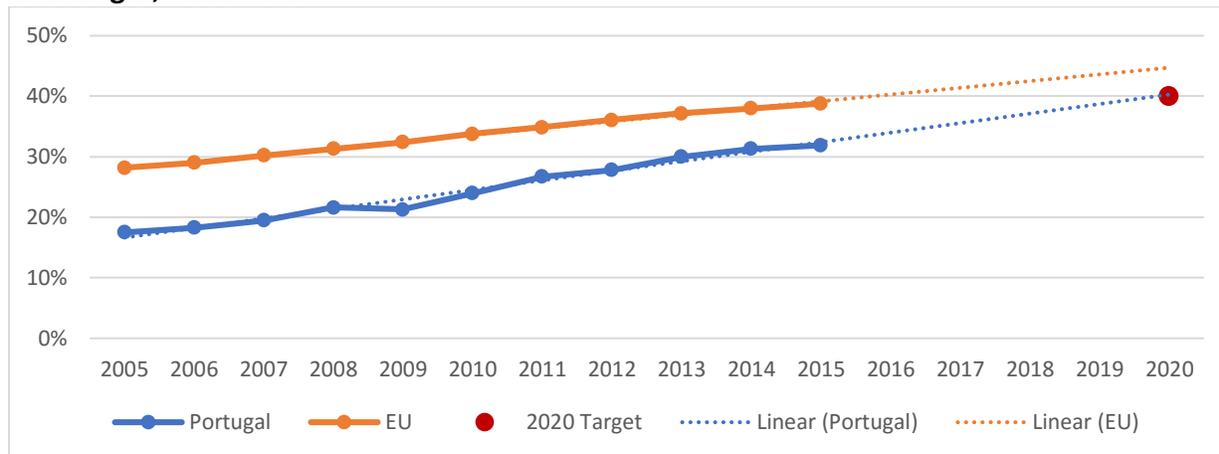
⁸ Ibid.

⁹ OECD, "OECD Economic Surveys: Portugal 2017."

¹⁰ "Europe 2020 in Portugal - European Commission," accessed January 5, 2017, http://ec.europa.eu/europe2020/europe-2020-in-your-country/portugal/progress-towards-2020-targets/index_en.htm.

¹¹ DGEEC, "Tertiary Education Attainment: 30 to 34 Years Old Population - Data and Projections" (Lisbon: Direção-Geral de Estatísticas da Educação e Ciência, 2016).

Figure 1: Tertiary educational attainment of the 30-34-year-old population relative to the EU 2020 target, 2005-2015



To successfully meet its goals for increased attainment, Portugal will need to not only to expand access, but to raise the proportion of students who complete their degrees. The government’s commitment to improving completion was confirmed in the June 3, 2016 resolution of the Portuguese Council of Ministers, which set the following goal: *To ensure that higher education institutions [...] make the following commitment during the current legislature: [...] to reduce failure and drop-out rates to international reference levels.*

The specific genesis of this report is the launching of an OECD Review of the Portuguese Science, Technology and Higher Education Systems and Policies, on request from the Ministry of Science, Technology and Higher Education (*Ministerio de Ciência, Tecnologia e Ensino Superior, MCTES*). The OECD Review’s terms of reference include the following research question: *What steps can be taken at institutional and national levels to increase degree completion and reduce drop-outs?*

Based on this question and the Council of Ministers motion, our study seeks to answer the following research question: **What steps can the Portuguese government take during its current mandate (2017 to 2020) to initiate a systematic increase in the higher education completion?** At many points in the report, we use the somewhat broader term of study success, but completion remains our point of emphasis.

To help develop our answer the primary research question, the study had to address four sub-questions:

1. What data is available on trends in higher education completion across the system and at the institutional level? Chapter 2 of the Technical Report provides an introduction to the concept of study success, which includes completion, and an overview of the available data.
2. What are the drivers of non-completion in tertiary education in Portugal? Chapter 2 of the Technical Report considers individual-level factors affecting completion somewhat

independently from the higher education system itself. Chapters 3, 4 and 5 explore systemic factors in terms of admissions, quality of education delivery, and higher education finance.

3. What strategies and practices have other countries adopted to increase completion rates in higher education? International approaches are noted particularly in the closing sections of Chapters 3, 4 and 5 of the Technical Report.
4. What steering mechanisms can the Portuguese Government use to influence the behaviour of the higher education system and increase programme completion? We focus specifically on measures that support system-wide changes of approach to address the factors in non-completion identified during the study, endeavouring to take into account constraints on administrative, financial and political feasibility. The analysis of policy options accompanies our recommendations in Chapter 6 of the Technical Report.

We focus principally on the public higher education system, as a means to control scope and given data limitations regarding private sector institutions.

The study relies on two key research methods.

The first is an extensive literature review in English and Portuguese. We consulted academic journal articles, reports published by European higher education bodies, reports prepared by the Government of Portugal and associated agencies, and institutional surveys and presentations.

Multiple reports rely on surveys of active students or students who dropped out of higher education. The most frequently cited surveys are from the the Universidade de Évora,¹² and the Instituto Politécnico (IP) de Setúbal.^{13,14} Student survey responses are understood to reflect subjective perceptions, not necessarily precise facts.

Another key source is a draft (unpublished) survey of institutional websites by the Directorate-General for Education and Science Statistics (*Direção-Geral de Estatísticas da Educação e Ciência*, DGEEC), which explores whether institutions are implementing 30 activities or services relevant to completion. Importantly, this survey's calculations likely understate institutional activity given some activities may not be described online.¹⁵

¹² Rosalina Pisco Costa et al., "Identificação Das Causas Do Abandono Escolar Na Universidade de Évora" (Évora: Universidade de Évora, 2015).

¹³ IP de Setúbal, "O Abandono Nos Cursos de Primeiro Ciclo" (Setúbal: Instituto Politécnico de Setúbal, 2013).

¹⁴ IP de Setúbal, "O Abandono Nos Cursos de Segundo Ciclo" (Setúbal: Instituto Politécnico de Setúbal, 2014).

¹⁵ DGEEC - Equipa de Estudos de Educação e Ciência, "Draft: Medidas de Promoção Do Sucesso Escolar Nas Instituições de Ensino Superior Públicas Em Portugal, Tal Como São Relevadas Nos Respetivos Sítios" (Lisboa: DGEEC, Unpublished).

We lean heavily on a review of study success policies across Europe published in late 2015 by the Centre for Higher Education Policy Studies (CHEPS).¹⁶ The report includes a literature review that provides much of the basis for our conceptual understanding of factors in higher education. It is also our key resources on policy approaches adopted in other jurisdictions.

The second main method was interviews with stakeholders and experts within Portugal, as well as staff at the OECD's Directorate for Education and Skills. Conversations with OECD representatives occurred throughout the length of the project by telephone or Skype. Interviews with Portuguese representatives occurred primarily during a study visit from March 11 to March 18, 2017. The MCTES assisted in identifying interviewees and scheduling meetings. A list of interviewees is provided in Appendix I.

The study visit emphasised reality-testing findings from the literature review, exploring what the visited institutions were doing to improve completion where applicable, and digging into the feasibility and desirability of different policy options. Interviewees were provided in advance a document introducing the project and indicating factors in non-completion identified through the literature review up to that point.

What is Study Success?

Three key measures of study success are described in Table 1.¹⁷ These indicators complement each other to provide a more complete understanding of study success. The completion rate is the most comprehensive. The drop-out rate allows for more immediate measurement of trends that feed into the completion rate, given completion rates can take time to measure. Time-to-completion indicates the efficiency of an education system for those students who do successfully graduate, but provides no information on students who do not graduate.

Table 1: Key empirical measures of study success

Measure	Description
Completion Rate	Measures the proportion of students who begin a study programme at a higher education institution who complete the study programme successfully. Previously called "survival rates".
Drop-Out or Attrition Rate	Number of students in a study programme who fail to re-enrol in subsequent year and did not graduate. Antonyms: Retention, Persistence or Continuation.
Time-to-Degree	Average number of years that students take to complete the study programme among those who do so.

¹⁶ Vossensteyn et al., "Dropout and Completion in Higher Education in Europe."

¹⁷ Our focus in this study is on study success endogenous to a study programme, i.e. not considering the student's subsequent pathway including employment. Other definitions may also emphasise grades, as a measure of student learning, but this falls outside our scope.

Do these indicators of study success matter? They do for a number of reasons, beyond the contribution of study success towards Portugal reaching its tertiary education target.

For students, credentials are meant to communicate that they have obtained valuable skills and knowledge, which they may not achieve if they drop-out. The financial benefits of completing degrees are also significant as Portugal has among the highest internal rates of return to tertiary education in the OECD, at 18.9% for women and 18.5% for men (the respective OECD averages by gender are 11.6% and 13.9%),¹⁸ while empirical evidence from the US indicates that these returns are important even for students with marginal skills at admission and during their studies.^{19 20 21} Dropout also affects self-esteem for students and their families.²²

Low study success can also have significant consequences for institutions and higher education systems. It can affect the strength of institutional communities, their financial sustainability and their successful execution of their academic mission.²³ Poor study success can indicate that the system is inefficient, failing to meet students' needs and recruiting students who do not have sufficient preparation to be successful. Finally, given there are social factors that shape students' study success and the personal benefits of completion, low rates of study success can reflect and reproduce inequities not only within higher education, but across society.

Nevertheless, suitable levels of study success depend on the role that higher education plays within the particular society and economy. In systems that value lifelong learning, students may not be seeking to complete a degree and earn a credential, but simply to pursue certain courses for personal or professional reasons.²⁴ Students may also be encouraged to study between jobs, or leave their studies to work when employment opportunities are present. The more detailed the data on study success collected is, the clearer it will be for policy analysts to interpret and distinguish constructive and destructive factors contributing to the overall picture.

There are three important trade-offs inherent to the concept of study success. Any study success strategy will have to navigate or break through these trade-offs.

The first trade-off is with access. Expanding access entails recruiting more students from disadvantaged backgrounds and more unconventional education pathways, who will be expected

¹⁸ OECD, "OECD Economic Surveys: Portugal 2017."

¹⁹ Joshua Goodman, Michael Hurwitz, and Jonathan Smith, "Access to 4-Year Public Colleges and Degree Completion," *Journal of Labor Economics* 35, no. 3 (2017): 829–67.

²⁰ Seth D. Zimmerman, "The Returns to College Admission for Academically Marginal Students," *Journal of Labor Economics* 32, no. 4 (2014): 711–54.

²¹ Ben Ost, Weixiang Pan, and Doug Webber, "The Returns to College Persistence for Marginal Students: Regression Discontinuity Evidence from University Dismissal Policies," Discussion Paper, IZA Discussion Paper Series (Bonn, Germany: IZA, 2016).

²² Alarcão, "Insucesso Académico e Abandono Escolar."

²³ Ibid.

²⁴ OECD, "Education at a Glance 2016: OECD Indicators."

to have lower rates of study success. This may reduce study success rates as a proportion of students, but generate far more graduates in absolute terms, making the country better off.

The second trade-off is between completion and ensuring students learn the required material. An obvious option for improving our study success measures would be to simply pass students through irrespective of what they have learned. Of course, this would be contrary to the purpose of higher education, which is not merely about obtaining a credential but developing the knowledge and skills that the credential represents.

The third trade-off can be between completion and time-to-completion. Policies that dismiss students who do not achieve satisfactory progress in a given year or do not complete their study programmes in a given period of time may promote faster time-to-degree at the expense of lower completion. Our emphasis in this study is on completion, but not at the expense of great inefficiency.

A Snapshot of Study Success in Portugal

Completion Rates by International Standards

The OECD provides the best comparative data on completion rates in higher education. In 2014, Portugal's cross-cohort completion rate among *Licenciatura* (Bachelor's) students was 65%, well below the 75% figure among OECD countries using this completion measure.²⁵ However, only seven countries used the same cross-cohort methodology measure in 2014. Making a very imperfect comparison with completion rates using the true-cohort methodology after the length of the study programme plus three years, Portuguese *Licenciatura* students again fell behind the average across 15 other OECD countries (69%).

Aside from data comparability challenges, the details of factors in study success suggest that international reference levels are not terribly meaningful. Considering results across other jurisdictions, it is clear that systems can have low study success and still be successful, or high study success and be relatively unsuccessful, depending on the role of higher education within the specific society and economy. **Portugal should establish a target for completion rates that corresponds with the its own economic and social circumstances and objectives.**

Study Success among Portuguese Higher Education Institutions

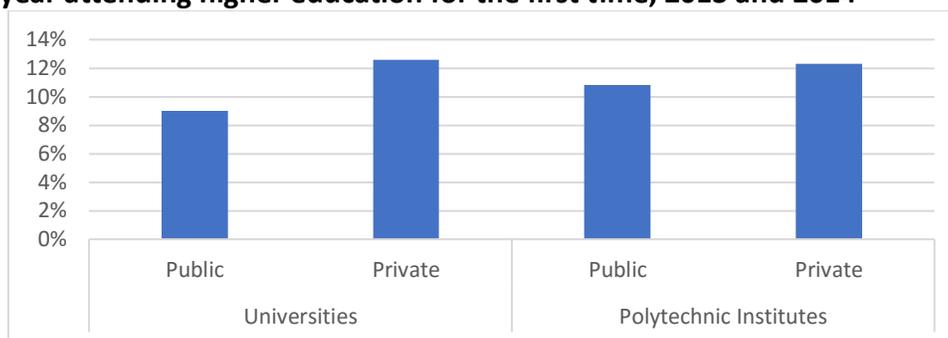
For further detail in terms of study success across Portugal's higher education system, we have to rely on students' status at the end of their first year of study, as tracked by the DGEEC. The available measure of students' status after one year of study can tell us about how study success

²⁵ Ibid.

varies between different institutions and study programmes. Institutional surveys in general, although not always, find highest levels of dropout in first year, but our measure remains limited given students can choose to continue, change or abandon their study programme throughout the programme's duration.^{26 27 28}

Figure 2 presents Portuguese Government data on dropout after year for students first enrolled in 2012-13 and 2013-14.²⁹ We find important differences in dropout rates between institution-types. Universities appear to perform better than IPs, and public institutions better than privates.

Figure 2: Proportion of Licenciatura students reported as not in higher education at the end of their first-year attending higher education for the first time, 2013 and 2014



We also find considerable differences between individual institutions within institution types, especially among private institutions. Data from the programme level also indicate wide ranges in dropout rates, which suggests dropout rates may be shaped less by the particular institution than the types of study programmes that institutions offer.^{30,31,32}

Intervening Factors in Study Success

Some factors affecting the success of individual students are largely independent from the higher education system itself. We can categorize these as: (1) non-modifiable student characteristics,

²⁶ Pisco Costa et al., "Identificação Das Causas Do Abandono Escolar Na Universidade de Évora."

²⁷ José António Sarsfield Cabral, "Algumas Notas Sobre O Acesso E Desempenho Dos Estudantes Admitidos Na U.Porto Em 2008/09, 2009/10 E 2010/11 (Pelo Regime Geral de Acesso Em 1s Ciclos E Mestrados Integrados)" (Seminário para o "Sucesso Académico," Lisbon, May 12, 2015).

²⁸ IP de Setúbal, "O Abandono Nos Cursos de Primeiro Ciclo."

²⁹ DGEEC, "Dados E Estatísticas de Cursos Superiores," *Infocursos*, 2017, <http://infocursos.mec.pt/>.

³⁰ António Firmino da Costa and João Teixeira Lopes, "Os Estudantes E Os Seus Trajectos No Ensino Superior: Sucesso E Insucesso, Factores E Processos, Promoção de Boas Práticas - Relatório Final" (Lisbon: Centro de Investigação e Estudos de Sociologia, 2008).

³¹ DGEEC, "Ensino Superior: Situação Em 2012-13 Dos Inscritos Pela Primeira Vez Em 2011-12" (Lisbon: Direção-Geral de Estatísticas da Educação e Ciência, 2013).

³² Firmino da Costa and Teixeira Lopes, "Os Estudantes E Os Seus Trajectos No Ensino Superior: Sucesso E Insucesso, Factores E Processos, Promoção de Boas Práticas - Relatório Final."

(2) student academic skills, and (3) student motivations. Often the interaction of these factors with the higher education system and institutions generates study success outcomes.³³

Non-Modifiable Student Characteristics

Important non-modifiable student characteristics include socioeconomic status, gender, and ethnic origin. OECD data indicates that female students outperform male students in Portugal by 13 percentage points in terms of completion rates, a pattern that is consistent with but stronger than the OECD norm.³⁴ The OECD also finds that Portugal has the second strongest relationship between parental education and tertiary enrolment among member countries.³⁵ In other words, the Portuguese student body is comprised proportionally more of relatively advantaged students, and less of disadvantaged students.

Skills at Admission

PISA results suggest that by international standards Portuguese students overall are reasonably well prepared for higher education in terms of their core skills and knowledge.³⁶ Denmark and the United Kingdom have largely equivalent 2015 PISA results but clearly stronger higher education completion. It is important, however, to distinguish between students entering higher education with different educational backgrounds. There are multiple educational pathways Portuguese students can pursue to prepare for higher education and the more conventional the channel into higher education, the higher the rates of study success.³⁷ Multiple studies also find positive relationships between Portuguese students' secondary school grades and their study success in higher education.^{38 39}

Student Motivation

Elements of student motivation include self-motivation, self-esteem and self-efficacy. Students who are interested in and committed to their study programme or their later career are considerably more likely to complete and stay within the same institution.

³³ Vossensteyn et al., "Dropout and Completion in Higher Education in Europe."

³⁴ OECD, "Education at a Glance 2016: OECD Indicators."

³⁵ OECD, "OECD Economic Surveys: Portugal 2017."

³⁶ OECD, "PISA 2015 Results (Volume I): Excellence and Equity in Education," PISA (Paris, France: OECD Publishing, 2016).

³⁷ DGEEC, "Transição Entre O Secundário E O Superior: Parte I" (Lisboa: Direção-Geral de Estatísticas da Educação e Ciência, 2016).

³⁸ IP de Setúbal, "O Abandono Nos Cursos de Primeiro Ciclo."

³⁹ Sarsfield Cabral, "Algumas Notas Sobre O Acesso E Desempenho Dos Estudantes Admitidos Na U.Porto Em 2008/09, 2009/10 E 2010/11 (Pelo Regime Geral de Acesso Em 1s Ciclos E Mestrados Integrados)."

Student expectations relate closely to motivation and students are more likely to dropout when their prior expectations are not met. Expectations are built around accurate information up front about the nature of a study programme, including content, the academic culture, and instrumental career-related elements, as well as accurate estimation of students' own ability to complete the programme successfully.

Another important factor in motivation is students' sense of belonging. This is based largely upon the development of relationships with peers and instructors that encourage students to fully engage with or participate in their courses as well as wider community activities.

Finally, students' career motives may also affect their likelihood of succeeding in higher education. Unemployment among youth remains high in Portugal, job quality is low even among tertiary graduates, and returns to degrees have been declining across all fields and may also vary considerably between graduates of different institutions and study programs.⁴⁰ Overall, the OECD's assessment is that these factors make for weak incentives to invest in skills development. In other words, they could contribute significantly to low completion rates.

Key System Factors in Study Success

We identify 24 factors that appear to contribute to reduced completion in Portugal. These relate to Admissions (Chapter 3 of the Technical Report), Quality of Education Delivery (Chapter 4) and Financing (Chapter 5). In the technical report, we also identify activities being pursued in each area in other jurisdictions.

Admissions

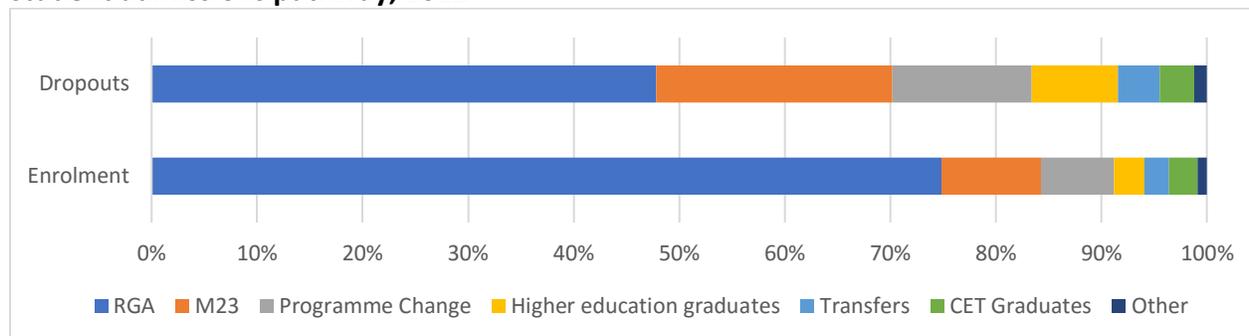
Portugal's higher education system is structured around a largely centralised admissions system. Key features of this system are a host of access streams under variable institutional and government control, Numerus Clausus (NC) restrictions on enrolment, and central information sharing.

Portugal offers special admissions streams for non-traditional students, including mature students. These **alternative admissions streams lead to high dropout**, in fact most students who drop out in first year use alternative admissions streams even though these account for roughly a quarter of overall enrolment (See Figure 3– The RGA is the general access stream, the balance are alternative streams). Research would predict higher dropout rates among these students, however the extent of dropout suggests that these pathways may be setting too many students

⁴⁰ OECD, "OECD Economic Surveys: Portugal 2017."

up for failure. Institutions control these admissions streams in terms of developing assessments of prospective students.

Figure 3: Enrolment and number of dropouts after first year in public higher education by student admissions pathway, 2012



The primary stream for students leaving secondary school to access public institutions is the National Access Competition (CNA). Under the CNA, students' grades on secondary school finishing exams and their final grades in secondary school are combined to generate an admissions score. Students rank their top six priority programs, and are admitted through an automatic system based on their admissions score. The Government of Portugal identifies minimum scores each year for admissions to any programmes.

This process focuses overwhelmingly on securing the perception of fairness based on grades, with considerable success, but **the CNA promotes shallow matching**. Students' grades are an unreliable indicator of student quality, with large annual variations in averages and clear evidence of inequities. Meanwhile institutions have no discretion to select students based on attributes aside from exams under the pathway.

Under NC, the Government of Portugal must approve the number of spaces offered in all study programs across the higher education system. **The NC restricts access to sought-after programmes**, which are often at urban public institutions along the coast. Less competitive institutions can therefore attract students who would not otherwise choose them, because they provide the only means for these students to access particular fields. This could increase dropout and transfers, while it may also weaken incentives for many institutions to improve their performance because their competition is greatly constrained.⁴¹

Finally, the Government of Portugal operates online information portals to inform students' choices entering higher education. Data includes drop-out rates, previous student minimum admissions scores, and graduate unemployment.⁴² However, there is **insufficient information on the student experience**, in terms of student engagement or student satisfaction survey results.

⁴¹ Madalena Fonseca et al., "Waves of (Dis)Satisfaction: Effects of the Numerus Clausus System in Portugal.," *European Journal of Education* 49, no. 1 (2014): 144–58.

⁴² DGEEC, "Dados E Estatísticas de Cursos Superiores."

The quality of student experience is closely related to study success. Limited information on the student experience undermines student decision-making and does not incentivise institutional improvement in this area.

Quality of Education Delivery

Shortfalls in the quality of education delivery greatly undermine study success within Portugal's higher education system. We distinguish between certain overall patterns, as well as academic factors and non-academic factors.

In terms of overall patterns, two findings stood out in particular. The first is **uneven institutional commitment to study success**. For example, across 30 services tracked in a survey of institutional websites, there are dramatic differences between the offerings of different public institutions: the strongest five IPs had information on their websites regarding more than two-thirds of the services, while four institutions provided information on one-third of the indicators or less.⁴³ Given the great diversity of efforts being made by institutions, it seems unsurprising that completion rates also vary considerably.

The second finding is widespread **failure to identify and provide targeted support to students at risk of dropping out**. Many institutions are reaching out when students apply to drop out, but this may often be too late.

Looking more closely at more strictly academic factors, these relate largely to Portugal's transition from a traditional elitist higher education system to a modern massified system.

The system demonstrates **insufficient focus on teaching and serving students**. Within Portugal's overall quality assurance agenda, improvement of pedagogy is the least developed element, as assessed even by faculty.⁴⁴ Pedagogical skills development remains limited and generally voluntary. Student satisfaction questionnaires have become more common but are rarely used to drive improvement.

Portuguese students experience **high rates of academic failure**, especially among those who drop out.^{45 46} Figure 4 provides the total failure rate from 2007 to 2014 at the Lisbon School of

⁴³ DGEEC - Equipa de Estudos de Educação e Ciência, "Draft: Medidas de Promoção Do Sucesso Escolar Nas Instituições de Ensino Superior Públicas Em Portugal, Tal Como São Relevadas Nos Respetivos Sítios."

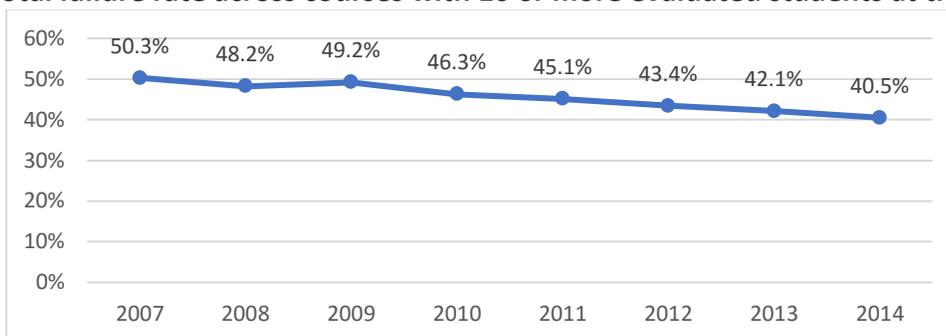
⁴⁴ Maria J. Manatos, Maria J Rosa, and Cláudia S. Sarrico, "The Importance and Degree of Implementation of the European Standards and Guidelines for Internal Quality Assurance in Universities: The Views of Portuguese Academics," *Tertiary Education and Management* 21, no. 3 (2015): 245–61.

⁴⁵ Lucília Santos et al., "Academic Success of Mature Students in Higher Education - A Portuguese Case Study," *European Journal for Research on the Education and Learning of Adults* 7, no. 1 (2016): 57–73.

⁴⁶ Carlos Farinha Rodrigues, "Indicadores de (In)sucesso Académico" (Sexto Seminário Anual do Observatório Pedagógico do ISEG, Lisboa, February 24, 2016).

Economics and Management (Instituto Superior de Economia e Gestão, ISEG) as an example. Some faculty in fact continue to view high rates of academic failure in their courses as a marker of quality. Many students who fail do not attend assessments and faculty report having students enrolled in excess of ten times for the same course.

Figure 4: Total failure rate across courses with 10 or more evaluated students at the ISEG



Rigid programme structures result from extensive required courses starting in first year and very few optional classes. This has a host of implications, including lower student satisfaction and greater difficulties for students to switch programs mid-stream.

Portuguese students seem to be burdened with **Excessive class time**. The 2011 Eurostudent Survey found Portuguese students have the most challenging schedules in Europe and are the most dissatisfied with their schedules.⁴⁷ Of particular interest, Portuguese *Licenciado* students have 26 hours per week in taught studies, compared to the European average of 18.5 hours. Difficulties balancing schedules are among the most frequently cited causes of dropout among Portuguese higher education students. Interviewees suggested this situation may be improving.

The unclear binary distinction between universities and polytechnics does not appear to motivate polytechnics to play their own important role. One special concern is the requirement that polytechnic faculty obtain doctoral degrees, which demonstrates an emphasis on university-style research in lieu of pedagogical skills development and engagement with employers.⁴⁸

Finally, the system does a poor job in supporting students with non-traditional backgrounds. There is **inadequate remedial support for students with weaker academic preparation**, as reflected in low provision found in the institutional website survey and exceptionally high dropout rates for students with low entering grades as shown in Figure 5. Very high dropout and failure rates also speak to **poor adaptation to the academic needs of mature students**.⁴⁹ Class

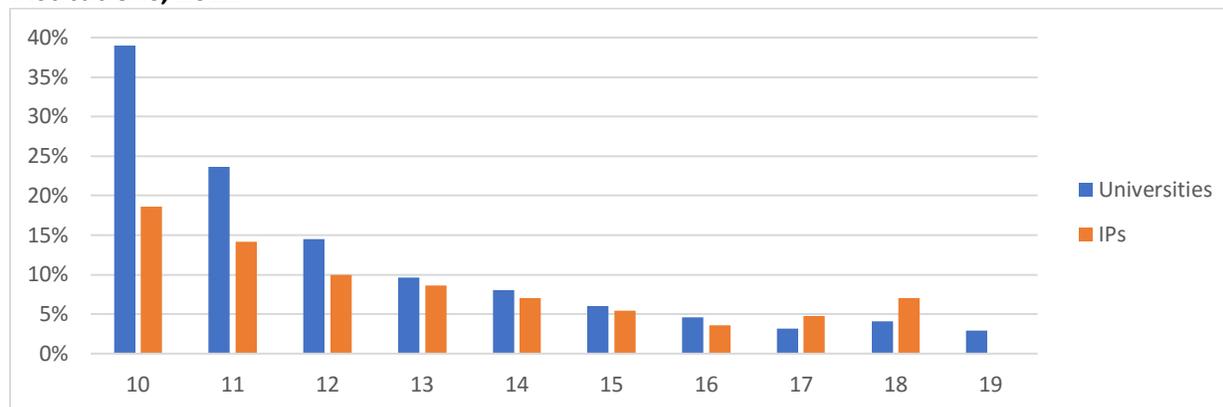
⁴⁷ Dominic Orr, Christoph Gwosc, and Nicolai Netz, "Social and Economic Conditions of Student Life in Europe: Synopsis of Indicators - Final Report - Eurostudent IV 2008-2011" (Bielefeld: W. Bertelsmann Verlag, 2011).

⁴⁸ Jon File et al., "Policy Challenges for the Portuguese Polytechnic Sector" (Centre for Higher Education Policy Studies, April 2013).

⁴⁹ Lucília Santos et al., "Academic Success of Mature Students in Higher Education - A Portuguese Case Study," *European Journal for Research on the Education and Learning of Adults* 7, no. 1 (2016): 57–73.

times, pedagogy and communication strategies do not seem to account for these students' distinct needs.

Figure 5: Dropout after first-year among first-time students at public higher education institutions, 2012



Figures for students with entering grades of 20 are excluded due to very low sample size.

Information on the non-academic side is more limited. Still, multiple weaknesses are either apparent or likely.

The first year of integration in higher education is a difficult adaptation not only in terms of academics, but also psychologically and socially. Unfortunately, the system clearly suffers from significant **weaknesses in first year student integration**. There are few systematically effective programmes to support students through this period and position them to be successful. Decision-makers seem often to ignore the importance of *social* integration, which may have helped often degrading and dangerous *praxe* traditions to persist.

Challenges with student integration partly reflect **limited student engagement** across study years. For example, students report low satisfaction and availability of extracurricular activities and some studies find few students who drop out have participated.⁵⁰ Legal restrictions make it difficult for institutions to hire students for jobs that could strengthen engagement.

Information is limited, but **the quality of student services is uncertain at best**. Student satisfaction data has been relatively negative, but is now quite dated.⁵¹ Certainly, **supports for students with disabilities are underdeveloped**, compared with other jurisdictions like Canada,⁵² with institutional capacity especially variable. Little empirical data is available, but it seems

⁵⁰ Cláudia S. Sarrico and Maria J Rosa, "Student Satisfaction with Portuguese Higher Education Institutions: The View of Different Types of Students," *Tertiary Education and Management* 20, no. 2 (2014): 165–78.

⁵¹ António Magalhães, Maria de Lourdes Machado-Taylor, and Maria José Sá, "Satisfação Dos Estudantes Do Ensino Superior Português" (Fundação para a ciência e a tecnologia, 2012).

⁵² Kayti Baur et al., "Disable the Label: Improving Post-Secondary Policy, Practice, and Academic Culture for Students with Disabilities" (Halifax, NS: Students Nova Scotia, 2014), 3, <http://studentsns.ca/wp-content/uploads/2014/12/2014-12-03-disable-the-label-final-report-accessible-3.pdf>.

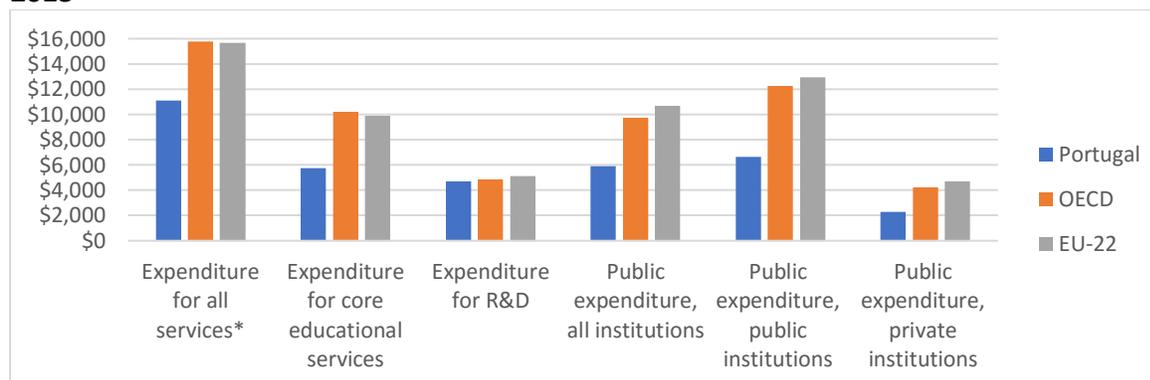
certain that difficulties in accommodating students with invisible disabilities (learning disabilities and mental health challenges) are an underappreciated factor in dropout.

Financing

Ways in which Portugal finances higher education are also important. We can distinguish between factors relating to the financing of higher education institutions, and financial aid to students.

There is no question that **institutional funding is limited by international standards**, as a share of GDP, public expenditures, or dollars per student as shown in Figure 6.⁵³ However, there are also **weak incentives in the institutional funding structure**, as core funding is not tied to performance, but allocated on a historical basis. The Government of Portugal has also provided only **limited targeted funding for key initiatives**, including only modest temporary envelopes for specific study success activities and little funding to assist institutions with the often considerable and unevenly distributed costs of disability services.

Figure 6: Annual Tertiary Expenditure per Student by Educational Institutions in Portugal, 2013



* Portugal's figures for tertiary expenditure for all services include some spending for post-secondary non-tertiary, which means we may be understanding Portuguese higher education institutions' funding disadvantage. If spending on post-secondary non-tertiary is included in tertiary spending for all services then Portugal's rank falls to 31/34 in spending. This comparison would exaggerate Portugal's funding disadvantage, however, given some of Portugal's spending on post-secondary non-tertiary is also calculated under secondary spending, in fact this is more the norm in the OECD statistics.

On the student side, **students struggle to balance studies and employment**. In surveys, students cite employment-related issues as a major factor in dropout.^{54 55} Many work long hours even though international research indicates that students who work more than 20 hours per week

⁵³ OECD, "Education at a Glance 2016: OECD Indicators."

⁵⁴ Madalena Alarcão, "Insucesso Académico E Abandono Escolar" (Seminário Sucesso Académico, Lisbon, May 12, 2015).

⁵⁵ Pisco Costa et al., "Identificação Das Causas Do Abandono Escolar Na Universidade de Évora."

are more likely to drop out.⁵⁶ Yet, the government provides considerable incentives for students to work, including rights to longer timelines to complete degrees and retain financial aid, exemptions from rules on academic suspension, allowance for extra make-up assessments, and even exemption from compulsory attendance requirements.

Available evidence suggests that the system provides **insufficient student financial aid**. In the Eurostudent study, Portugal was at the bottom of participating countries in terms of its share of students receiving public support, and public support as a share of recipients' total monthly income.⁵⁷ First-year dropout data shows strong correlations between access to financial aid and persistence, although this data has serious limitations.⁵⁸

The primary needs-based financial aid program is the Bolsa Estudo (BE) grant. Portugal also operates a student loan program, but uptake is negligible. Some aspects of the design of **financial aid eligibility criteria may undermine completion**. The schedule for losing eligibility to the BE based on poor academic progress is much tighter than minimum academic suspension rules, and loss of eligibility is associated with higher likelihood of dropping out. Moreover, it becomes almost impossible to regain eligibility once students lose it under a time-to-completion based criterion. Portugal's student loan program includes rewards for students who progress well academically, but these may compound the disadvantages of students who struggle without improving study success.

Finally, Portugal provides **negligible disability-related financial aid**. According to one interviewee, just 34 students with special needs are receiving the targeted grants, which conservatively represents roughly 0.055% of all students receiving any government grants.⁵⁹ It is certain that most students with disabilities do not receive any targeted support.

Prioritising Factors in Study Success

We use a heuristic to assess the appropriate prioritisation of each factor for policies to raise completion, based on our view of the factor's importance in determining overall completion rates across the system, our confidence in our research findings regarding the factor, and our assessment of how susceptible the factor is to a policy intervention by government. This analysis is presented in Table 2.

⁵⁶ Vossensteyn et al., "Dropout and Completion in Higher Education in Europe."

⁵⁷ Orr, Gwosc, and Netz, "Social and Economic Conditions of Student Life in Europe: Synopsis of Indicators - Final Report - Eurostudent IV 2008-2011."

⁵⁸ DGEEC, "Ensino Superior: Situação Em 2012-13 Dos Inscritos Pela Primeira Vez Em 2011-12."

⁵⁹ Manuel Heitor, Hugo Horta, and Miguel Leocádio, "Enlarging the Social Basis of Higher Education: Lessons Learned from Extending a Social Support System with a Risk-Sharing Loan Scheme in Portugal," *Technological Forecasting and Social Change* 113 (2016): 319–27.

Our assessment of the importance of different factors is with respect to the total population of students who drop out in a given year. It is not intended to judge the importance of particular students, such as students with disabilities or mature students. There are strong reasons to provide targeted support to students with disabilities grounded in Portugal's commitment to the UNCRDP, regardless of how much this will contribute to the overall completion rate.

Table 2: Analytical tool to prioritise factors in completion based on importance, confidence in assessments and susceptibility to policy interventions, on a scale of 1-10

Concerns	Chapter	Importance	Confidence	Susceptibility	Prioritisation
Failure to assist students at risk of dropping out	Quality	9	10	9	9.2
Uneven institutional commitment to study success	Quality	10	8	8	8.8
Weak incentives in the institutional funding structure	Financing	9	8	9	8.8
High rates of academic failure	Quality	9	8	8	8.4
Students struggle to balance studies and employment	Financing	8	9	8	8.2
Insufficient student financial aid	Financing	9	7	8	8.2
Insufficient focus on teaching and serving students	Quality	9	9	7	8.2
Financial Aid eligibility criteria may undermine completion	Financing	7	8	9	8
Limited targeted funding for key initiatives	Financing	7	8	9	8
Underdeveloped first year student integration	Quality	7	8	9	8
Rigid programme structures	Quality	9	8	7	8
Negligible disability-related financial aid	Financing	5	10	9	7.6
Low institutional funding by international standards	Financing	7	8	8	7.6
Poor adaptation to the needs of mature students	Quality	8	8	7	7.6
Excessive time demands on students	Quality	9	6	7	7.6
The unclear binary distinction	Quality	7	8	8	7.6
Alternative access streams lead to high failure rates	Admissions	7	8	7	7.2
Numerus Clausus restricts access to sought-after programmes	Admissions	8	8	6	7.2
Supports for students with disabilities are underdeveloped	Quality	6	7	8	7
Limited student engagement	Quality	7	6	7	6.8
The quality of student services is uncertain at best	Quality	7	4	8	6.8
Inadequate remedial support for students with weaker academic preparation	Quality	7	6	7	6.8
The National Access Competition promotes shallow matching	Admissions	5	8	7	6.4
Insufficient information on the student experience	Admissions	4	6	9	6.4

* Prioritisation_i = (2*Importance_i + Confidence_i + 2*Susceptibility_i)/5

With regards to confidence, the research we provide in Chapters 3 through 5 of the Technical Report suggests that the factors we have identified contribute to low completion, but the data are rarely conclusive. There is a total absence of empirical research establishing causal relationships with completion in Portugal. Much of the descriptive data that we use has special deeper limitations too. Noting where our confidence is weak can help to indicate which areas should become priorities as soon as updated data is collected.

Our assessment of susceptibility is grounded in reflection on the financial, administrative, and political feasibility of possible government interventions to address each policy problem. More expensive problems require not only resources, but that government eschew other expenditures in a context of fiscal constraint. Many of the factors in non-completion would not require expenditures to address, but it can often be much easier to simply spend money than to change controversial policies and practices. Some non-financial challenges we have identified appear very politically difficult. Finally, in many areas it is unclear what tools the Government of Portugal can put to use. For example, the Government has made student loans available but it cannot force students and their families to enroll and take on debt for education.

A second heuristic, in Chapter 5 of the Technical Report, provides a clear indication of where the Government has direct authority, and where challenges can only be addressed indirectly by influencing the behaviour of other system actors. The Portuguese Government has considerable direct control on the financial factors because higher education is mostly publicly funded, but also over admissions systems through its statutory powers over NC and the CNA. The Government is much more limited in its ability to directly address quality related challenges, although many of these factors are very important determinants of study success. Institutional leaders, faculty, administrative staff, student representatives and quality assurance agency staff all have a role to play in raising completion.

Policy Options

We used the following basic criteria for reviewing policy options:

1. Impact on completion – assessed partly through the prioritisation analysis.
2. Associated risks – may relate to unforeseen expenditures, possible negative side-effects for the higher education system and its stakeholders, and popular opposition.
3. Flexibility – susceptibility to be adjusted over time or meet different possible policy goals.
4. Feasibility – administrative, legal, technical or political capacity to implement the policy. Our policy options also could be pursued with limited additional expenditure beginning in the short-term.

Chapter 6 of the Technical Report contains our more detailed analysis of policy options, and a summary is provided in Appendix II. We decided ultimately to focus on three themes, each of which directly addresses multiple factors in study success:

1. **Targeted Supports for Students at the Margin:** Policies in this area would aim to address the top priority concern from our analysis: failure to assist students at risk of dropping out. Additional related concerns include: limited targeted funding for key initiatives; the unclear binary distinction; underdeveloped first year student integration; and, limited student engagement.
2. **System Steering:** Steering policies aim to systematically reshape higher education institutions' incentives to align with the Government's policy goals, while recognising that institutions are autonomous. The top priority concerns for government steering are uneven institutional commitment to study success, and weak incentives in the institutional funding structure. Other concerns that the policy options would also seek to address are: limited targeted funding for key initiatives; Numerus Clausus restricts access to sought-after programmes; insufficient information on the student experience; and, the quality of student services is uncertain at best. Many of these system steering mechanisms could have broader implications beyond study success, so the Government of Portugal must therefore consider them within the context of its other system objectives as well.
3. **Shaping Expectations of Study Success:** The policy options in this area would directly address the following factors: high rates of academic failure; difficulties balancing studies and employment; grant eligibility criteria may undermine completion; and alternative access streams lead to high failure rates. Part of the logic of these policies is also their potential to support a greater focus on teaching and serving students, which is largely about faculty.

To control scope, we do not address some factors that appear very important. In particular, our analysis suggests that the low funding of Portuguese higher education and limited financial aid for students contribute to reducing completion, but it would require more extended analysis to provide an informative review of the Government of Portugal's approach to either issue in line with the Government of Portugal's wider strategy for higher education, workforce development, research and innovation. We also do not consider policy options to specifically support students with disabilities, a topic that deserves greater attention than we were able to dedicate to it. Finally, we do not consider policy options specifically targeting the private higher education system, although we would note that the wide range of dropout levels from private institutions suggests this sub-sector would be particularly suitable for strategies that target those institutions with exceptionally dropout rates.

Recommendations

We have identified a number of policy options that would help the Government of Portugal initiate a durable improvement in the study success of Portuguese higher education students.

We have identified a primary recommendation that would promise the greatest impact under each of the three themes, as well as secondary recommendations that would be valuable complimentary measures.

Support Students at Risk of Dropping Out

Primary Recommendation 1: Provide targeted institutional funding for services to identify and support students at risk of dropping out

Among all our recommendations, we believe this one promises the most significant short-term returns on investment. It could be implemented more or less immediately, subject mainly to constraints on the capacity of institutional data systems and the use of academic student information for purposes of institutional outreach.

Clear bases for identifying students as being at risk of dropping out include:

1. Admission through pathways that are not part of the RGA;
2. Admission through the RGA with a relatively low admissions score;
3. Consistent absences from classes; and,
4. Failed evaluations starting from the beginning of the first semester (i.e. including in evaluations during the teaching term).

It should be possible to target students based on failed evaluations and absences even in the absence of developed data systems, provided that services coordinate effectively with faculty. Developing data systems will allow this targeting to be more efficient however.

The programme should aim for students to be contacted directly by the service once identified as being at risk. Supports for the at-risk students could include the following, where needed and available:

- Academic advising on the demands of their study programme, its suitability for the particular student based on their skills and aspirations, and the possibility of changing study programme if relevant;
- Financial aid resources on campus or assistance in applying to other financial aid sources;
- Employment services that assist students in securing part-time employment or planning their career;
- Study and life skills development workshops;
- The student ombudsperson;
- Disability supports;
- Psychological counselling; and,
- Health services.

Not all services may be initially adequate to the task. However, having the targeting mechanism in place could help inform and drive their continuous improvement.

The Government would be advised to require that the institutions track the numbers of students reached, basic characteristics of these students (admissions stream, year of study, gender, etc.), and the reasons why they sought assistance, with suitable privacy protections. This data could be helpful firstly in supporting accountability for the funds provided to support these services, and secondly to further build data on factors in study success. Data collection and service performance should be assessed under A3ES' institutional accreditation processes.

We are not in a position to identify the specific funding requirements for this initiative, and these would almost certainly vary by institution. However, we anticipate this effort could have among the highest possible returns on investment if pursued appropriately.

Secondary Recommendation 1: Cancel and replace the requirement that tenured polytechnic faculty have doctoral degrees.

This would require polytechnics and the Government of Portugal to develop new professional requirements for polytechnic faculty. It is beyond the scope of this report to speak to these, except to say that they should be firmly grounded in the polytechnic system's distinct mission by emphasising instructional skills and professional relevance.

Recognising that many faculty are currently completing doctoral degrees or have done so already in response to this requirement, the Government should find some way to compensate faculty for the training they have completed even as the sought-after qualifications shift moving forward, without continuing to overly incentivise doctoral degree completion.

Secondary Recommendation 2: Introduce legislation requiring institutions to provide annual student progression data to the MCTES

Establishing privacy protections will of course be essential, however annual reporting of currently collected data to the MCTES would allow Portugal to inform decision-making on study success with among the best data available anywhere in the world. MCTES could make the data available in appropriate ways to consultants, institutions and even academic researchers. Academic use in particular could improve understanding of the system at essentially no additional cost. This study for example, could have developed much greater confidence with access to the full data on student progression, especially if this were then connected with other ministry data on student grants and admissions.

This policy would help to reinforce Primary Recommendation 1 on targeting of students at greatest risk of dropout. It could also help to strengthen A3ES quality assurance processes and help MCTES to determine where institutions or programmes should be prioritised for broader study success measures.

The MCTES should also consider steps to communicate the improved data to prospective students. Improved information sharing could create pressure on institutions to improve their performance.

Secondary Recommendation 3: Adjust legislation to allow public higher education institutions to hire or otherwise compensate students for non-research activities.

Institutions should be permitted to hire students to complete tasks that contribute to the institution fulfilling its mission. There is no reason to further restrict the purposes of student employment.

Other Observations

We believe that responsible student-association-driven student orientation activities could promote improved student integration and engagement. It seems apparent that social integration will remain highly important to students themselves, and if formal, well-meaning student-driven activities are not in place then *praxe* is likely to fill the void. We are unprepared, however, to endorse a wholesale policy based on the information collected as of this point. Possible intermediate steps direction could include participation in seminars or other activities with institutions and students from other jurisdictions where such activities are well established (e.g. Canada), and pilot projects to test the approach within Portugal.

Steer the System for Study Success

Primary Recommendation 2: Include performance criteria relating to study success within an institutional funding formula

The Government of Portugal appears committed to introduce a funding formula, thereby fulfilling requirements under the higher education financing law. This would be a positive step, especially if the new formula includes thoughtful criteria that make institutions accountable for their students' study success.

Tying funding to the number of degrees granted would be the simplest measure and an improvement on enrolment based funding. It implies the risk that institutions simply pass students through and would require that quality assurance structures operate effectively to prevent this. Passing too many students does not appear to have been a systematic problem in Portugal, but it should not become one in the future.

To ensure equity, Portugal should ensure that the funding formula recognises where institutions are recruiting more disadvantaged students, or running programming associated with lower rates of study success. The formula should adjust funding accordingly either through its study success

measure or by including a separate funding envelope to reward institutions for their performance in terms of access for disadvantaged students.

Whatever measures are used should be developed carefully and not in a rush. The Government could begin to work on this during its current mandate, but perhaps take longer to put an effective formula in place, given it should consult higher education institutions and other stakeholders extensively. It would be essential to tie enough funding to the instrument to actually affect institutional behaviour.

Introducing the new formula in parallel with an overall increase in funding to institutions could help to mitigate any negative short-run impacts and thereby improve feasibility.

Secondary Recommendation 4: Develop performance agreements with institutions to promote study success

The Government should pursue performance agreements that prioritise study success, as a complement and/or precursor to a funding formula. These performance agreements could focus on the study success issue alone or as one item within a broader higher education system strategy. Study success components should prioritise factors in quality of education delivery identified in Chapter 4, including in particular programme structure, student-centred instruction, and better serving mature students and students with disabilities.

Given it will take time to develop effective agreements, the Government almost certainly should not try to reach agreements with all institutions under the current parliament. Focusing first on institutions most aligned with its study success agenda could help the government to learn how to develop these agreements collaboratively and also establish expectations for other institutions. If the government greatly increases institutional funding it would likely help to link this with the performance agreements.

The five-year timeline envisioned by the higher education financing law for institutional development agreements would appear to be a suitable maximum length of the agreements. Three years would be a reasonable minimum length if the Government and institutions would prefer shorter agreements.

Secondary Recommendation 5: Introduce Funding Envelopes to Support Study Success Initiatives

At least as a short-term measure while a funding formula and performance agreements are in development, and as a complement to the targeted funding for services to identify and support students at risk of dropping out, the Government of Portugal would do well to introduce competitive grants for initiatives to support study success. The competition could be overseen by an expert committee independent from the MCTES and should be connected with strong monitoring and evaluation to identify which programmes succeed and fail. Again, providing more funds to such an initiative would heighten its potential impact, but the targeting initiative in Primary Recommendation 1 should be the priority.

Secondary Recommendation 6: Launch a student engagement survey, implemented on an annual or biannual basis

The Government should work with institutions to implement a survey of student engagement on an annual or biannual basis. The survey would help to help track performance for performance agreements and could even be used within a funding formula.

The Government and institutions would have to sort out the details of administration. This should not be too difficult or time consuming, so it seems very possible to have the survey in place during the Government's current mandate. We would recommend that key indicators be published online as a tool to foster a more holistic understanding of the system than is generated by the current emphasis on entry grades.

Other Observations

We do not recommend significant changes to the *NC* regime at this time. Almost all interviewees seemed to believe changes were infeasible in the short-to-medium term, largely because the risks of impacts on numerous institutions are simply too great. Greatly destabilising the higher education system in the short-run might lower completion.

Nevertheless, Portugal at some point must allow institutions to fail financially if they are failing academically to serve their students, or else it will waste large amounts of money and obtain poor results. For a funding formula to fulfill its potential, the Government will have to show a credible intention to maintain the mechanism even when institutions are losing out. In a similar way, greatly reducing the scope of the *NC* could be an important step to improve the system in the future, again tied to ensuring students are not forced to attend institutions that are failing to provide a high-quality experience.

Entrench Expectations that Students Succeed

The high rates of failure, especially the presence of inactive students, undermine the credibility of commitment to completion system-wide. Nevertheless, multiple policies and processes within the higher education system seem to normalise longstanding patterns where large numbers of students fail academically or otherwise drop out. If the Government of Portugal wants faculty to hold and act upon stronger expectations that their students will be successful, it should take steps to build these expectations more strongly into its own policies.

Primary Recommendation 3: Tighten rules regarding academic suspension and monitor institutional compliance.

More detailed and stringent requirements for institutional policies on academic suspension should be developed in consultation with higher education institutions. Fulfillment of these requirements should be a criterion in institutional accreditation by A3ES, and A3ES should especially explore measures to audit the shares of students who are serially inactive.

The following modifications to the basic requirements for academic suspension are merely suggestions:

- a. The maximum registrations per year of study progress prior to academic suspension should be reduced by 1 across all study years.
- b. When students return from academic suspension they should be required to pass at least 50% of their courses on a yearly basis or be suspended a second time.
- c. Students should be required to reapply for admission after their third academic suspension.
- d. Academic failures where students did not participate in any evaluations should have double the weight for the purposes of determining academic suspension.
- e. Exemptions from these conditions should be permitted for students facing exceptional attenuating circumstances, as determined through an institutional appeals mechanism.

There is no question that higher rates of academic failure are a by-product of expanding access to higher education to students with less academic preparation, often because they have faced systematic disadvantage in their earlier education. To preserve equity, the proposed appeals mechanism is essential and this recommendation should complement the recommendation on developing services to identify and support students at risk. Further research regarding the relationship between academic failure and study success in Portugal could help to refine this mechanism and the targeting services from Primary Recommendation 1.

Institutions should be collecting revenues to actually deliver education, not simply to provide students access to incidental privileges. Hence the loss of tuition revenues that institutions collect from serially unsuccessful/inactive students should not be a bar to adopting this policy.

Secondary Recommendation 7: Adjust Worker-Student rules to more strongly emphasise study success.

For the Government of Portugal should rebalance its legislation and policies to place a greater emphasis on study success among employed students. More specifically, we recommend the following changes to the Worker-Student Statute:

- a. Eliminate exemptions for student-workers with respect to timelines for completion of degrees.

- b. Remove the requirement for institutions to provide Student-Workers make-up assessments.
- c. Eliminate the wholesale exemptions from compulsory attendance requirements for Student-Workers (more modest exemptions could be adopted instead).
- d. Limit eligibility for Worker-Student Status to part-time students when workers work over a threshold set of hours.

Furthermore, we recommend the following adjustments to BE eligibility policies:

- a. Allow students with more than 20 hours per week of paid employment only to receive the BE to pursue part-time studies; and,
- b. Eliminate the 1-year extension of the time-to-completion requirement (clause f) for Worker-Students.

The hours-of-work based limits on eligibility would aim to promote part-time studies among students who work many hours. The 20-hours threshold seems very appropriate for BE grants based on international evidence, but with respect to Worker-Student Status a somewhat higher limit could be reasonable given that the policy is not funding these students. Any limit could also use a different method from the single step of full and part-time status, such as limits tied to the specific number of courses in which the student is registered. Whatever approach taken needs to be administratively feasible, including in terms of tracking students' hours of work.

These policies would not be expected to increase the cost of government programmes since they will constrain eligibility. However, given that financial aid is likely inadequate for many students it may be difficult to justify restricting funds based on hours worked, even if these funds likely would not have efficiently promoted these students' success. Implementing these policies alongside wider expansion of financial assistance would help mitigate these problems.

Secondary Recommendation 8: Adjust the time-to-completion related eligibility criterion for the BE to allow students to regain eligibility through successful study without BE support

In approximate language, our recommendation would be to institute the following: *Where a student loses eligibility due to clause f), the subsequent semesters of study pursued by the student while not receiving the BE will not be counted in calculations for eligibility based on clause f). The student may regain eligibility under clause f) based on their study period prior to the loss of eligibility and total credits completed before and after the loss of eligibility, provided they fulfil all other eligibility criteria.*

We are uncertain how many students lose eligibility based on the time-to-completion requirement. The cost of this policy would be determined by this number and the number of students who would work to regain eligibility as a result of this policy change. In other words, the more effective the policy is, the higher its cost.

Secondary Recommendation 9: Review Institutional Admissions Processes under Alternative Access Streams

A guiding principle for Portuguese higher education should be that students should not be admitted to programmes if they almost certainly do not have the skills to succeed. A student admissions letter should indicate that the institution believes the student can succeed, and moreover represent a commitment by that institution to endeavour to help the student succeed by all reasonable means.

The Government of Portugal and the CNAES should review the quality of institutional admissions processes for alternative access streams. The Review should not seek automatically to make admissions requirements more demanding, but instead to review whether minimal requirements reflect a credible commitment to students' success and fulfil a minimum level of rigour. Improved information collected pursuant to other recommendations could help highlight institutions for special attention.

If Portugal determines that admissions processes should be stricter for Licenciatura programmes, it could retain more open admissions for TESP programmes. TESP programmes may better target the needs of many students accessing alternative admissions processes, and could serve as a suitable stepping stone to Licenciatura degrees. The effectiveness of such an approach will depend on how effectively institutions implement the TESP model over the coming years.

Secondary Recommendation 10: Support an annual Study Success Summit

The Government of Portugal should collaborate with CCISP and CRUP to create an annual summit for stakeholders and experts to explore the challenges facing students and institutions, and learn from local and international experiences. The Summit could rotate between institutions that have demonstrated strong commitment to study success, as a way to recognise their efforts and provide them the opportunity to exercise leadership for the whole system.

Other Observations

We do not recommend relaxing requirements for BE recipients to pass classes (clause e), to maintain expectations that students will be academically successful. Assuming Portugal implements Primary Recommendation 1, students should receive considerable support if they are beginning to fail classes. If Primary Recommendation 1 is not implemented, then it may be justifiable to grant students an additional semester of eligibility for financial aid (from the time of first enrolment in first year) based on the proportion of classes passed (clause e).

Appendix I: List of Interviewees

- Fernando Almeida, Pro-President, Instituto Politécnico de Setúbal
- Alberto Amaral, President, A3ES
- João Baptista, General Sub-Director, DGEEC
- Pedro Barrias, Adjunto, MCTES
- António Firmino da Costa, Professor, University Institute of Lisbon (ISCTE – IUL)
- Pedro Dominginhos, President, Instituto Politécnico de Setúbal and representative of the Conselho Coordenador dos Institutos Superiores Politécnicos (CCISP)
- António Feijó, Vice-Rector, Universidade de Lisboa
- Paulo Ferraz, Social Services Director, Instituto Politécnico do Porto
- Daniel Freitas, Student Representative, Conselho Coordenador do Ensino Superior
- Nuno Lima, Técnico Especialista, MCTES
- Delminda Lopes, Vice-President, Instituto Politécnico do Porto
- Susana Paula Veiga da Rocha Oliveira, Professor, Universidade de Lisboa
- Eduardo Pereira, Vice-Rector, Universidade de Lisboa and representative of the Conselho de Reitores das Universidades Portuguesas (CRUP)
- José Pimentel, student representative, Conselho Coordenador do Ensino Superior
- Rosalina Pisco Costa, Pro-Rector, Universidade de Évora
- Fernando Remião, Pro-Rector, Universidade do Porto
- Carlos Farinha Rodrigues, Assistant Professor, ISEG
- Cláudia Sarrico, Higher Education Policy Analyst, OECD Directorate for Education and Skills
- Felipe Silva, Chief of Staff for the Secretary of State, MCTES
- José Amado da Silva, Rector, Universidade Autónoma de Lisboa and representative of the Associação Portuguesa do Ensino Superior Privado (APESP)
- Pedro Teixeira, Vice-Rector, Universidade do Porto
- Thomas Weko, Senior Analyst, OECD Directorate for Education and Skills

Appendix II: Summary of Analysis of Policy Options

Policy Option	Targeted Policy Problem	Key Actors	Key Steps to Implement	Key Obstacles	Timeline
1.1 Provide targeted institutional funding for services to identify and support students at risk of dropping out	Failure to assist students at risk of dropping out	MCTES, HEIs, HEI staff and faculty	Secure funding allocation, negotiate with institutions	Funding requirements, administrative capacity	1-2 years
1.2 Cancel the requirement that tenured IP faculty have doctoral degrees	The unclear binary distinction	MCTES, HEIs, faculty, A3ES	Change MCTES requirements, develop new guiding standards, explore measures to compensate faculty with PhDs	Clarifying system vision, compensation for faculty and HEIs who have responded to current incentives	1-2 years
1.3 Adjust legislation to allow public higher education institutions to hire or otherwise compensate students for non-research activities	Limited student engagement; Insufficient student financial aid	Assembly of the Republic, MCTES	Bring forward legislation, secure stakeholder backing (HEIs, student associations)	Legislative process, possible political controversy	1-2 years
1.4 Develop partnerships with student associations to allow them to coordinate formal student orientation activities, with strict requirements to protect safety and social inclusion	Underdeveloped first year student integration; Limited student engagement	MCTES, HEIs, student associations	Reach agreement with stakeholders, create instrument for funding orientation activities, establish standards for activities in consultation	Political controversy, securing funds, establishing new responsibilities for student associations	1-2 years

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Policy Option	Targeted Policy Problem	Key Actors	Key Steps to Implement	Key Obstacles	Timeline
1.5 Introduce legislation requiring institutions to provide annual student progression data to the MCTES	Failure to assist students at risk of dropping out; Insufficient information on the student experience	Assembly of the Republic, MCTES, HEIs	Investigate appropriate privacy protections, introduce legislation	Legislative process, addressing privacy concerns, developing suitable information system	1-2 years
2.1 Develop performance agreements with institutions to establish expectations of improvement in study success.	Uneven institutional commitment to study success; Weak incentives in the institutional funding structure	MCTES, HEIs	Create plan for performance agreements, negotiate with HEIs, secure associated funding allocation if necessary	Negotiation, securing funding if necessary	1-5 years
2.2 Tie institutional funding to study success related activities, outputs or outcomes through a funding formula	Uneven institutional commitment to study success; Weak incentives in the institutional funding structure	MCTES, HEIs	Consult with stakeholders, design funding formula consistent with system goals, phase-in(?)	Risk of distributing funds between HEIs, political controversy	3-5 years
2.3 Introduce Funding Envelopes to Support Study Success Initiatives	Limited targeted funding for key initiatives	MCTES, HEIs	Secure funding allocation, negotiate standards with institutions	Securing funds, effective administration	1-2 years
2.4 Remove Numerus Clausus restrictions for non-professional programmes, or introduce conditionality related to study success	Numerus Clausus restricts access to sought-after programmes; Uneven institutional commitment to study success;	MCTES	Consult with stakeholders, design new approach consistent with system goals, phase-in(?)	Risk of distributing funds between HEIs, political controversy	3-5 years

Policy Option	Targeted Policy Problem	Key Actors	Key Steps to Implement	Key Obstacles	Timeline
2.5 Develop, administer and publish the results of a national survey of student engagement	Uneven institutional commitment to study success; Insufficient information on the student experience	MCTES, HEIs	Develop plan for survey with HEIs, develop survey	Securing funds, reaching agreement on use of information, design and implementation of survey	2-3 years
3.1 Tighten rules regarding academic suspension and monitor institutional compliance	High rates of academic failure; Insufficient focus on teaching and serving students	MCTES, possibly the Assembly of the Republic	Consult with HEIs and other stakeholders, establish new standards	Political controversy, potential loss of institutional revenues, requires careful design	1-2 years
3.2 Adjust Worker-Student rules to more strongly emphasise study success	Students have difficulties balancing studies and employment	Assembly of the Republic, MCTES	Consult with stakeholders, introduce legislation and adjust MCTES policies	Political controversy, legislative process	2-3 years
3.3 Increase the flexibility of BE eligibility criteria for academically struggling students	Financial Aid eligibility criteria may undermine completion	MCTES	Revise current policies	Risk of increasing costs	1-2 years
3.4 Review Institutional Admissions Processes under alternative access streams	Alternative access streams lead to high failure rates	MCTES, HEIs, CNAES	Establish review team and terms of reference, secure funding	Securing funds, risk of limiting access	1-2 years
3.5 Support an annual Study Success Summit	Uneven institutional commitment to study success; Insufficient focus on teaching and serving students	MCTES, HEIs, A3ES	Secure funding, consult with stakeholders	Secure buy-in from stakeholders, secure funds	1-2 years

