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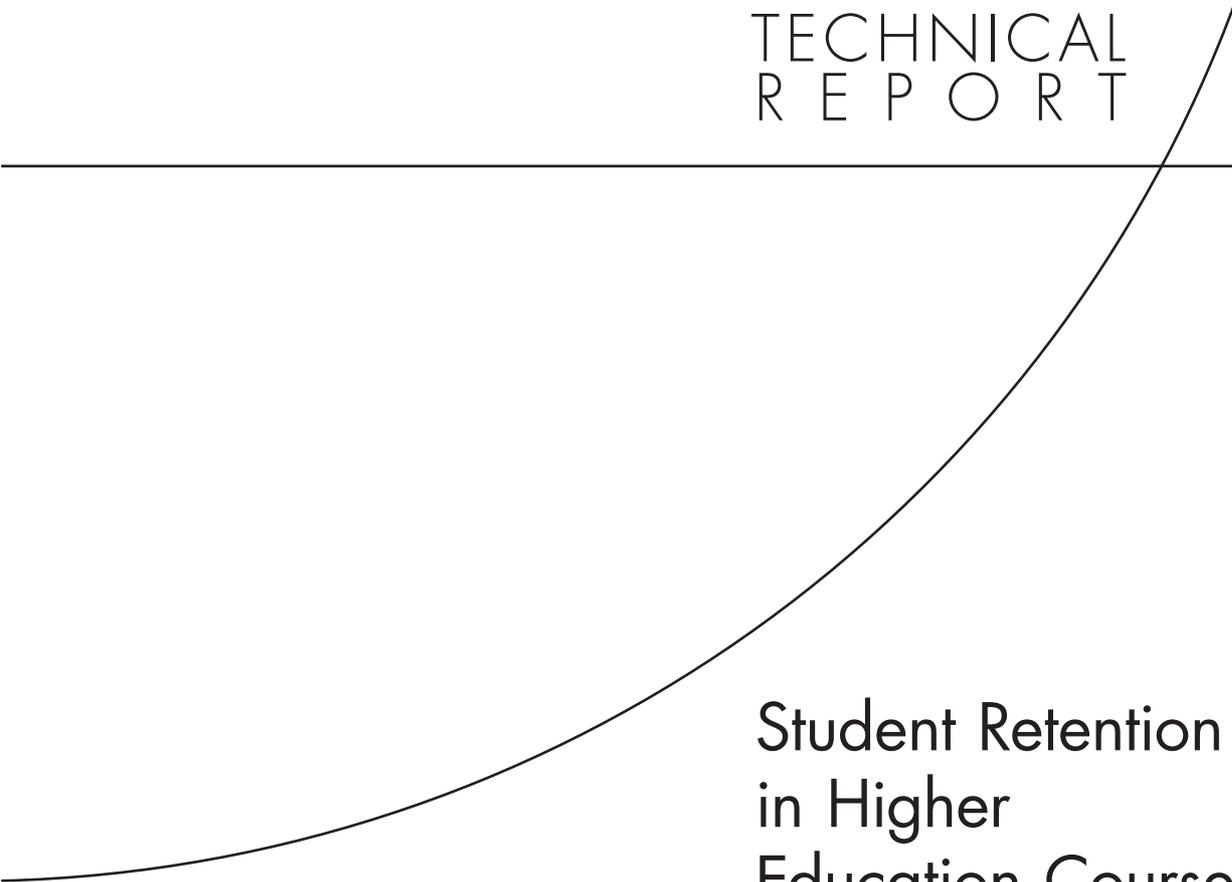
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TECHNICAL
R E P O R T



Student Retention in Higher Education Courses

International
Comparison

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Prepared for the National Audit Office

The research described in this report was prepared for the National Audit Office.

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Summary

1. During the last decade, the UK government has sought to both increase¹ and widen participation to include more students from groups that have been less well represented in higher education, while maintaining or improving student retention.² Against this background, the National Audit Office (NAO) has conducted a value-for-money study on the English higher education sector's performance on student retention.
2. As part of this value-for-money study, the NAO commissioned RAND Europe to undertake an international comparison of how higher education institutions in four other countries manage HE student retention. The four countries selected were Australia, Ireland, the Netherlands, and the United States. For an overview of the selection criteria used, see Appendix A.
3. The objectives of this international comparison are to:³
 - give an overview of the selected countries' systems of higher education
 - provide the definitions of non-continuation; and analyse the rates of student-non-continuation on higher education courses over the past ten years
 - review the approaches used by governments and higher education institutions in the selected countries to maximise the likelihood of student retention
 - provide reasoned conclusions on the effectiveness of the approaches to student retention in the four countries and to establish what lessons might be transferable to the UK to inform approaches in this area.

The main findings of the study were as follows.

The countries studied have measured completion rates in HE to some extent, but only Australia and the Netherlands systematically capture retention rates.

4. In Ireland and the United States (US), there are no agreed definitions of retention. Where retention is measured, the data measurement is mostly course-specific. There are some

¹ The target is to move towards 50 per cent participation among 18-30 year olds by 2010.

² See e.g. HEFCFE, *Strategic Plan 2006-2011* (2006); and Department for Education and Skills, *The Future of Higher Education* (White paper, Presented to Parliament by the Secretary of State for Education and Skills by Command of Her Majesty, January 2003).

³ A full template with the criteria for comparison is given in Appendix B.

common definitions of completion in these countries. Completion rates are compiled for students on financial assistance in the US. Completion refers to the number of students who graduate within 150 percent of the normal course time (six years). Ireland differentiates between students who graduate on time and students who graduate late. In Australia and the Netherlands, there are more systematic definitions that inform data collection. In the Netherlands, graduation is defined as ‘yield’ and refers to the number of students who graduate on time. The Netherlands captures retention as students who stay in HE after the first two years of study. The Netherlands also uses a definition for progress or continuation, that is, the number of students who stay in their courses and progress on time. This last definition is not captured for most courses. Australia defines attrition as drop-outs after the first year of HE and defines the completion rate as the graduation rate after seven years of HE.

The UK is one of the better performers compared to the other countries studied in terms of completion and survival rates of students, where comparable data is available.

5. It is challenging to make comparisons between retention rates of countries given the differences in how retention and completion rates are defined and calculated.⁴ Also, some of the data can be contradictory as it measures different types of completion or graduation rates. To build some comparisons we used Organisation of Economic Development (OECD) data and available national data.⁵ The OECD has several data sets that compare degree completion, graduation, and survival rates of students between countries.⁶ Table 0.1 sets out these rates for the countries studied alongside those for the United Kingdom. The data does not appear to show a positive relationship between participation and completion of degrees in HE. For instance, the United States has the highest participation rate of the countries studied and a relatively low completion rate in 2003 and first-time graduation rate in 2004. The same can be said, to a lesser extent, of Ireland. However, Ireland has one of the highest survival rates of students, which to some extent contradicts relatively low completion and graduation rates.⁷ The Netherlands has both a low participation rate and completion rate, but high graduation and survival rates. Australia seems to be a high performer, both in participation and completion/graduation rates. The United Kingdom has the highest completion rate of the countries listed and relatively high graduation and

⁴ It is important to note that some of these measurements are for different years and might measure slightly different performance indicators. In addition, the way measurements are made, in terms of length of study after which completion and retention are measured, can bias the outcomes of comparisons given differences between countries in the provision of HE, the organisation of studies, financing of the HE system and the student population.

⁵ OECD does not disaggregate data for the different constituent parts of the United Kingdom.

⁶ The OECD defines completion rates as the number of degrees awarded per 100 students enrolled in a given year. Graduation rates refer to the ratio of tertiary graduates to the population at the typical age of graduation, multiplied by 100. Survival rate indicates the number of graduates divided by the number of new entrants in the typical year of entrance (tracking of a cohort). ‘Type A’ HE refers typically to theory-based university education. We have mostly used data for Type A institutions as data for ‘Type B’ institutions, more practice-based professional institutes and vocational colleges, was not readily available in all countries.

⁷ These contradictions may relate to the fact that different ways of measurement involve different reference years.

survival rates. In terms of survival rates, the United Kingdom and Ireland have similar rates in 2000, which are higher than for the other countries. Survival rates seem to decline between 2000 and 2004, with the exception of the Netherlands.⁸

6. It is more difficult to explain the factors behind the variance of completion and survival rates between countries. The case study chapters refer to a variety of institutional, course-specific, financial and social factors that explain the variance. Some of the factors are for instance the cost of education, socio-economic background, and the length of courses. The length of HE courses, which is shorter in the United Kingdom and Ireland than in other countries, could be a factor in explaining why these countries have higher survival rates. The removal of tuition fees in Ireland has been cited as a factor that could lead to improved survival rates. However, the causal relationship between survival rates and reduced tuition fees in Ireland is not visible in the data (2000-04). Generally, there is too little evaluation of factors affecting completion and survival to come to firm conclusions.

Table 0.1 OECD data on participation, degree completion and survival rates compared between countries

Country	College participation (young adults 18-24 enrolled in HE in % 2003)	Completion rate (number of degrees awarded per 100 students enrolled 2003)	First-time graduation Type A courses 2004 (%)	Survival rate for all Type A HE courses 2000 (%)	Survival rates Type A HE courses 2004 (%)
Australia	31	23	46.4	69	67
Ireland	35	21	37.4	85	83
The Netherlands	27	16	40.2	69	76
United Kingdom	n/a	24	39.3	83	78
United States	35	17	33.6	66	54

SOURCE: OECD 2003 taken from the National Center for Public Policy and Higher Education and OECD 2006a, *Education at a Glance*

Note 1 There was no comparative participation data available for the United Kingdom in 2003.

All countries studied have policies aimed at disadvantaged groups, but those concerning the participation and retention of disadvantaged groups differ between countries.

7. All countries share a policy concern around the participation and participation of disadvantaged groups. However, several factors need to be taken into account when breaking down retention and completion rates for specific disadvantaged groups or priority groups. Firstly, different countries monitor different subgroups. Secondly, as stated before, countries differ in the way they measure participation, retention, and completion. Thirdly, countries have different policy issues for subgroups. Research in the Netherlands has shown that ethnic minorities (a specific priority group) are not under-represented and do not show any significant differences in terms of retention (first two years) from the native Dutch reference group. Moreover, in recent cohort retention rates for first generation

⁸ In the Netherlands, reforms of HE after 2002 to comply with Bologna have shortened the time period until completion of the first course of study. This might have had an effect on survival rates..

ethnic minorities seem to be better than second generation and native Dutch students. The policy concern in the Netherlands is the significantly lower completion rate for ethnic minorities compared with the native Dutch reference group.⁹ In other words, there seem to be problems after the first two years of HE, which affects students from an ethnic minority background disproportionately. In Australia, there is evidence that retention rates for priority groups are lower than for the reference group. However, there is no significant gap between retention rates for these priority groups and the reference group. The main policy concern in Australia is the significant under-representation of certain priority groups in HE as indicated in participation rates. The most under-represented group are students with a low socio-economic status and students from isolated areas, In the US, there is evidence that minority groups are under-represented in HE and also anecdotal evidence that these groups have lower retention and completion rates.¹⁰ Within the subgroups, performance varies. The Asian subgroup seems to outperform in terms of participation and completion compared to the non-Hispanic ethnic white group and other subgroups. The performance (participation and completion) of other subgroups such as Hispanic and non-Hispanic Black is similar and below the levels of the non-Hispanic white and Asian groups.

8. Some further policy issues are shared. Retention of mature students is deemed problematic in the Netherlands, the United States, and Australia. This suggests that retention of mature students seems to be a shared and common policy concern. However, evidence on the participation and retention rates of disabled students in the Netherlands and Australia suggests that participation and retention of disabled students are not major policy concerns in these countries.

Trends in the participation and retention rates of students across countries seem mostly stable, where data is available.

9. The data available in the countries studied allows us to make some conclusions on the retention of students in HE. The Netherlands shows an improvement in retention and participation of ethnic minority groups over the last decade. Overall, retention rates seem to be stable in the Netherlands. Australia shows stable retention and attrition rates over the last decade. The US shows some improvement of outcomes for the ethnic majority groups but declining prospects for some of the minority groups (e.g. non-white Hispanic groups). However, this data is only anecdotal. Ireland has only institution-specific data, which shows that some institutions have outperformed others (see Section 3.4 in Chapter 3).

Causes given by and for students leaving HE, in the countries studied, are age at commencement of studies, the wrong choice of study course, transition from secondary school to HE, and financial burden.

10. Evidence from the case studies shows that a variety of causes underlie students' decisions to interrupt courses or withdraw from HE. In Australia, research into the main causes for students dropping out of HE shows that older students, students who gave no clear

⁹ See case study report for more information.

¹⁰ This data is derived from sources used for the case studies. For specific studies and sources, see the case study chapters.

motivation for attending HE, students whose personal circumstances changed and part-time students were substantially more likely to drop out of HE.¹¹ In Ireland, the initial choice of the course and personal problems were the two most important reasons given by students for leaving a course. In the Netherlands, there were three main causes: age at the time of HE commencement (older students have worse outcomes); pre-HE preparation/schooling; and choice of course. Some studies in the US show that there is an influence of the financial burden of tuition fees. Where financial aid goes down and tuition fees go up, there seems to be a negative impact on retention and completion. The Netherlands lists a large effect of higher tuition fees on the participation and retention of ethnic minority students. Factors such ‘academic integration’ and ‘social integration’ are also cited in literature reviews in the US but not systematically evaluated.¹²

There are important commonalities in the policies proposed and adopted to improve the retention of students in the countries studied.

11. Evidence from the four countries studied suggests that there are common approaches to policies for improving the retention of students in HE. Many of the initiatives reflect on the work undertaken by Tinto¹³ on the importance of ‘academic and social integration’ of students in HE. Table 0.2 shows the overlaps between the countries studied. The main categories of Table 0.2 are ‘macro-level’ initiatives referring to initiatives taken at government level and ‘micro-level’ initiatives referring to initiatives taken at institute or university level. For more details and references, please refer to the country reports.
12. Commonalities on the macro-level exist around the monitoring of retention issues (Australia, Ireland and the Netherlands), the exchange of best practice (Ireland and the Netherlands) and use of specific funding streams into retention issues (Australia, Ireland and the US). On the micro-level, commonalities exist around information provided to incoming students (Australia, Ireland and the Netherlands); peer mentoring (Ireland, the Netherlands, the US); transition courses and skills training (Australia, Ireland, the Netherlands, the US); professionalisation of support staff and retention officers (Ireland and the Netherlands); and the creation of smaller learning communities (the Netherlands and the US).
13. This study has found it difficult to assess the effectiveness of these policy levers, as few evaluations have established the direct impact of these levers on participation and retention. Most evaluation evidence concerns an overall effect of a number of policy levers rather than a specific effect associated with a specific policy lever.

¹¹ For more information on the causes in Australia and references, see section 2.5 of Chapter 2.

¹² For more information on the causes given, see section 2.5 of Chapter 2; section 3.5 of Chapter 3; section 4.5 of Chapter 4; and section 5.5 of Chapter 5.

¹³ See for instance Tinto (1987).

Important differences in the organisation and institutional set-up of HE need to be taken into account when comparing retention rates and in examining the transferability of instruments/policies aimed at improving retention in HE systems.

14. There are important differences in the organisation and institutional arrangements of the countries studied. These differences relate to four key areas: 1. institutional differences in the provision of HE; 2. the organisation of studies; 3. the financing of the HE system; and 4. the student population.
15. Firstly, some of the countries have distinct institutional arrangements in the formulation and implementation of HE policy and the provision of HE services. For instance, Australia and the United States are both federal states and part of the responsibility for the formulation and implementation of education policy is devolved to the states and territories. Moreover, the countries studied show differences in how HE is provided. In Ireland, HE is divided between institutes of technology and universities. The Netherlands has a similar division between institutes of professional education (HBO) and universities (WO). HE in the United States operates as a market with a large mix of private providers and public institutions, mostly at the state level. These providers can have different price structures for HE courses and offer different types of HE in terms of the course length, quality of education, and type of courses.
16. Secondly, the organisation of courses of study varies between countries. The United States and the Netherlands offer modular systems based on credits. HE in Ireland mostly offers fixed curricula to students. The autonomy of self-accrediting universities and institutes in Australia gives these bodies flexibility in the types of courses they offer and the organisation of the courses (there is no nationwide system of course credits or accepted modular system). Evaluation studies in the Netherlands show that the organisation of courses can have an impact on the retention of students.¹⁴ Flexibility and a modular system seem to have a positive impact.
17. Thirdly, financing arrangements vary for HE in the countries studied. While Australia, the Netherlands, and the US use tuition fees, Ireland does not and funds HE mostly through government spending. In the Netherlands, the tuition fee is fixed across the range of public providers but variable across private providers. In Australia and the United States, these tuition fees can vary by provider and course studied. There is some evidence from the Netherlands that a higher financial burden might have a negative impact on student retention, especially when it affects students from ethnic minority groups.¹⁵
18. Fourthly, the student population varies across countries. Ireland has a relatively homogeneous population of students. Australia, the Netherlands, and the United States have sizeable minority groups of students. This is important when considering and comparing retention rates for disadvantaged groups.

¹⁴ See for instance meta-analysis in J. Lansbergen, *Literatuurrapport studiestakers en –switchers* (Fontys, 2003).

¹⁵ See meta-analysis in P.G.P. Herfs, 'Retention policy for ethnic minority students,' *Higher Education in Europe* XXVIII (3) October (2003).

Table 0.2: Policy initiatives taken in the countries studied

Category	Australia	Ireland	The Netherlands	United States
Macro-level initiatives	<ul style="list-style-type: none"> - Monitoring of retention, access and participation rates against national targets for institutions and student sub-groups - Funding for specific equity-group-related projects at the institutional level - Scholarships for students from disadvantaged groups - Research on retention and attrition rates 	<ul style="list-style-type: none"> - Monitoring of detailed student records through Student Record System - Exchange of best practice through Inter-University Retention Network - Funding for projects aimed at specific retention issues in IT/maths/engineering - Abolition of tuition fees -Exit interviews to understand why students leave HE 	<ul style="list-style-type: none"> - National monitoring of retention issues for ethnic minority groups - Exchange of best practice and national coordination through ECHO - Importance of financial aid in supporting retention - More curriculum flexibility - Binding study advice after the first year of study 	<ul style="list-style-type: none"> - Funding for specific micro-projects in TRIO Student Support Services
Micro-level initiatives	<ul style="list-style-type: none"> - Improved information for incoming students - Specific university monitoring into causes of non-completion (surveys) - Specific transition courses/skills training - Lowering of entry requirements for disadvantaged groups - Financial support to disadvantaged students - Raising staff awareness and providing guidance on retention issues 	<ul style="list-style-type: none"> - Improved information for incoming students - Specific university monitoring into causes of non-completion (surveys) - Peer mentoring - Specific transition courses/skills training - Retention officers 	<ul style="list-style-type: none"> - Improved introduction for incoming students - Association for and by students - Transition courses/skills training - Professionalising and improving student support - Accessible and engaging teachers - Creating smaller learning communities 	<ul style="list-style-type: none"> - Peer mentoring - Tailoring courses to cultural contexts and needs of students - Creating smaller learning communities - Creating living/learning environment for commuters