

School Subject Choice and University Entrance

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Widening Access to Scottish Higher Education: Getting in and Getting on
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This presentation draws on research conducted in the AQMeN Education and Social Stratification research strand:

1. Iannelli, C., Smyth, E. and Klein, M. (2015) Curriculum differentiation and social inequality in higher education entry in Scotland and Ireland (*British Education Research Journal*, available at <http://onlinelibrary.wiley.com/doi/10.1002/berj.3217/full>)
 - Iannelli, C. and Klein, M. (2015). Subject choice and inequalities in access to Higher Education: Comparing Scotland and Ireland, *AQMeN research briefing 7* (www.aqmen.ac.uk/education/schoolsubjectchoices)
2. Iannelli, C. and Klein, M. (2015) Social origin differences in subject choices in secondary education – New evidence from the Scottish Longitudinal Study (*in progress*)

Explanations of social inequalities in education

- Social inequalities in educational attainment influenced by two factors (*Boudon, 1974*):
 - school performance differences
 - differences in educational choices
 - Cross-country study on both factors (*Jackson 2013*)
 - Extent of social inequalities in school performance similar across countries
 - IEO larger in countries with strong social inequalities in educational choices
- Choice-based systems produce larger social inequalities in educational attainment

Rationale for our research

- In the UK the role of school curriculum choices in reproducing social inequalities in HE entry has been overlooked
- Focus of international literature
 - Selection into different school tracks (early tracking), e.g. academic vs. vocational
 - Less attention paid to within-school curriculum differences
- Flexible choice of type and number of secondary school subjects in Scotland
- Eight subjects (English, languages, maths, history, physics, chemistry, biology and geography) ‘facilitate’ access to Russell Group universities (*Russell Group Dossier, 2011*)

Key research questions and data

RQ1: Are there social class differences in subject choices in S3/S4 and S5/S6?

Data: Scottish Longitudinal Study

- SLS members passed through the school stages S3-S6 or S4-S6 in 2007-2010
- Census data (2001) provide information on pupils' family, housing and neighbourhood characteristics at age 9/10
- Education data include school census information, SQA attainment data (including subjects, levels and performance) and attendance data

RQ2: To what extent do subject choices explain differences in social inequality in HE entry?

Data: Scottish and Irish School Leaver Surveys: 1987-1991, 1993 and 2005; upper secondary leavers

RQ1: Key findings

- There is a clear social divide in the probability to take ‘facilitating subjects’ (science, languages, cultural subjects and English and Math in S5/S6) and ‘non-facilitating subjects’ (other: technical, business, vocational)
- Social inequalities in subject choices in S5/S6 are strongly explained by subject choices in S3/S4

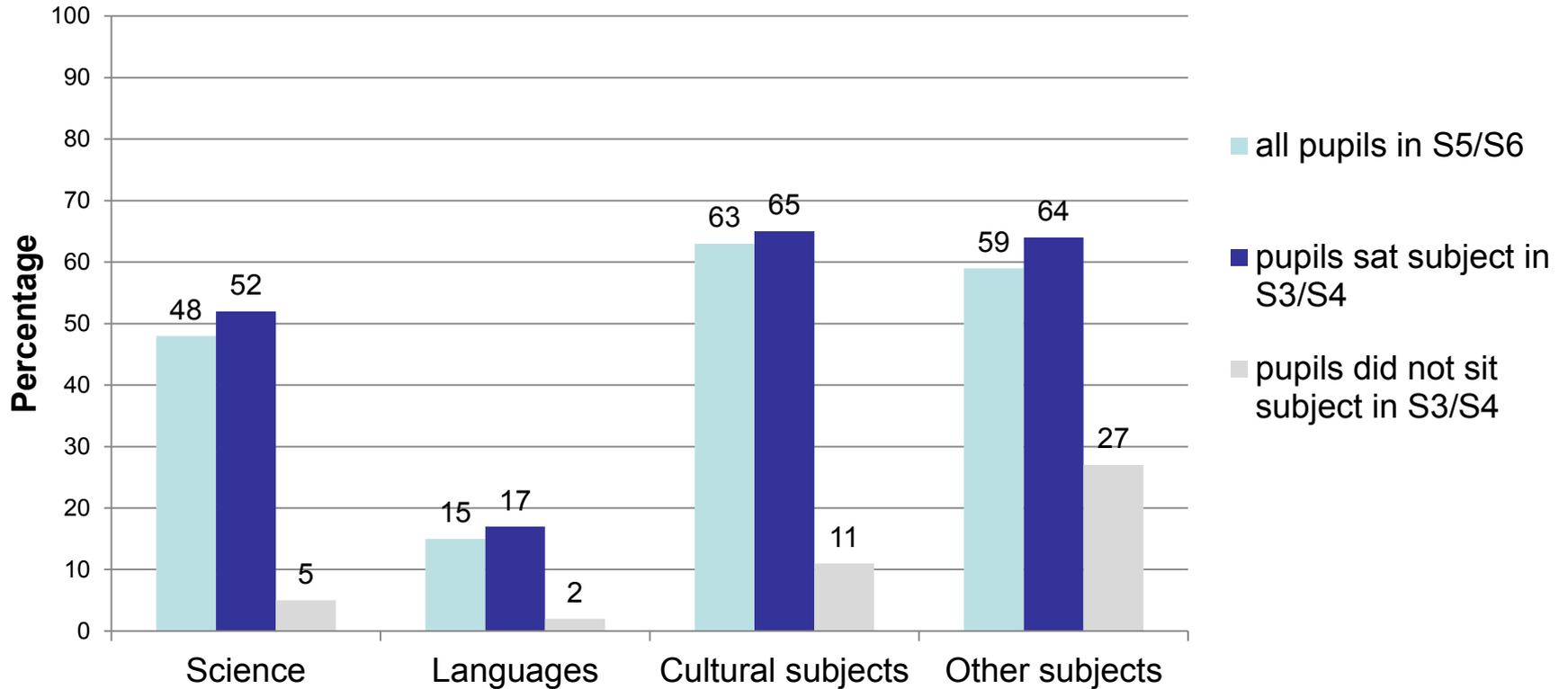
Uptake of subjects by parental social class

S3/S4	Science	Language	Cultural subj.	Other subj.
<i>Class of origin (%)</i>				
Routine occupations	75	58	87	88
Intermediate occupations	90	81	96	89
Higher managerial and professional	97	88	98	76

S5/S6	English	Maths	Science	Language	Culture	Other
<i>Class of origin (%)</i>						
Routine occupations	48	40	31	7	45	48
Intermediate occupations	76	64	49	16	66	64
Higher managerial and professional	87	74	66	20	74	57

Source: Scottish Longitudinal Study (SLS), own calculations.

Subject choice in S3/S4 and subject choice in S5/S6



Source: Scottish Longitudinal Study (SLS), own calculations.

- ***RQ2: To what extent do subject choices explain differences in social inequality in HE entry?***
 - To answer this question we compared two countries with different structures in terms of standardisation of curriculum and HE admission practices
 - We exploit institutional differences between Ireland and Scotland to examine their impact on social inequality among HE entrants

Comparing Scotland and Ireland

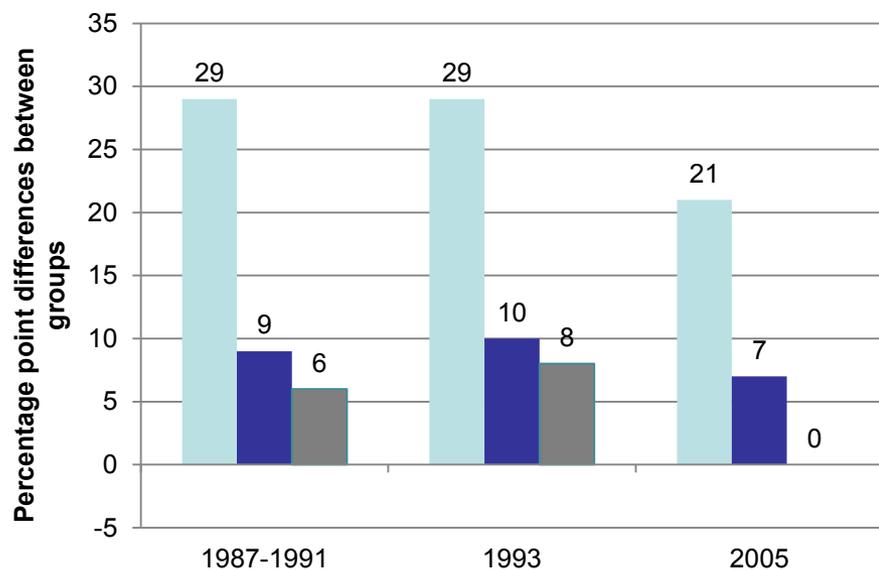
Scotland	Ireland
Both systems with comprehensive and compulsory schooling until the age of 16	
<i>Upper secondary curriculum</i>	
No compulsory subjects	Irish, English and Maths compulsory
No restriction in terms of numbers (average five)	Six to eight subjects (usually seven)
<i>HE admission process</i>	
Institutions (disciplines) decide on HE applicants (via UCAS)	Centralised nationally (CAO)
Admission based on subjects and grades (mostly in prestigious universities); role of facilitating subjects	Admission based on GPA in best six subjects; very minor role for subjects



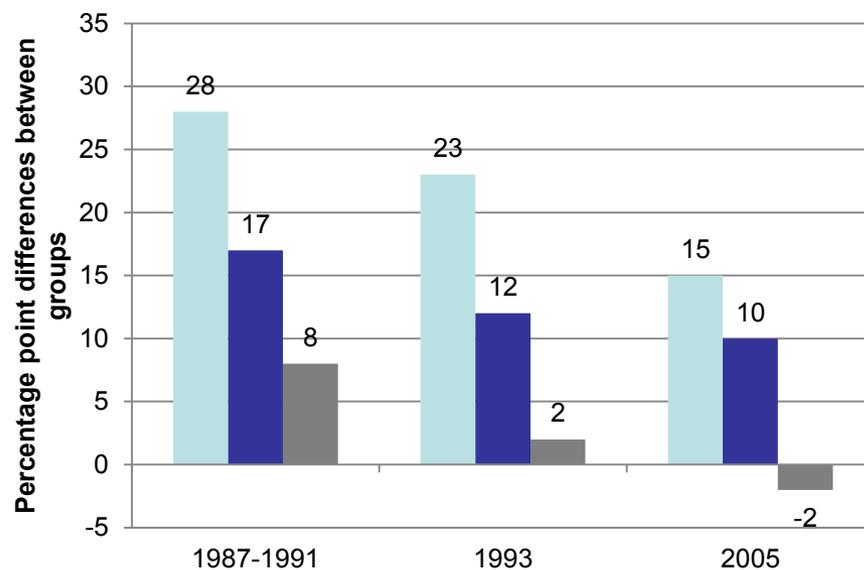
- More marked social class differences in the number of ‘facilitating’ subjects taken in Scotland than in Ireland. No social inequalities in other subjects (e.g. business, technical subject) in both countries
- Social inequalities in HE entry are more strongly explained by subject choices in upper secondary education (S5/S6) in Scotland than in Ireland. Attainment matters more in Ireland than in Scotland

Percentage point differences in the probability of HE entry between students from upper-middle and working class background

Scotland



Ireland



- Gross social gap
- Social gap net of subject choices
- Social gap net of subject choices and performance

Source: Scottish and Irish School-leaver surveys, own calculations



Conclusions

- Subject choices at upper secondary level explain more of the social gap in HE entry in Scotland than in Ireland
- The grades achieved at the end of upper secondary education explain more of the social gap in Ireland than in Scotland
- The comparison illustrates the unintended consequences of different curriculum structures and HE entry mechanisms

- Boudon, R. (1974) *Education, Opportunity, and Social Inequality: Changing Prospects in Western Society* (New York: Wiley).
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- Jackson, M. (2013) *Determined to Succeed? Performance versus Choice in Educational Attainment* (Stanford: Stanford University Press).
- Russell Group. (2011). Informed Choices, <http://www.russellgroup.ac.uk/informed-choices/>

Disclaimer

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