

# CALLS Hub Impact Case Study



Cristina Iannelli & Markus Klein, "Education and Social Stratification: The role of subject choices in secondary education on further education studies and labour market outcomes"

[SLS Project 2013\_013]

### **Research Summary**

Previous research by Iannelli et al (2016) found that subject choice in upper secondary school was a key factor in explaining social inequalities in participation in higher education. Using the Scottish Longitudinal Study and its linked SQA education data allowed the researchers to explore whether this effect begins earlier in secondary school. The analyses found strong social inequalities in subject choice at S3/S4, with children from lower socioeconomic backgrounds significantly less likely to choose subjects key for entry to university. Subject choice at this early stage was the strongest predictor of subsequent choices at 5th and 6th year. The results indicate that children from poorer backgrounds begin making choices early on in their secondary school career which may prevent them from moving into higher education. The findings have generated considerably interest from both practice and policy, and fed into the recommendations of the Scottish Government's Widening Access Commission.

### <u>Underpinning Research</u>

The education system in Scotland (and the UK in general) aims to offer a flexible approach to number and choice of subjects studied at secondary school. The importance of subject choices was highlighted by previous research by lannelli et al (2016) which showed that subject choice at upper secondary was key in explaining social inequalities participation in higher education (HE). By contrast, pupils in Irish schools - where subject choice is more restricted - did not demonstrate the same social patterning of subject take up.

Using the Scottish Longitudinal Study with its linked SQA education data allowed

## **Key findings**

Subject choice for Scottish pupils in S3/S4 showed strong social inequalities, with those from poorer social origins more likely to choose business, technical and vocational subjects rather than sciences, languages or cultural subjects.

There were significant attainment gaps in all subjects by social origin, particularly for the core subjects English and Maths.

Subject choice in S3/S4 was the strongest predictor of subject choice in S5/S6, suggesting that choices made from a relatively early stage of secondary schooling have direct implications for children's chances of being able to participate in higher education.

The authors argue that children from poorer social backgrounds need better guidance and information from schools in order to maximise their opportunities for the future.

Iannelli et al to explore these findings deeper, looking at subject choice in more recent cohorts and earlier in secondary school, at the 3rd and 4th year level (\$3/\$4).

The analyses found strong social inequalities in subject choice at \$3/\$4, with children from lower social origins significantly less likely to choose sciences and languages than those from more privileged backgrounds. These children were more likely to select vocational and technical subjects. Level of parental education was found to be more important than parental social class in this relationship. Subject choice at \$3/\$54 was in turn the strongest predictor of subjects chosen at \$5 and \$6. Once earlier subject choice was taken into account, social origins had only a modest effect on upper secondary subject choice.

The research also found significant attainment gaps by social origin, particularly in the core subjects of Maths and English. This may partly explain why children from lower socio-economic backgrounds were more likely to drop these subjects at \$5/\$6 where they are no longer compulsory.

The evidence suggests that although the Scottish Education system aims to provide flexibility, in reality subject choice follows a 'narrowing' pathway through secondary school as pupils choice is primarily determined by which subjects they have studied in previous years. With prestigious universities citing English, Maths, Languages and Sciences as key entry requirements, the patterns observed indicate that children from poorer social origins begin following a pathway limiting their chances of progressing to HE from early in their secondary schooling. Meanwhile, perhaps due to their parents' relative familiarity with University requirements and expectations for their children, pupils from more affluent social origins are more likely to follow a path that facilitates attaining qualifications that are valued by Higher Education establishments.

### **Impact**

This piece of research generated a great deal of interest from policy and practitioners following presentations to key audiences, including the 2015 British Sociological Association Annual Conference, the Effe Symposium, an ESRC Festival of Social Science event, a Knowledge Exchange event at Moray House School of Education, and a private meeting with representatives of the Scottish Government's Directorate for Learning. The results were covered both in the interim and in the final report of the Scottish Government's Widening Access Commission, influencing their key recommendations.

Media reports in both the mainstream and professional press followed, including extensive front page coverage in TESS, a front page article in the Herald Scotland and two articles in SecEd.

### Links to Further Information

SLS Project 2013\_013: "Education and Social Stratification: The role of subject choices in secondary education on further education studies and labour market outcomes" Cristina lannelli<sup>1</sup>, Markus Klein<sup>2</sup> & Adriana Duta<sup>1</sup> - <sup>1</sup>University of Edinburgh, <sup>2</sup>University of Strathclyde (includes details of all outputs)

lannelli, Smyth & Klein (2016) "Curriculum differentiation and social inequality in higher education entry in Scotland and Ireland" BERJ, 42(4), 561-581

Widening Access Commission Final Report (2016), Scottish Government

This research was carried out as part of The Applied Quantitative Methods Network (AQMeN), an ESRC-funded research programme. For further info visit: www.agmen.ac.uk/research/education

CALLS Hub is an ESRC-funded project supporting and promoting the work of the three UK LSs

web: <u>calls.ac.uk</u> email: <u>info@calls.ac.uk</u>

The researchers hope their findings will be taken forward by policy and practitioners, so that the education system will improve the flow of information between parents and schools to help children from poorer social backgrounds choose routes that open opportunities for progress to higher education.

### Next steps

The project continues to develop, with new team member, Adriana Duta. The research has moved on to explore how subject choice affects employment outcomes for those pupils who do not intend to go on to Higher Education. The results of this latter research will appear in a forthcoming Special Issue of the Oxford Review of Education.











