**Executive Summary**

## Introduction

Since the DEIS (Delivering Equality of opportunity In Schools) programme was introduced, the Educational Research Centre (ERC) has been evaluating it on behalf of the Department of Education and Skills (DES). The evaluation aims to monitor the implementation of DEIS and assess its impact on students, families, schools, and communities at primary and post-primary levels. This report is the latest in a series of reports on the evaluation of the DEIS programme at post-primary level, and focuses on the student outcomes of educational attainment and achievement. Student attainment is defined in terms of Junior and Senior cycle retention rates, and student achievement in terms of performance in the Junior Certificate Examination (JCE). The report builds on earlier analyses undertaken as part of the DEIS evaluation, continuing the examination of trends in these outcomes in DEIS and non-DEIS schools over time. It also examines how student achievement relates to medical card possession (a proxy for low family income) and gender in DEIS and non-DEIS schools. Furthermore, the data are used to examine the extent to which a ‘social context’ effect operates in schools. Such an effect refers to the extent to which student outcomes in a school are negatively affected by increasing densities of students from poor socioeconomic backgrounds, over and above the impact of the student’s own background. The findings are compared with those reported by Sofroniou, Archer and Weir (2004) who conducted similar analyses using data from the JCE in 1998.

## Method

Trends over time in achievement and retention in post-primary schools in Ireland were examined using centrally-held data made available to the ERC as part of the evaluation of DEIS. Analyses included data from all post-primary schools in the country.

Student performance in the JCE was described in the report using an Overall Performance Scale (OPS). The OPS involves the allocation of numerical values to the alphabetical grades awarded to JCE candidates in individual subjects and summing these values produce an index of a candidate’s general scholastic achievement. Trends in JCE English, mathematics and overall performance were examined in the current analyses. JCE data from 2002 to 2017 were available for analysis. However, a change was introduced in 2017 to the grading scheme for English (and which it is planned to extend to other subjects over time) which meant that grades in English were no longer directly comparable to those awarded in previous years. As such, 2017 English and OPS scores (of which English scores are a constituent part for many students) were not included in the trend analysis. As no change has yet been made to the marking scheme in mathematics, reported trends in JCE mathematics performance include data from 2017.

In relation to student attainment, retention rates were available for the cohort of students starting post-primary school in 1995 up to the 2011 entry cohort.

## Main Findings

Significant positive trends in achievement (overall performance, performance in English and performance in mathematics in the JCE) were identified over the period from 2002 to 2016/2017. Additionally, when looking at the 1995 to 2011 cohorts of students, significant positive trends were identified in retention to Junior Certificate and to Leaving Certificate.

From the available data, it was also possible to compare schools in DEIS to schools not in the programme. While positive trends in achievement and retention were identified in both DEIS and non-DEIS schools, there was evidence that improvements in these outcomes were more marked in DEIS than in non-DEIS schools.

Since the introduction of DEIS, there have been reductions in the proportion of students in DEIS schools sitting Foundation Level papers in English and mathematics, and increases in the proportion sitting Higher Level papers in these subjects.

Significant gaps in the proportion of students from medical card holding families between schools in and out of DEIS clearly indicate that students attending the two different school types have continued to differ in terms of the socioeconomic backgrounds of students who attend them.

Gender gaps in achievement were in favour of girls in all instances. Gaps were larger in English than in mathematics, where they can be described as very small. On the whole, gender gaps in achievement in DEIS and non-DEIS schools have remained relatively stable since the introduction of the DEIS programme.

Between-school variance in JCE achievement was greater in 2016 than in 1998, when similar analyses were conducted, meaning schools differed more from one another with respect to English and mathematics achievement in 2016 than they did in 1998. There was evidence of a social context effect in post-primary schools in 2016. After controlling for the effects of individual SES on overall achievement, there was a significant effect of school SES on school-level achievement in both JCE English and mathematics. The effect was stronger in 2016 than it was in 1998. While the effect was shown to be greater for boys than for girls in 1998, in 2016 there was no significant gender interaction.

## Conclusions

It is important to continue to monitor educational outcomes in DEIS schools. However, there are likely to be challenges associated with undertaking analyses similar to those reported here in the future. First, as Junior Certificate retention rates are reaching levels from which there is little room for further improvement, this outcome variable is unlikely to remain a useful indicator for much longer. Additionally, future examinations of long-term trends in achievement will require exploration of ways to equate the old and new JCE grading schemes, as they have many differences that make them incomparable. Finally, although it did not impact on the analyses undertaken on this occasion, the issue of the admission of new schools to DEIS in 2018 will need to be addressed, as these ‘new’ schools may differ in certain ways from schools that were originally admitted to the programme.

The fact that the analyses show that the achievement and attainment gaps between DEIS and non-DEIS post-primary schools continue to narrow is very welcome. However, significant gaps still exist and most of those gaps have their basis in income inequality. While this is a societal problem, the impacts are evident in our schools and it is important to continue to provide educational programmes such as DEIS to address the needs of our most marginalised students.