

National Council for Curriculum and Assessment

Response to PISA 2000

February 2002

PISA 2000 – Response of the NCCA

The National Council for Curriculum and Assessment (NCCA) has the responsibility, under the Education Act (1998), for advising the Minister for Education and Science on matters relating to

- the curriculum for early childhood education, primary and post-primary schools, and
- the assessment procedures employed in schools and examinations on subjects which are part of the curriculum.

The NCCA welcomes the OECD initiative to undertake an international assessment of 15-year-old students in second-level schools, and is pleased that Ireland is participating in this study. Those who contributed to and facilitated the conduct of this study are to be commended. The participating students and their teachers are to be congratulated on a highly creditable performance. The availability of comparative international data on student achievement in the domains of reading literacy, mathematical literacy and scientific literacy will be of benefit to the NCCA in carrying out its functions as described in the Education Act (1998), with particular reference to curriculum and assessment issues pertaining to post-primary schools. Information on school and student characteristics obtained through PISA will also help to inform educational developments.

In the first cycle of PISA, completed in 2000, the major domain of assessment was reading literacy. Ireland achieved the fifth highest mean score among 27 OECD countries on the combined reading literacy scale. Only one country (Finland) achieved a mean score that was significantly higher than Ireland. This is a noteworthy achievement, particularly in light of the much lower level of achievement by Irish participants in other international reading literacy studies, where they performed at about the OECD country average.

Given the importance of reading literacy for social, economic and cultural participation, this world-class performance by Irish 15-year-olds is a highly significant achievement for the students, their teachers and their schools.

PISA 2000 also found that a smaller proportion of Irish students achieved scores at or below the lowest level of achievement on the combined reading literacy scale compared to an OECD country average. However, we should nevertheless be concerned that this category accounts for more than one in ten of our post-primary students, a level that is consistent with that found in reading literacy study conducted by the International Association for the Evaluation of Educational Achievement (IEA/RLS) in 1991.

Both mathematical literacy and scientific literacy were minor assessment domains in PISA 2000 and, consequently, were less comprehensively assessed than reading literacy. The performance of Irish students in mathematical literacy did not differ significantly from the OECD country average. The revised Junior Certificate mathematics syllabus, which was introduced in 2000 and is scheduled for first examination in 2003 places increased emphasis on mathematical understanding and the ability to apply this in realistic contexts, which is a strong feature of mathematical literacy in PISA.

Ireland did comparatively better in scientific literacy than in mathematical literacy. The mean score of Irish students on the scientific literacy scale was significantly higher than the OECD country average, ranking ninth overall. However, it must be kept in mind that scientific literacy was a minor domain of assessment in this cycle of PISA and was based on a reduced set of content areas. Furthermore, Irish students who do not study science in the Junior Cycle performed relatively poorly on PISA 2000. Understanding of the scientific method of inquiry and skills in critically questioning scientific issues feature strongly in the PISA assessment of scientific literacy. The implementation in 2002 of the science component in the revised Primary School Curriculum and the revision of the Junior Certificate science syllabus, which is nearing completion, will better facilitate the development of these skills.

The NCCA will continue to contribute to the work of PISA and will closely monitor the performance of Irish students in the remaining cycles, when the major domains of assessment will be mathematical literacy (2003) and scientific literacy (2006).