TIMSS 2015 in Northern Ireland: introduction

Report outline

This report summarises Year 6 (Y6) pupils' attainment in the 2015 TIMSS survey in Northern Ireland and explores the context of that attainment.

TIMSS is an international comparison study of mathematics and science at ages 9-10. (TIMSS also assesses ages 13-14, but Northern Ireland participated only at the younger age range.) TIMSS has a four-yearly cycle. Northern Ireland took part in TIMSS for the second time in the 2015 cycle having previously participated in 2011.

What TIMSS assesses at ages 9-10

TIMSS assesses content domains (mathematics and science) and cognitive domains (knowing, applying and reasoning) in both subjects. The content domains assessed at ages 9-10 are:

- Mathematics Number, Geometric Shapes and Measures, Data Display
- Science Life Science, Physical Science, Earth Science.

In science, the area of study related to the classification and properties of materials is included in the Physical Science content domain.

Countries with which Northern Ireland will mainly be compared in this report

The report compares the performance of Northern Ireland pupils with pupils aged 9-10 in all participating countries in TIMSS. Where possible, it also compares performance in Northern Ireland with that of the six countries which outperformed Northern Ireland in the Programme for International Student Assessment (PISA)¹ 2012, in all three subject domains (mathematics, science and reading). These countries are:

- Australia
- Finland
- Hong Kong
- Poland
- Republic of Ireland
- Singapore.

In addition, where applicable, the report compares performance with that in England as another constituent country of the UK.

Trend comparisons: TIMSS 2015 and TIMSS 2011

The report compares Northern Ireland's performance in TIMSS 2015 with performance in TIMSS 2011. Where possible, the report also explores whether the background factors that impact on attainment have changed between these two cycles of TIMSS. It should be noted that the contextual questionnaires (school questionnaire, teacher questionnaire, pupil questionnaire and home questionnaire) have undergone some changes since TIMSS 2011. In some cases the changes are minimal and comparisons with the 2011 findings are made but should be interpreted with caution. In other cases the changes to the questionnaires are more fundamental and, as a result, trend comparisons are not possible.

¹ PISA is an international comparison study assessing students' mathematics, science and reading skills at age 15.

² TIMSS 2015 in Northern Ireland: mathematics and science