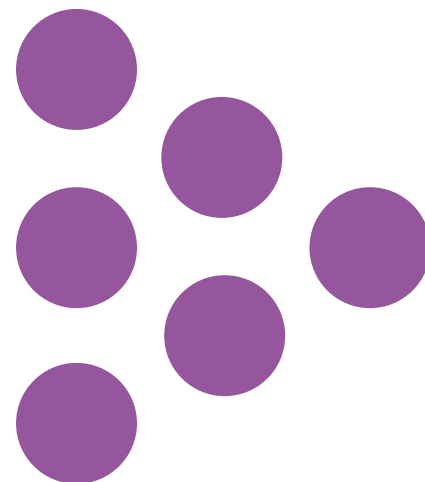

Identifying priorities for school improvement using TIMSS

Dr David Thomas

National Research Co-ordinator for TIMSS 2019
Northern Ireland, NFER



Identifying priorities for school improvement using TIMSS

What information would be useful to inform school improvement?

- Independent and statistically rigorous
- Changes in outcomes over time
- Links between achievement and contextual factors
- A valid comparison with other similar nations

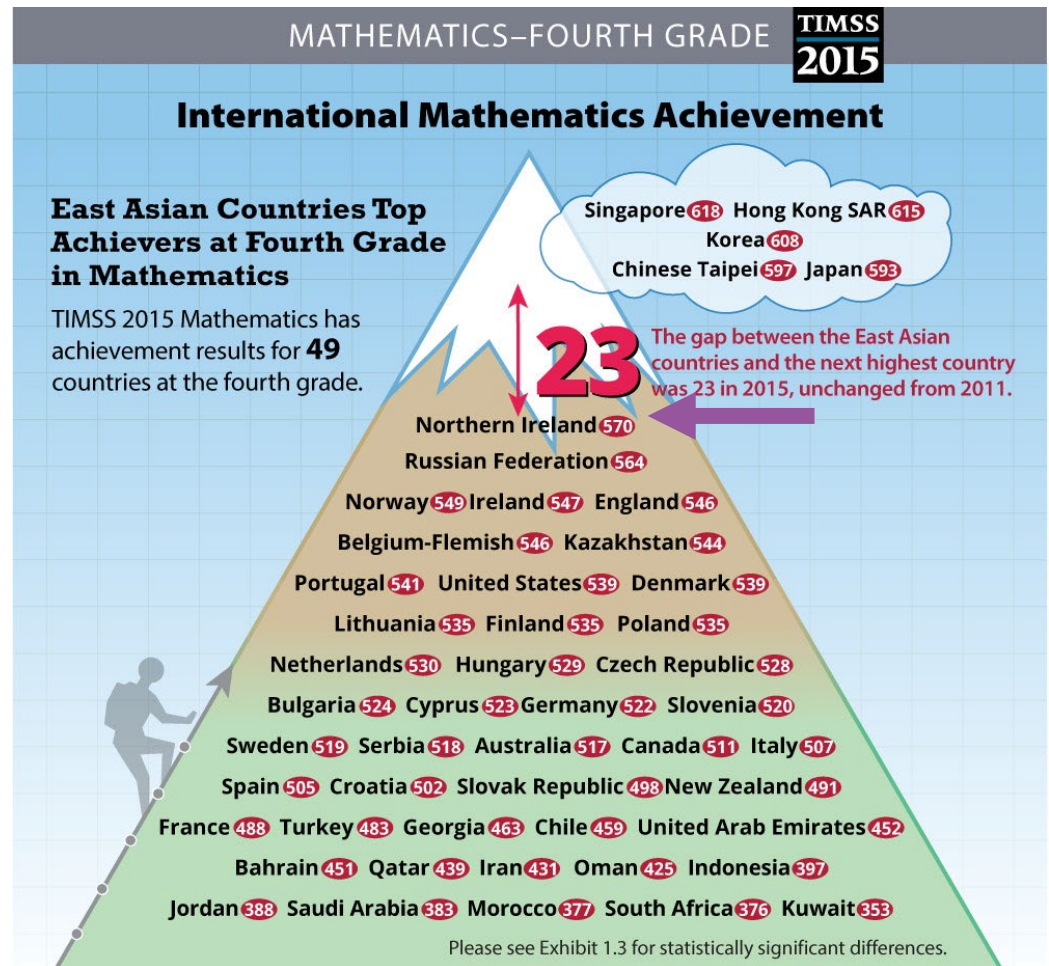
The ‘Trends in International Mathematics and Science Study’ provides all of this information (and PIRLS for reading)



TIMSS: An external temperature check, independent of government

What have we learnt about maths attainment in Northern Ireland?

- Primary 6 pupils participated in 2011 and 2015
- Excellent performance in 2011 and 2015 in maths. **The highest achieving European country.**



TIMSS: An external temperature check, independent of government

- What have we learnt already about and science attainment in Northern Ireland?
- Primary 6 pupils participated in 2011 and 2015
- Performance **above the international average** in science



TIMSS: An external temperature check, independent of government

- What have we learnt already about maths and science teaching in Northern Ireland?

Largest percentage of pupils experiencing 'Very Engaging teaching' in science and maths

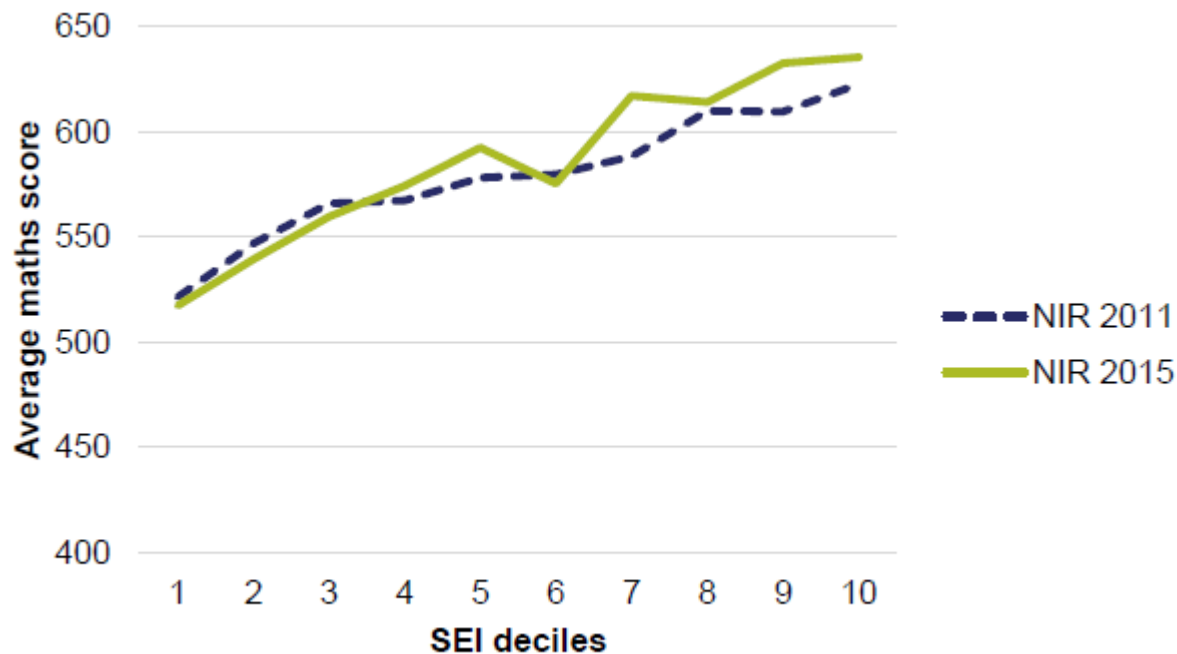
96 per cent of pupils had teachers who reported that they were 'Very Satisfied' or 'Satisfied' with their jobs

Only 16 per cent of pupils were taught by teachers who have a postgraduate degree

*Burge, B., Classick, R. and Stacey, O. (2016). *TIMSS 2015 in Northern Ireland: Mathematics and Science*. Slough: NFER

TIMSS: An external temperature check, independent of government

Performance in TIMSS 2015 of disadvantaged pupils in Northern Ireland*



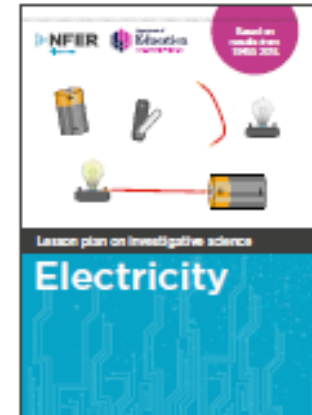
*Bradshaw, J., De Lazzari, G., and Andrade, J. (2018). *Performance in TIMSS 2015 of disadvantaged pupils in Northern Ireland*. Slough: NFER

TIMSS: An external temperature check, independent of government

- **TIMSS can inform specific curriculum interventions**

Science lesson plans informed by the performance in science of NI P6 pupils in TIMSS 2015

Covering areas from the science curriculum where pupils in Northern Ireland did not perform as well as expected.



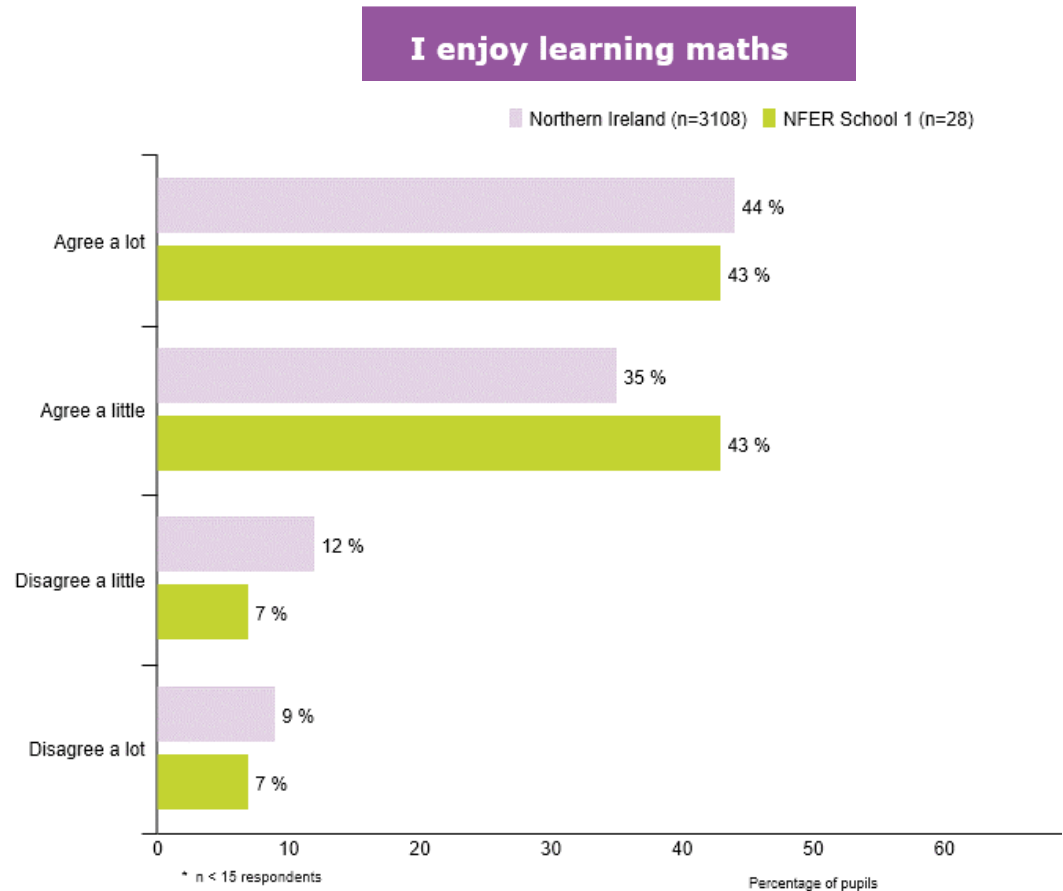
TIMSS: An external temperature check, independent of government

- **TIMSS can inform school policy**

Schools receive detailed feedback.

Based on pupils' responses to the TIMSS questionnaire exploring their attitudes to school, math and science

Highlights strengths and areas that may need further attention



TIMSS: An external temperature check, independent of government

What next? TIMSS 2019

Northern Ireland is participating in TIMSS 2019

Taking part is an enjoyable experience for students and straightforward for schools

If invited to take part, please sign up!



<https://www.nfer.ac.uk/timss>

timssandpirls.bc.edu/
www.nfer.ac.uk/timss



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The Mere, Upton Park, Slough, Berks SL1 2DQ
T: +44 (0)1753 574123 • F: +44 (0)1753 691632 • enquiries@nfer.ac.uk

www.nfer.ac.uk

