Teaching and learning in Icelandic and Science in the context of national tests in Iceland

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Today’s presentation

- A few words about the Icelandic education system
- A model of teaching and learning to investigate the effects of national testing on teaching and learning
- Pupils from 6–16
- Primary level, years 1–7
- Lower secondary level, years 8–10
- Little distinction between levels
The National Curriculum ...

- Around 900 pages in 12 separate booklets
- Prescriptive in terms of learning aims and objectives but more flexible in terms of methods
- Three sets of intended outcomes
  - Final outcomes – broad aims
  - Intermediate objectives (grade 4 and 7)
  - Learning targets for each year
National tests

- Grades 4 and 7
  - Icelandic and Maths
- Grade 10 (end of compulsory school)
  - Icelandic, Maths, English, Danish, Social studies and Science
- Not standardised (semi-standardised)
  - National tests (Nationally co-ordinated)
- Pencil & paper & (almost entirely) multiple choice
- High-stakes
The TIMMS / PISA framework

Intended Curriculum

Implemented Curriculum

Attained Curriculum
The curriculum process e.g. PISA
A framework for teaching and learning

Education Acts, National curriculum, regulations and national tests

Conceptions, Pedagogical content knowledge, Efficacy (self and collective)

The teaching:
Content, organisation, assessment

The learning:
Internal conditions: (motivation, self-efficacy and student traits), Learning tasks (what), Learning methods (how)

Differentiation / Individualisation

Implemented curriculum

Teachers

Attained curriculum

Outcomes of learning

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