The impact of high-stakes national testing on teaching and learning: In Icelandic example
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The study ...

- The aim and main questions
  - ... the impact of the national tests in Icelandic and Science on teachers’ conceptions, decisions and teaching organisation, and on students’ learning activities and outcomes

- The design
  - a case study in four compulsory schools
  - individual interviews with the head teachers and teachers
  - classroom observations
  - focus group interviews with students
  - written materials from the schools

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An overview

- The Icelandic context
- The conceptual model used in the study
- Highlights from findings
- A few concluding remarks

- Pupils from 6–16
  - Primary level years 1–7
  - Lower secondary level years 8–10
National examinations in Iceland

- At the time of the study
  - Icelandic and Maths in the beginning of years 4 and 7
  - Danish, English, Icelandic, Maths, Science and Social studies (optional) in year 10. Part of the final examination
- Currently
  - Icelandic and Maths in the beginning of years 4 and 7
  - English, Icelandic and Maths in the beginning of year 10 (obligatory but no longer a part of the final examination)

The curriculum process (e.g. PISA)
Teachers

- Generally satisfied with the National curriculum
- Discrepancy between tests and curriculum
  - tests did not reflect the curriculum
- Professional tension
  - Adhere to the curriculum (and their own conceptions) or prepare students for the test
- The solution
  - Choose from the curriculum
  - Text-book coverage

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The 1999 Science curriculum

From the earth sciences
From the physical sciences
From the biological sciences

About the nature and role of science
About methods and skills

The 1999 Icelandic curriculum

- Grammar
- Literacy & reading comprehension
- Literature
- Spoken language and expression
- Viewing and listening skills
- Writing (composition skills)

There is evidence that grammar & spelling get over 50% of the teaching time in Icelandic at the expense of the other content areas, in particular, spoken language and expression & viewing and listening skills

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Teaching style of informers

Direct teaching and transmission of factual knowledge and rather infrequent use of questions other than closed questions that demand recall and application of facts (Hacker & Rowe, 1997)

Differentiation

- Most of the teachers endorsed the idea of differentiation
- Little scope in the teaching organisation of informers
- The teachers who expressed the clearest ideas of differentiation blamed the national tests for narrowing their scope
  - Why differentiate, when everyone is measured by the same yardstick at the end of the day?
Assessment

- Written tests by the end of terms
- Continuous assessment

Widespread use of previous national tests

Students & the attained curriculum

- Weak students expressed anxiety and stress
- Learning culture in the four schools
  - dominated by limited motivation and a desire for grades and learning to pass the tests rather than learning on its own merit
  - attained curriculum characterised by factual knowledge rather than a learning environment that encouraged reflection, problem-solving, deep learning and constructed knowledge.
Concluding remarks

- The implemented curriculum
  - departed in some ways from the National curriculum
  - and from the teaching conceptions of the teachers themselves
- Impact on teachers and through teachers into the classroom
- Strong tradition
  - teachers as technicians
- Pedagogical content knowledge
- Perceived self- and collective efficacy

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