

Primary and secondary education in mathematics in Chile

**International educational
cooperation symposium**

**University of Tsukuba
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CURRICULUM REFORM AS SCHOOL SYSTEM'S ANSWER TO NEW EXTERNAL REQUIREMENTS

- information and knowledge society
- crisis of educational system as a whole
- competitiveness of the Chilean economy increasingly based on educational level of its population
- modern citizenship requirements

DIMENSIONS OF CHANGE IN THE CURRICULUM

■ CONTROL:

■ Instruments

- Curriculum Framework (National)
- Programs of studies (School)

■ Organizations

- Ministry of Education (Government)
- Consejo Superior de Educación (State)

■ STRUCTURE: Primary (8 years) Secondary (4 years)

THE NEW PROGRAMS OF STUDY

- Highly specific and detailed with respect to four interrelated categories:
 - contents
 - learning objectives
 - teaching activities
 - evaluation activities
- Explicit definitions of:
 - time per larger content units
 - methodological orientations
 - several optional examples of activities per learning objective
 - Orientations for teachers on evaluation

IMPLEMENTATION PROCESS 1997-2002

- The programs for improvement of the 90s (P900, Mece-Primary, Mece Secondary), as preparation for the curriculum reform.
- Gradualism of the implementation : two grades by year
- The decision on high specification of the programs of study
- The last reform of this type: substituted by curriculum development
- Thus: the frameworks approved in 1996 –primary- and 1998 –secondary-, have already experienced adjustments; in the case of language and maths in the firsts four years, a major change

IMPLEMENTATION: Teachers' declared curriculum coverage

Subjects	% of teachers who declare total or 75% coverage of the new official program of studies
Maths	
1° Medio 1999	61.9%
1° Medio 2000	68.5%
2° Medio 2000	75.3%
2° Medio 2001	81.2%
3° Medio 2001	79.0%
3° Medio 2002	80.2%

STANDARDS PROJECT

WHY?

- Evaluation unlinked with key learning objectives
- Grades and scores lacking descriptive meaning
- Problems with comparability of grades and scores
- Need to reach international performance level

TIMSS

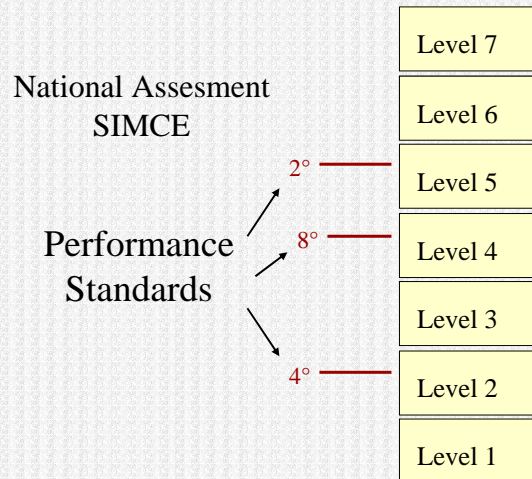
Mathematics	
Nation	Average
Singapore	604
Korea, Republic of	587
Chinese Taipei	585
Hong Kong SAR	582
Japan	579
Belgium-Flemish	558
Netherlands	540
Slovak Republic	534
Hungary	532
Canada	531
Slovenia	530
Russian Federation	526
Australia	525
Finland	520

OUR CHOICE:

- Content Standards
- Performance Standards

STRUCTURE

Progress Map



STRANDS

- Numbers
- Algebra
- Shape and Space (Geometry)
- Information and Chance
- Mathematical Reasoning

TIME TABLE

2004	2005	2006	2007	2008
<ul style="list-style-type: none"> • Elaboration Maps Progress (5 Strands) 	<ul style="list-style-type: none"> • Public Discssion 	<ul style="list-style-type: none"> • National Test (4 grade) 	<ul style="list-style-type: none"> • National Test (4 and 8 grades) 	<ul style="list-style-type: none"> • National Test (4 and 10 grades)
	<ul style="list-style-type: none"> • Consejo Superior de Educación 	<ul style="list-style-type: none"> • Public Standars 		
	<ul style="list-style-type: none"> • Progress Maps 			
	<ul style="list-style-type: none"> • Performanc e Standard (4 grade) 			
	<ul style="list-style-type: none"> • Experimental National Test about Standars (4 grade) 			