

INVALSI

Italian National Institute for the Evaluation of Educational System

*The Italian National Evaluation Service:
a challenge for Education Improvement*

Carlo Di Chiacchio

Rita Marzoli

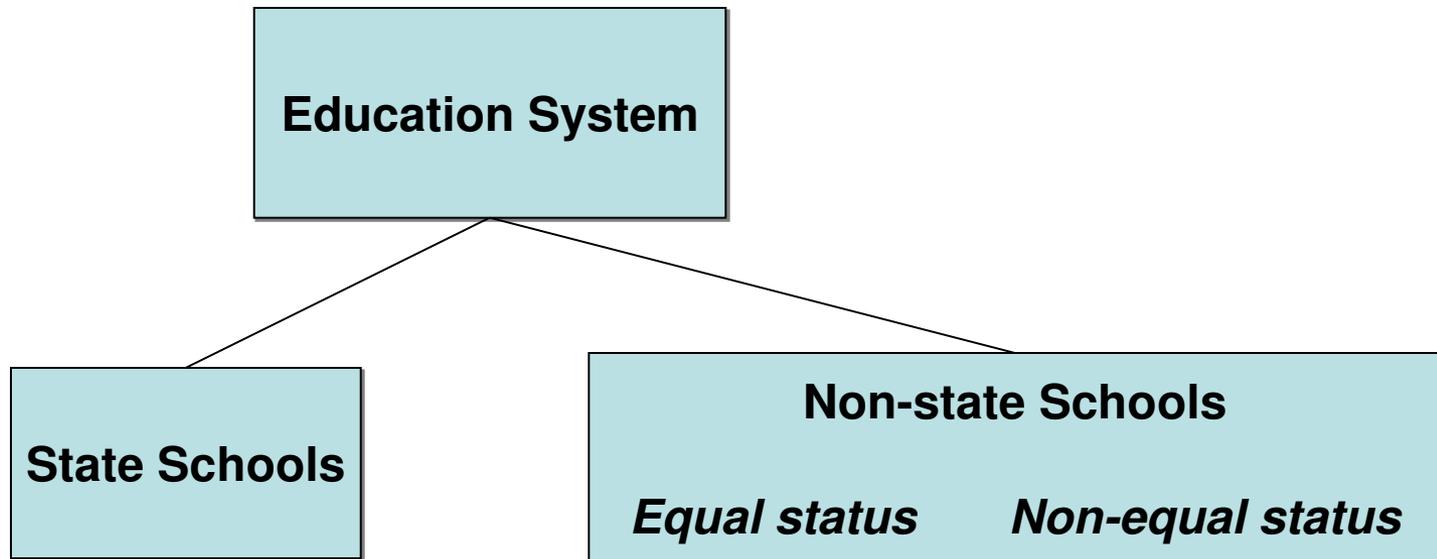
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- **Overview of the Italian Education System**
- **Characteristics of the National Evaluation Service**
- **Some spots of results from national (NES) and international survey (PISA)**

- **Population (school year 2009/10)**

Pre-primary	1,007,108
School-children	7,804,711
<i>Primary</i>	2,578,650
<i>Lower secondary</i>	1,670,117
<i>Upper secondary</i>	2,548,836

- **Administrative control**
 - Ministry of Education University and Research at central level
 - Regions and Provinces at local level
 - Teaching autonomy (organization, research, experimentation and development)



- **Educational levels**
 - *Pre-primary*
 - *Nursery schools (age 3-6)*
 - *Compulsory*
 - *First cycle (primary school 6-11 yrs; lower secondary school 11-14 yrs)*

National Education System Overview

Post-compulsory/upper secondary and post-secondary

Secondo ciclo di istruzione (second cycle of education) within post-compulsory education	
<p><i>Liceo classico</i> (general upper secondary school specialising in classical studies)</p> <p><i>Liceo scientifico</i> (general upper secondary school specialising in scientific studies)</p> <p><i>Liceo linguistico</i> (general upper secondary school specialising in foreign languages)</p> <p><i>Liceo delle scienze umane</i> (general upper secondary school specialising in human sciences)</p> <p><i>Liceo musicale e coreutico</i> (general upper secondary school specialising in music and dance)</p> <p><i>Liceo artistico</i> (general upper secondary school specialising in arts subjects)</p>	Age (14) 16-19
<i>Istituto tecnico</i> (technical school)	Age (14) 16-19
<i>Istituto professionale</i> (vocational school)	Age (14) 16-19
<i>Formazione professionale di base</i> (Initial vocational training)	Age (14) 16-17
Istruzione e formazione tecnica superiore (higher technical education and training system)	Age 19-21

Evaluation culture in Italy

- Pupils' evaluation
- Data collection of the whole system
- Aims of the evaluation process are to provide:
 - *Policy makers with knowledge for strategic decisions*
 - *General public with a transparent account*
 - *Single educational institutions with tools for self-evaluation*

- In 1999 after a political reform INVALSI was settled with the following tasks:
 - *Evaluation of the efficacy and efficiency of the educational system*
 - *Studying the reason of students' dropout*
 - *Assessment of users' satisfaction levels*
 - *Supporting single educational institutions*
 - *Assessing results from implementation of legislations*
 - *Assessing results from projects promoted at national level*
 - *Assuring participation in international projects*
- In 2003 INVALSI was reorganised and the National Evaluation Service was established

Law framework (2)

- ▶ On the basis of art. 2 of legislative decree 286 of November 19, 2004 the ministry of Education defines the main goals of the National Institute for the Evaluation of Educational System (INVALSI) for each three-years-period so that it can program its activities for the following 3 school years.
- ▶ Starting from the school year 2008-09 the above mentioned directive foresees the realization of the Italian NES:
 - ▶ 2008-09 standardized tests for 2nd, 5th, and 8th grades
 - ▶ 2009-10 standardized tests for 2nd, 5th, 6th, and 8th grades
 - ▶ 2010-11 standardized tests for 2nd, 5th, 6th, 8th, and 10th grades
- ▶ In the first school year (2008-09) NES was not compulsory for the primary school (2nd and 5th grade). Starting from the school year 2009-10 NES is compulsory for each Italian school (public and private).

Test administration - Levels



GRADE	Classes	Students	classes sample	students sample
2 grade	29.989	560.738	1.770	35.479
5 grade	30.722	574.880	1.770	35.113
6 grade	27.163	600.795	1.968	44.769
8 grade	24.788	527.318	2.302	50.838

The main steps of NES

- ▶ Test development (15-18 months before the main study)
- ▶ Field trial (pre-testing at national level)
- ▶ Communication of the National Ministry of Education of national testing
- ▶ School registration (collection of general data at school level and collateral information informational about students, such as social, economics, and cultural covariates)
- ▶ Test delivering to each schools (in the school year 2010-11 about 15,000 schools)
- ▶ Test administration (to about 2,800,000 students) in May (June for the 8th grade)
- ▶ Data collection
- ▶ National reports based on sample data (within the 15th August)

Restitution to each school of its data with comparative analyses

- ▶ Definition and publication of the [Evaluation Framework](#)
- ▶ Teacher first proposals of items, part of tests, and whole tests
- ▶ INVALSI experts select on qualitative basis in relation to the Evaluation Framework best items or tests
- ▶ Pre-test of the selected items on national samples
- ▶ Evaluation of pre-test results
- ▶ Booklet definition and composition

The NES design

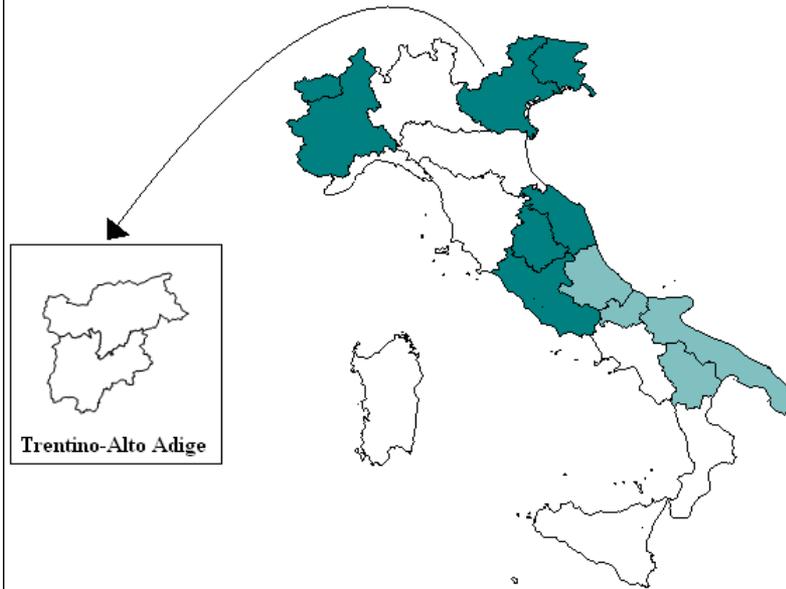
- ▶ Participation to the NES is compulsory
- ▶ NES is a census survey
- ▶ NES tests are usually administered by school teachers
- ▶ For a definition of benchmarks a nested sample (level 1: schools, levels 2: classes) is selected
- ▶ Samples (one for each grade) are representative:
 - ▶ at regional level
 - ▶ for school tracks (only for the 10th grade, because with the 8th grade in Italy ends the so called *common* school)
 - ▶ In the sample-classes tests are administered by external teachers or school principals selected by INVALSI. They also score tests and upload on the INVALSI website tests results within a week from test administration.

- Classical Test Theory
- Item Response Theory

Some examples from NES results

Summary

Liv 5: prova di ITALIANO

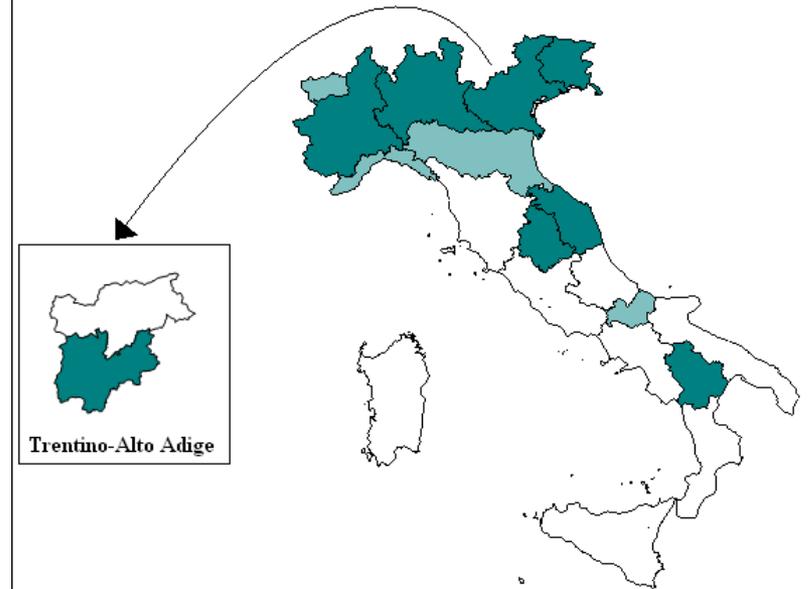


Trentino-Alto Adige

Media regionale degli esiti

- significativamente MAGGIORE della media nazionale
- NON significativamente MAGGIORE della media nazionale
- MINORE o UGUALE alla media nazionale

Liv 5: prova di MATEMATICA



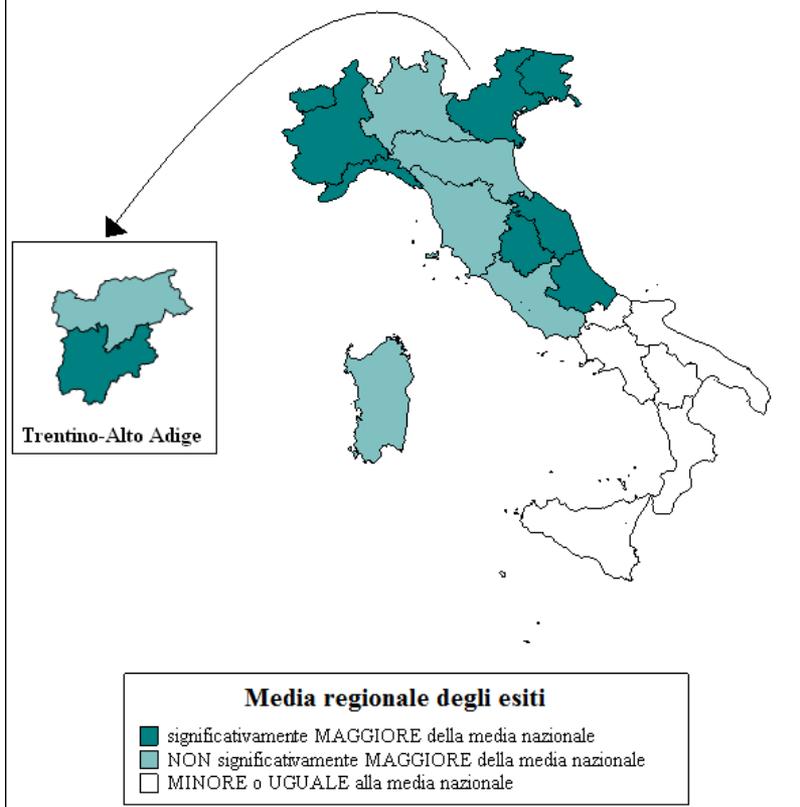
Trentino-Alto Adige

Media regionale degli esiti

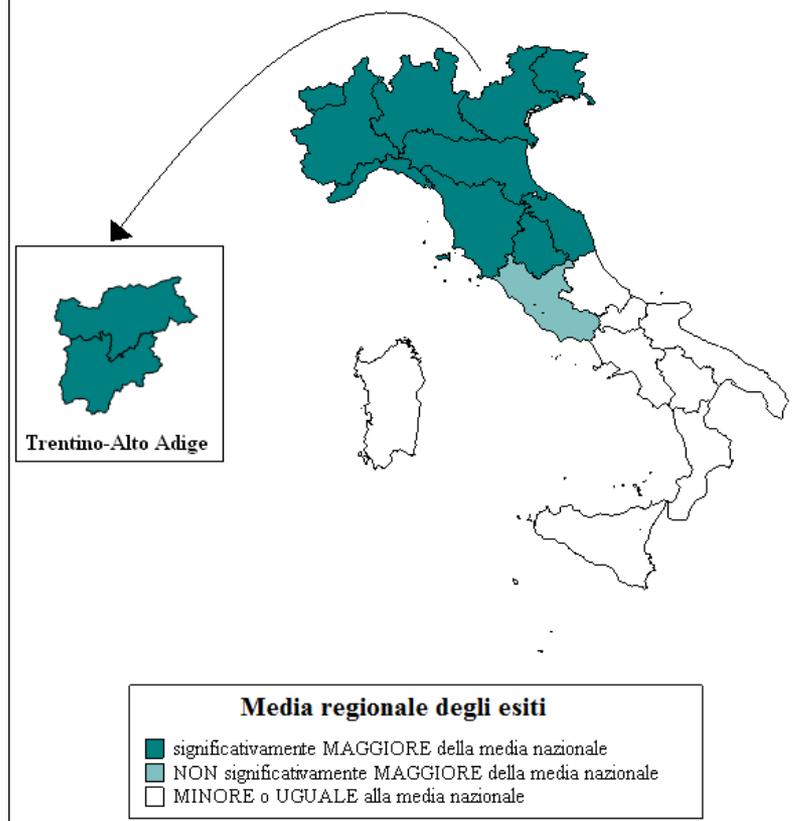
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Summary

Liv 8: prova di ITALIANO

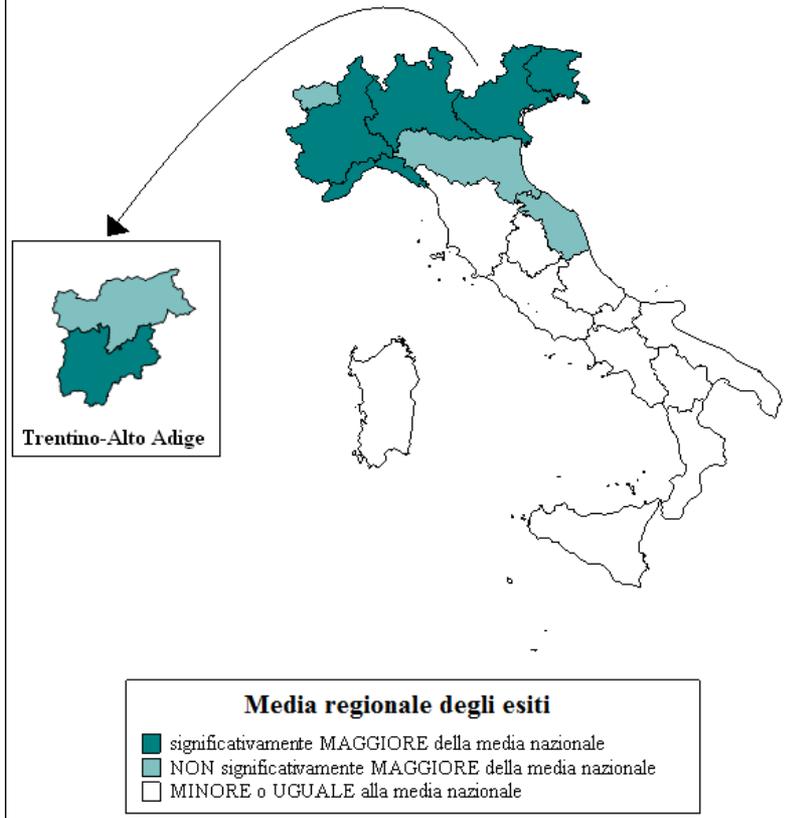


Liv 8: prova di MATEMATICA

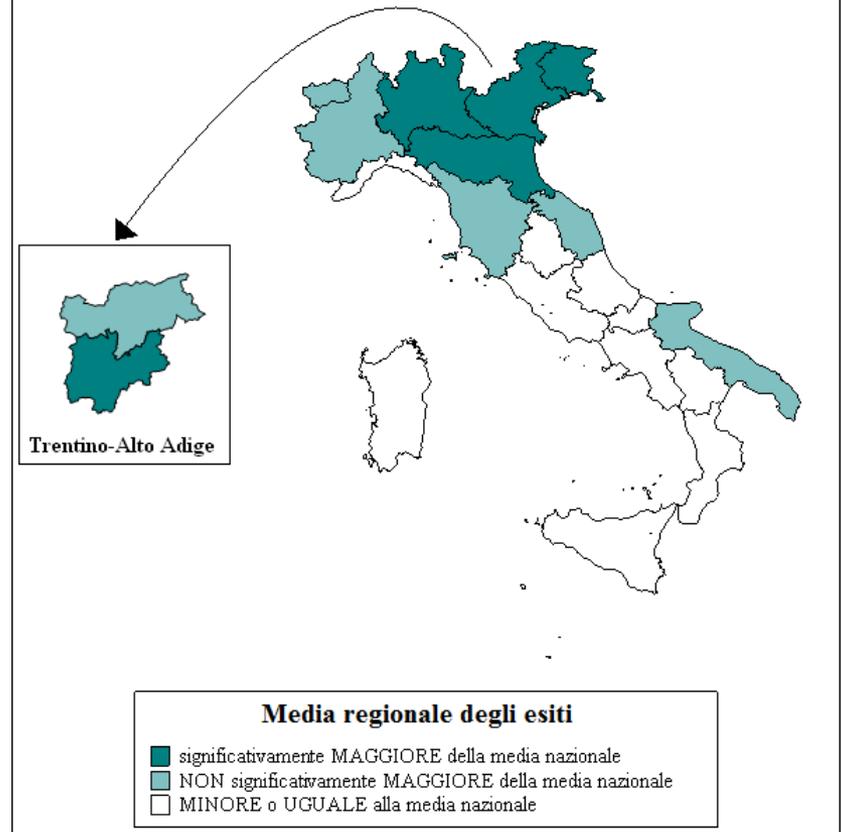


Summary

Liv 10: prova di ITALIANO

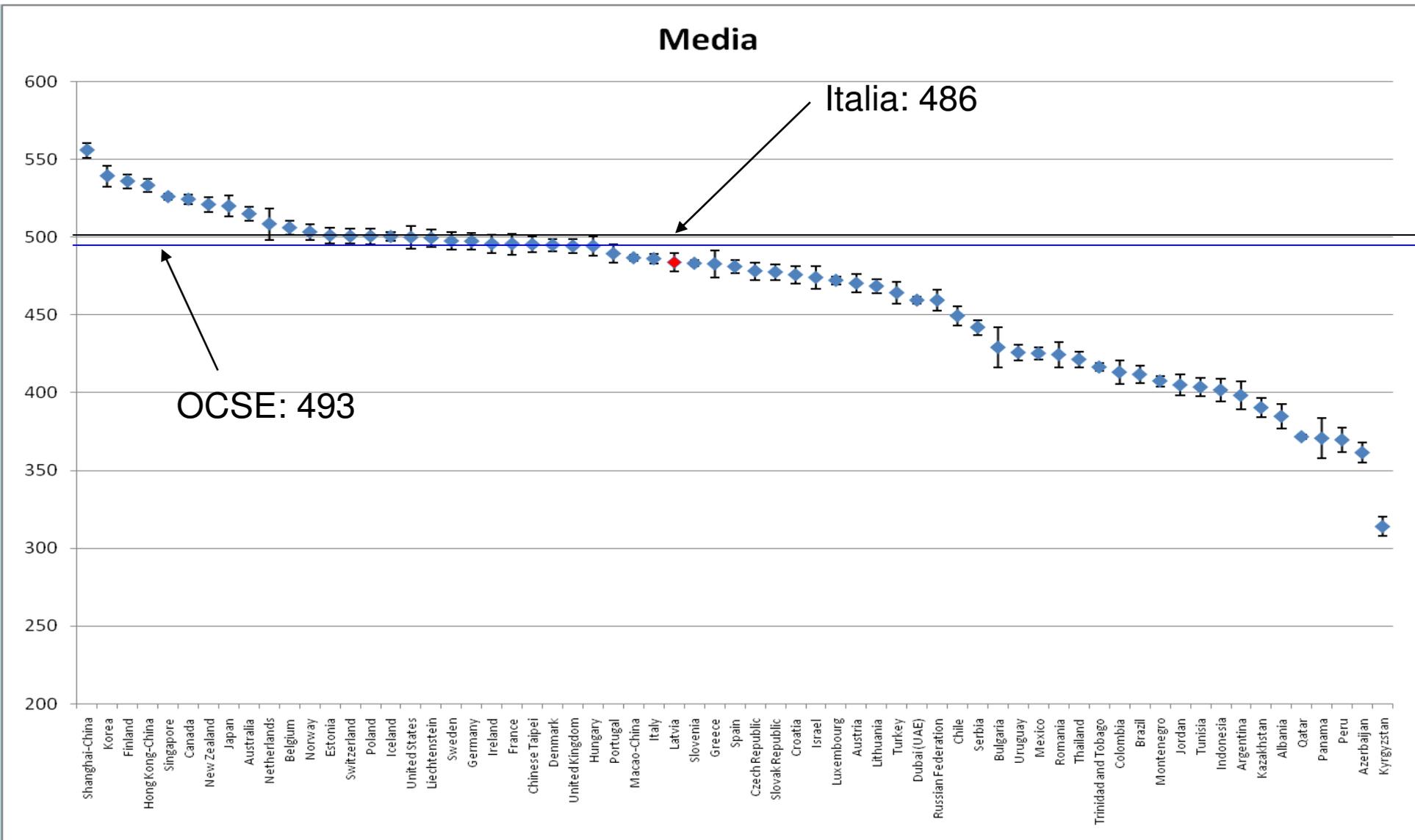


Liv 10: prova di MATEMATICA



Some examples from PISA 2009 results

Average score in Reading international comparison



Differences in Reading among Geographical areas

