- A european model / presentation_anders_Hingel
- IEA's TIMSS and PIRLS: a bridge to school improvement / presentation_michael_Martin_Ina_Mullis
- PISA assessments of student skills / presentation_andreas_Schleider
- Testing times: changes to national testing in England / presentation_bertrand_Lorna
- Assessment of student skills in Denmark / presentation_steen_Harbild
- What role could the european community and the european countries play to fuel the reflection in the field of international survey of pupils'assessment / presentation_pierre_Vrignaud
- Conclusions du rapporteur Jean-Claude Emin / conclusion_jean-claude_Emin

Education and Culture

French EU Presidency Conference

International Comparison of education systems: A European model

Paris, 13th and 14thNovember 2008

Anders J. Hingel
DG Education and Training
European Commission

EUROPEAN STATISTICAL INFRASTRUCTURE FOR COMPARATIVE DATA ON EDUCATION AND TRAINING

1959 Eurostat - European Statistical system

1975 Cedefop

1980 Eurydice

1990 European Training Foundation (ETF)

EU POLICY FRAMEWORK FOR THE USE AND DEVELOPMENT OF INDICATORS IN THE FIELD OF LIFELONG LEARNING

2000	Lisbon conclusions - Open Method of Coordination – Monitoring progress and performance
2002	Objectives in education and training 2010
2002	First meeting of the Standing Group on Indicators and benchmarks (25th meeting yesterday !)
2003	Five Benchmark for 2010 in Education and Training
2004	First Progress Report based on Indicators and Benchmarks (2004, 2005, 2006, 2007, 2008)
2004	Development of new indicators
2005/06	CRELL research centre on Lifelong Learning
2007	Coherent framework of indicators and benchmarks

A EUROPEAN MODEL !

The development of a
comprehensive European tool of indicators and benchmarks
to support
comparative monitoring of progress and performance
of
education and training systems in Europe
within a
Lifelong-learning and worldwide perspective

Reference framework of 8 key competencies

EU Recommendation of the EP and the Council (Dec. 2006)

Communication in the mother tongue	PISA | PIRLS
Communication in foreign languages	SURVEYLANG
Math, science and technology competence	PISA | TIMSS
Digital competence	SITES | PIAAC
Learning to learn competences	« LtoL »
Social and civic competences	ICCS
Sense of initiative and entrepreneurship	CREATIVITY
Cultural awareness and expression	CREATIVITY

Monitoring and Analysing Progress

FIVE EUROPEAN BENCHMARKS FOR 2010

10% Early school leavers (young people)
20 % less low performers in reading literacy (15 years old)
15% more new Math, Science and Technology graduates
85 % Upper secondary graduates (young people)
12.5% Lifelong learning participation (adults)

SIXTEEN

1. Participation in pre-school education
2. Special needs education
3. Early school leavers
4. Literacy in reading, maths and science
5. Language skills
6. ICT skills
7. Civic skills
8. Learning to learn skills

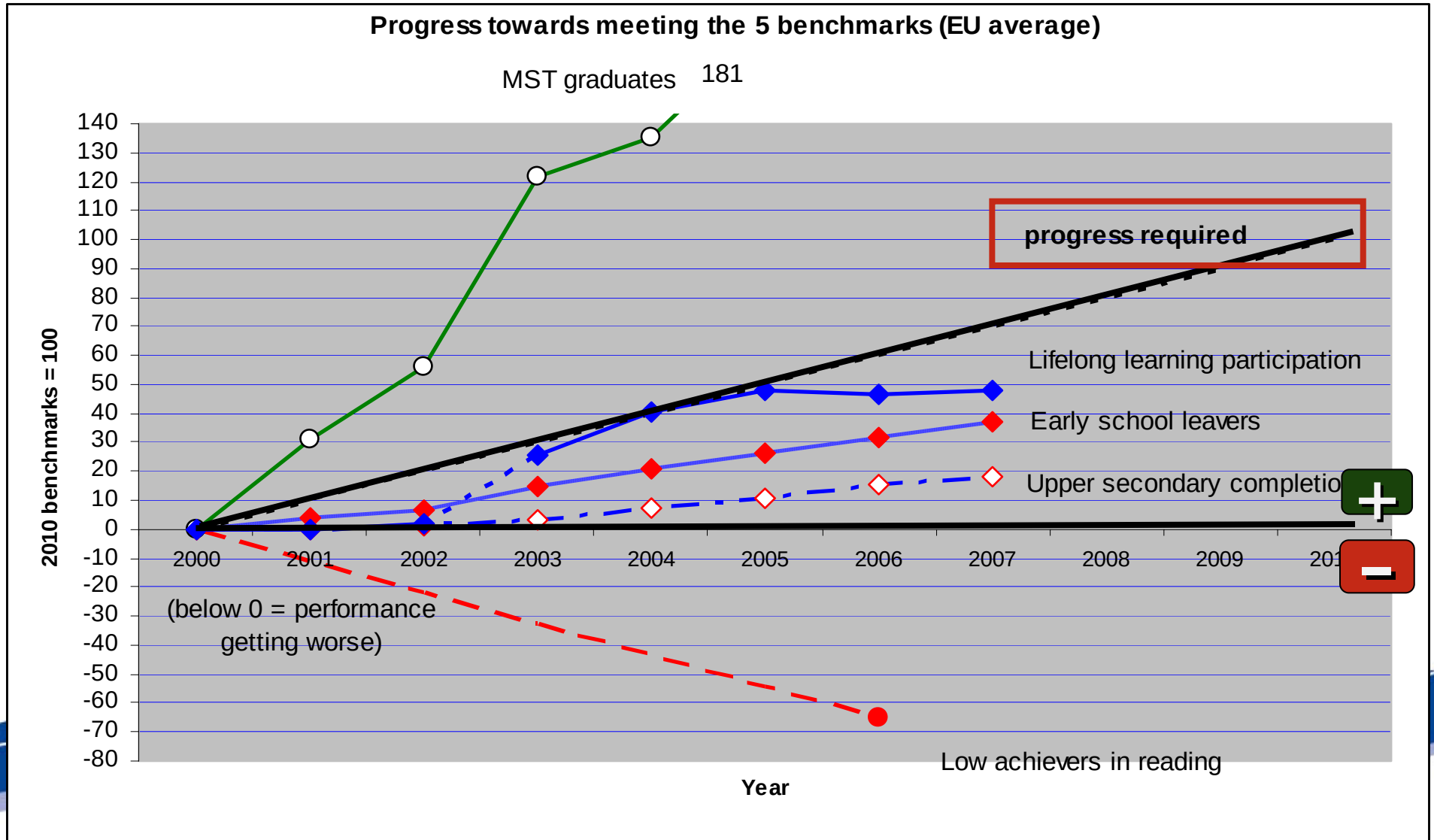
And other objectives:

- ❖ 90 % participation in pre-school education
- ❖ Mastering at least two foreign languages
- ❖ Significant yearly increase of investment in human resources

Annual Progress Report

1. Making lifelong learning a reality
2. Developing school education
3. Developing vocational education and training
4. Developing higher education
5. Key competences for lifelong learning
6. Improving equity in education and training
7. Employability
8. Investment in education and training

Progress of performance
Five European Benchmarks
for 2010



Coherent framework of indicators and benchmarks
Data sources

LFS UOE CVTS 3 AES ICT survey	Attainment, participation Mobility, financing, graduates VET Self reported skills (adults) Self reported ICT skills
PISA survey TALIS survey PIAAC survey	Maths, reading ,science skills Teacher professional dev. Adult skills
ICCS survey	Civic skills
Surveylang LtoL survey	Language skills Learning to learn skills

New data/ New indicators !

Teachers professional development	2009
Civic skills	2010
Language skills	2012
Adult skills	2013
Learning to Learn	?
Creativity	??

Secondary analysis of international survey data - many needs !

Tracking and disparities	Teacher/trainer support
Instruction time / homework	Investment
Socio-economic background	Migrant background
Student motivation	Informal learning
Gender differences	Special education needs
School autonomy	Student assessments
School evaluation	School climate
School resources	Adult learning
Support of parents	ICT
…….	

Education and Training
post 2010 workprogramme

Future Coherence of the framework of indicators and benchmarks

Next step :

Commission Communication (end 2008)

« An updated strategic framework for European cooperation in Eduction and Training »

Education and Culture

Thank you for your attention !

The Progress Report on Education and Training (2008) is available in the conference room

…. and on the web.

http://ec.europa.eu/education/policies/2010/progressreport_en.html

Building on 50 Years of International Comparisons

IEA's TIMSS & PIRLS
A Bridge to School Improvement

Michael O. Martin and Ina V.S. Mullis, Executive Directors
TIMSS & PIRLS International Study Center
Boston College

Comparaison Internationale
des Systèmes Éducatifs:
Un Modèle Européen?
Paris, 13 et 14 novembre 2008

What Is IEA?

- IEA - International Association for the Evaluation of Educational Achievement
- IEA is an independent, international cooperative of national research institutions and governmental research agencies
- IEA has been pioneering international student assessment for 50 years
- IEA's Mission: Provide Internationally Comparable Data of High Quality for Improving Education

What Are IEA's TIMSS and PIRLS?

International Assessments of Educational Achievement

TIMSS

- Mathematics and science
- Fourth and eighth grades

PIRLS

- Reading
- Fourth grade

Why TIMSS and PIRLS?

- Monitor progress in students' educational achievement in mathematics, science, and reading over time and across grades
- Provide comparative information about trends in educational achievement across countries in relation to efforts to improve teaching and learning
  - Monitor curricular implementation and effectiveness
  - Identify most promising instructional practices

Trends Over Time

Grade 4

- TIMSS in 1995, 2003, 2007, 2011…
- PIRLS in 2001, 2006, 2011…

Grade 8

- TIMSS in 1995, 1999, 2003, 2007, 2011…

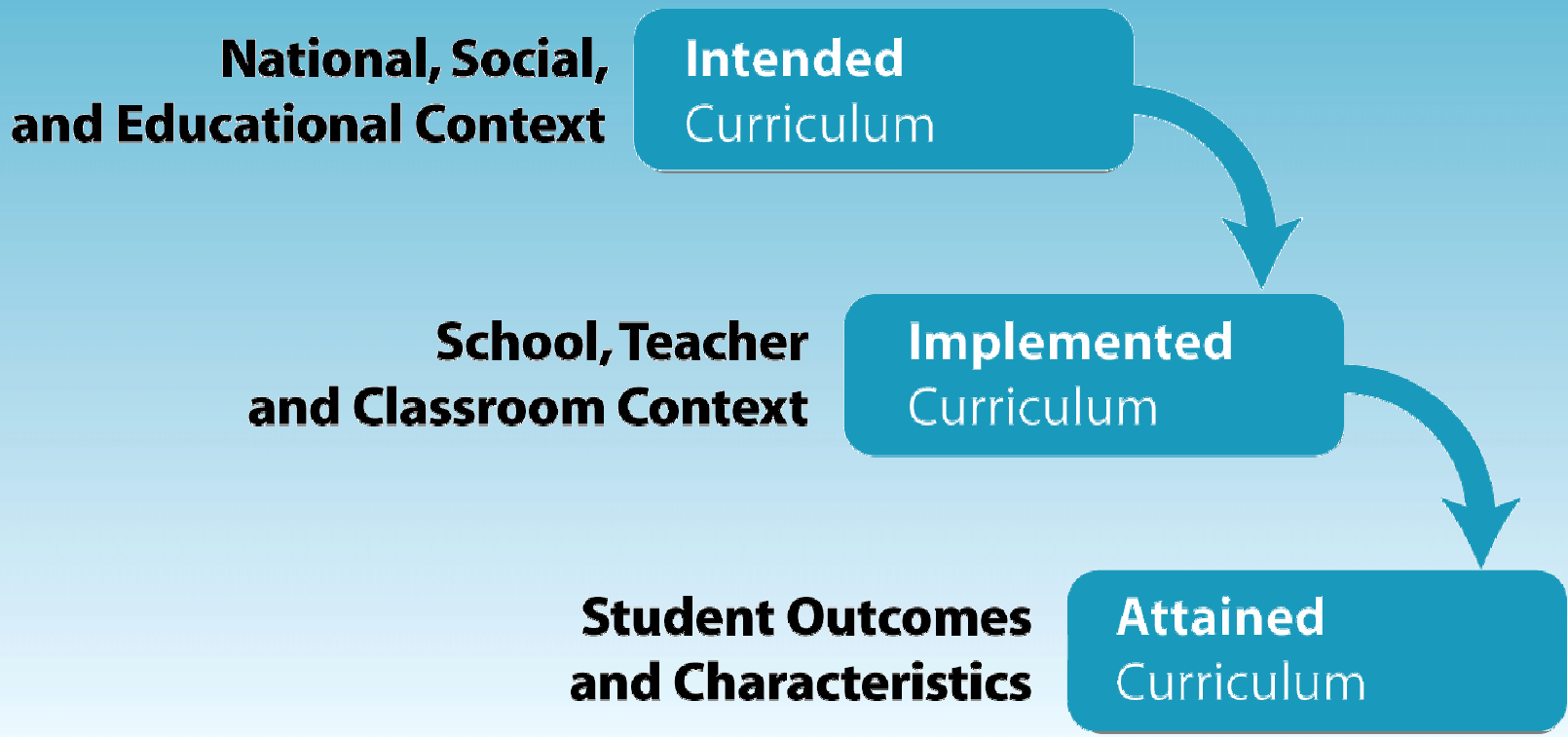
Grade 12

- TIMSS Advanced in 1995, 2008…

Benefits of TIMSS and PIRLS

- Focuses on the quality of educational achievement internationally
  - Provides international benchmarks describing levels of student proficiency
- Provides policymakers with strategic contextual information
  - Can monitor reforms over time
- Fosters capacity building in a collaborative environment

IEA's Curriculum Model: An Educational Perspective on Educational Issues



What Data Are Collected?

Intended Curriculum

- Participating countries, curriculum experts
- Routinely published in Encyclopedia

Implemented Curriculum

- Teachers and principals of participating students
- The students themselves

Attained Curriculum

- The mathematics, science, and reading tests
- Routinely published in International Reports

Comprehensive Content Coverage

TIMSS 2007 Mathematics

Grade 4 – 179 items (192 score points)

- Number (50%)
- Geometric shapes and measures (35%)
- Data display (15%)

Grade 8 – 215 items (238 score points)

- Number (30%)
- Algebra (30%)
- Geometry (20%)
- Data and chance (20%)

Comprehensive Content Coverage

TIMSS 2007 Science

Grade 4 – 174 items (194 score points)

- Life science (45%)
- Physical science (35%)
- Earth science (20%)

Grade 8 – 212 items (240 score points)

- Biology (35%)
- Chemistry (20%)
- Physics (25%)
- Earth science (20%)

Scope of TIMSS 2007

Total Assessment Time

Grade 4 - 8½ hours

Grade 8 - 10½ hours

Assessment Time per Student

Grade 4 - 72 Minutes (two 36-minute sessions with break)

Grade 8 - 90 Minutes (two 45-minute sessions with break)

Booklet Design (14 booklets)

Two blocks per session

Two math and two science blocks per student

Mathematics and Science Cognitive Domains – TIMSS 2007 Grades 4 & 8

Reasoning (20-30%)

- Analyze, integrate/synthesize, generalize, hypothesize/predict, draw conclusions, justify, solve non-routine problems and conduct investigations

Applying (35-40%)

- Compare/contrast, model, represent, use relationships and concepts to solve problems

Knowing (30-40%)

- Recall, recognize, classify, define, measure

Comprehensive Coverage

PIRLS 2011 Framework – Grade 4

Purposes for Reading

- Reading for Literary Experience (50%)
- Reading to Acquire and Use Information (50%)

Processes of Comprehension

- Retrieve explicitly stated information (20%)
- Make straightforward inferences (30%)
- Interpret and integrate ideas and information (30%)
- Examine and evaluate textual elements (20%)

Scope of PIRLS 2011 Assessment

Reading Comprehension Assessment

- 10 Passages
  - 5 literary, 5 informational
- 130 Items (approx.)
  - 50% constructed response

New Initiatives

- Web-based reading
- prePIRLS

Scope of PIRLS 2011 Assessment

Total Assessment Time

- 6 hours, 40 minutes

Assessment Time per Student

- 80 minutes (two 40-minute sessions with break)

Booklet Design (13 booklets)

- Two passages, one per session

Comprehensive Background Information About Contexts for Teaching and Learning

Questionnaires:

- Country – intended curriculum
- Student – home and classroom experience
- Teacher – implemented curriculum, education and preparation, instructional practices
- School – climate, resources, composition
- Parent (PIRLS) – early literacy activities, home resources, parental attitudes toward reading

Ensuring Comparative Validity in TIMSS and PIRLS

- Are the tests appropriate?
- Are target populations comparable?
- Was sampling conducted properly?
- Are translations comparable?
- Were the tests administered appropriately?
- Was scoring done correctly?
- Are the data comparable?

Widespread Participation

TIMSS 2007 Grade 8

- 50 Countries
- 242,000 Students

TIMSS 2007 Grade 4

- 37 Countries
- 183,000 Students

PIRLS 2011 Grade 4

- 55 Countries (expected)
- 300,000 Students (approx.)

What Has Been Learned…

Different countries use different approaches but an effective educational system always requires enormous effort

- High percentages of students completing high school, and taking advanced courses
- Students ready to learn
- A rigorous and progressive curriculum
- Resources for facilities and materials
- Well-prepared teachers
- Education valued by society

PIRLS & TIMSS *in* 2011

A Unique Opportunity for International Assessment at the Fourth Grade

IEA's PIRLS and TIMSS international assessments both will be conducted in 2011, providing countries with:

- At fourth grade, one comprehensive assessment of three essential subjects – reading, mathematics, and science
- At eighth grade, the fifth TIMSS mathematics and science assessments, the latest in a series that has been conducted every 4 years since 1995
- For both grades, a rich array of contextual background information for improving teaching and learning

TIMSS & PIRLS
International Study Center
Lynch School of Education, Boston College

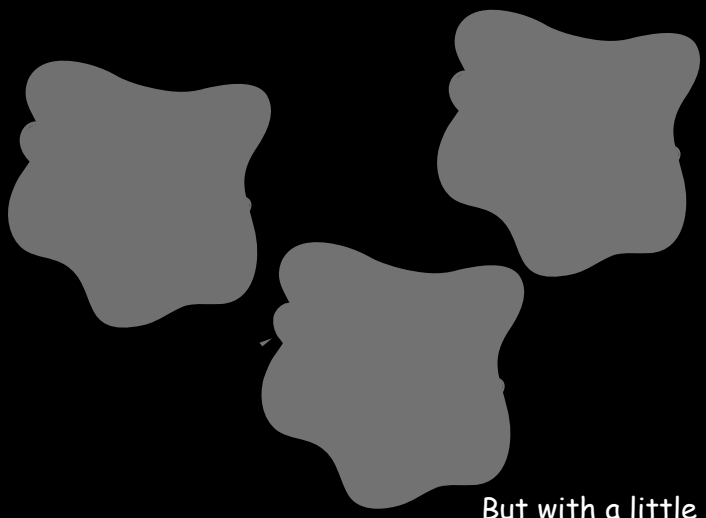
PISA assessments of student skills

Seeing education systems through the prism of international comparisoins

French presidency of the European Union, Paris, 13 November 2008

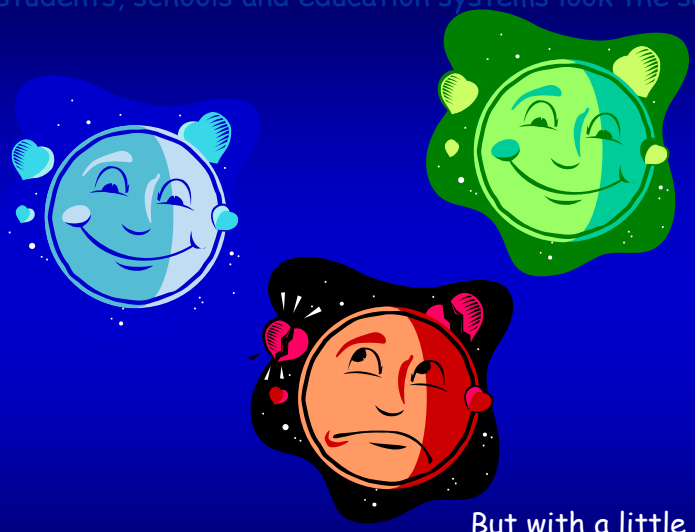
Andreas Schleicher
Head, Indicators and Analysis Division
OECD Directorate for Education

In the dark…
…all students, schools and cultures look the same…



But with a little light….

In the dark…
…all students, schools and education systems look the same…

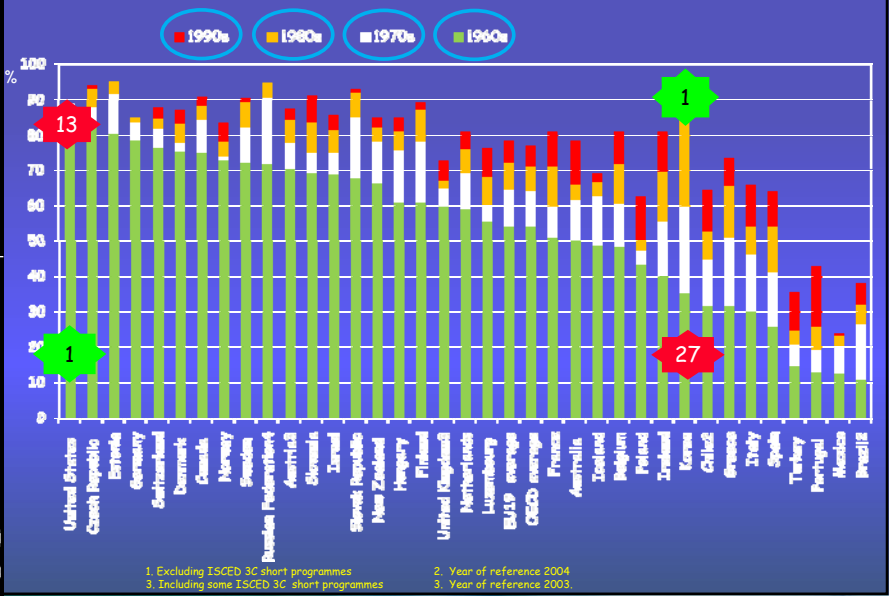


But with a little light….
…important differences become apparent….

There is nowhere to hide
How the global talent pool has changed
Measuring improvement in a changing world

A world of change in baseline qualifications

Approximated by percentage of persons with high school or equivalent qualfications in the age groups 55-64, 45-55, 45-44 und 25-34 years



1. Excluding ISCED 3C short programmes
3. Including some ISCED 3C short programmes
2. Year of reference 2004
3. Year of reference 2003.

PISA

OECD's three-yearly global assessments…

… examine the performance of 15-year-olds in key subject areas as well as a wider range of educational outcomes

- Including students attitudes to learning and their learning behaviour

… collect contextual data from…

… students, parents, schools and systems…

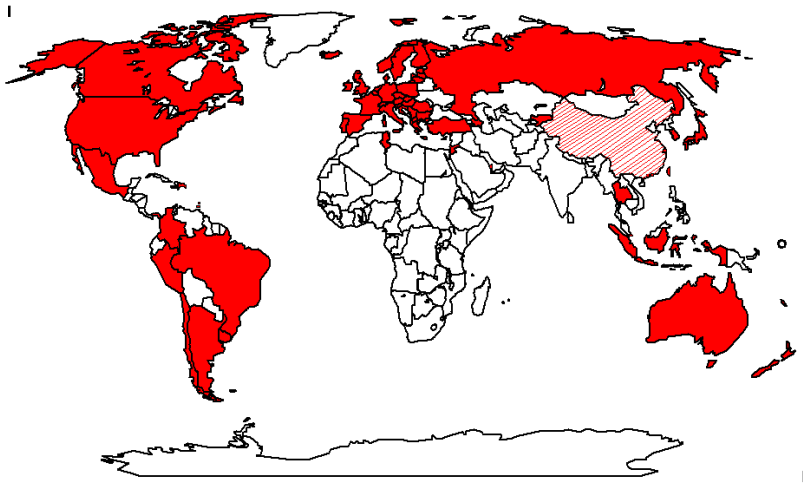
… in order to identify policy levers shaping learning outcomes

Coverage

- Representative samples of between 3,500 and 50,000 15-year-old students drawn in each country
- Most federal countries also draw state-level samples

OECD's PISA assessment of the knowledge and skills of 15-year-olds

Coverage of world economy 87%



What can PISA contribute

- Comparative assessments of learning outcomes…
  - Can show what is possible in education and thus help optimise existing policies and to reflect on a more fundamental transformation of the paradigms and beliefs underlying current policies
  - Can help setting policy targets in terms of measurable goals achieved by other systems and help to establish trajectories for reform
  - Can assist with gauging the pace of educational progress and help reviewing the reality of educational delivery at the frontline
  - Can support the political economy of reform

Deciding what to assess...

looking back at what students were expected to have learned

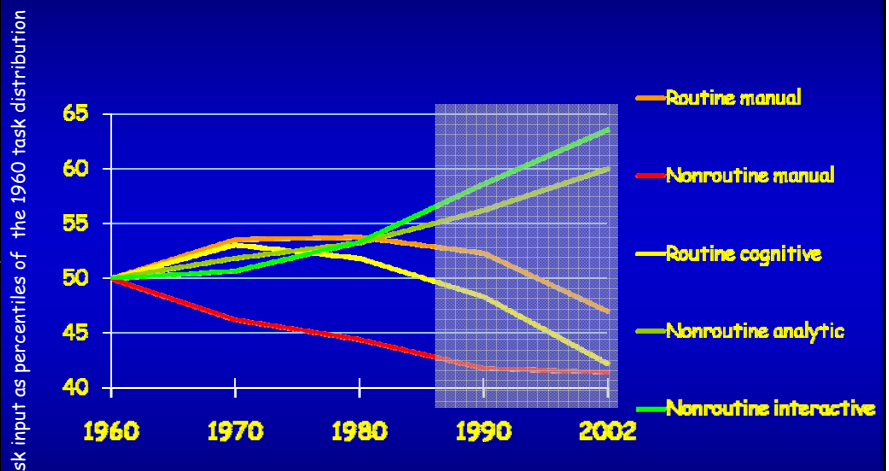
...or...

looking ahead to how well they can extrapolate from what they have learned and apply their knowledge and skills in novel settings.

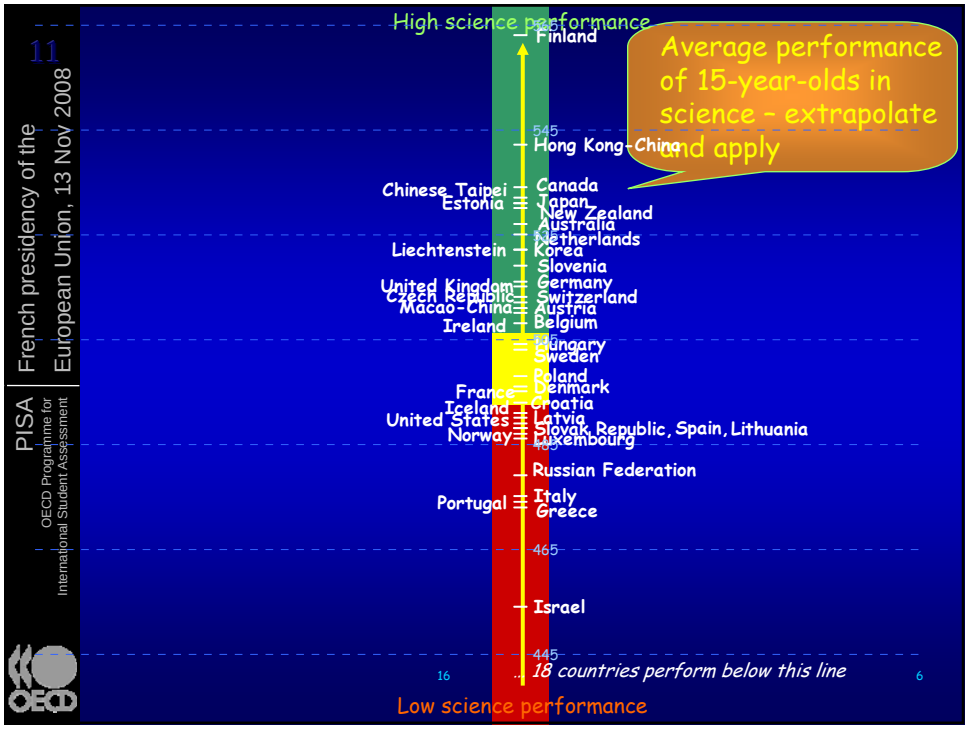
For PISA, the OECD countries chose the latter.

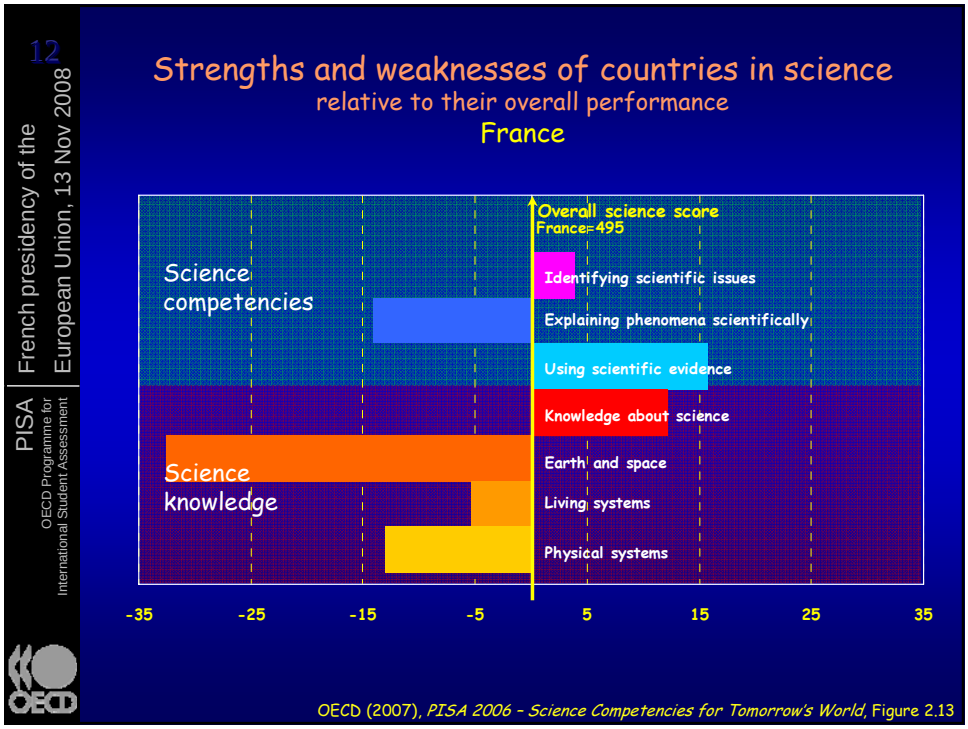
How the demand for skills has changed

Economy-wide measures of routine and non-routine task input (US)



(Levy and Murnane)


11
French presidency of the European Union, 13 Nov 2008
PISA
OECD Programme for International Student Assessment
High science performance
Finland
Average performance of 15-year-olds in science – extrapolate and apply
545
Hong Kong-China
Canada
Chinese Taipei
Estonia
Japan
New Zealand
Australia
Netherlands
Liechtenstein
Korea
Slovenia
Germany
United Kingdom
Czech Republic
Switzerland
Macao-China
Austria
Ireland
Belgium
Hungary
Sweden
Poland
Denmark
France
Croatia
Iceland
Latvia
United States
Slovak Republic, Spain, Lithuania
Norway
Luxembourg
Russian Federation
Italy
Portugal
Greece
465
Israel
445
18 countries perform below this line
16
6
Low science performance


12
French presidency of the European Union, 13 Nov 2008
PISA
OECD Programme for International Student Assessment
Strengths and weaknesses of countries in science
relative to their overall performance
France
Overall science score
France=495
Science competencies
Identifying scientific issues
Explaining phenomena scientifically
Using scientific evidence
Knowledge about science
Science knowledge
Earth and space
Living systems
Physical systems
-35
-25
-15
-5
5
15
25
35
OECD (2007), PISA 2006 – Science Competencies for Tomorrow's World, Figure 2.13

13

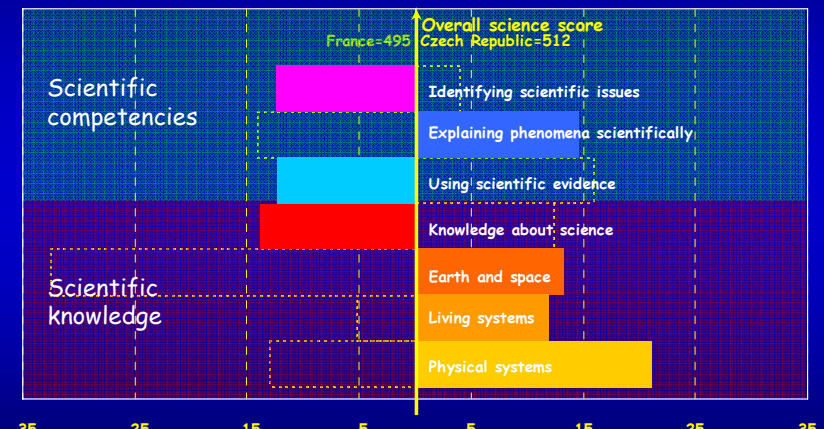
French presidency of the European Union, 13 Nov 2008

PISA OECD Programme for International Student Assessment

Strengths and weaknesses of countries in science

relative to their overall performance

Czech Republic



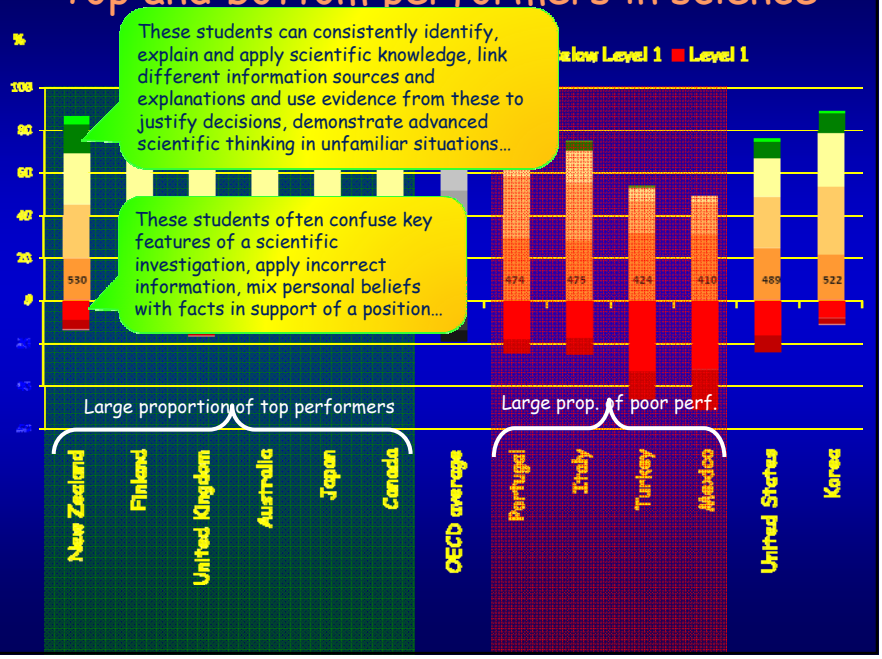
OECD (2007), *PISA 2006 – Science Competencies for Tomorrow's World*, Figure 2.13

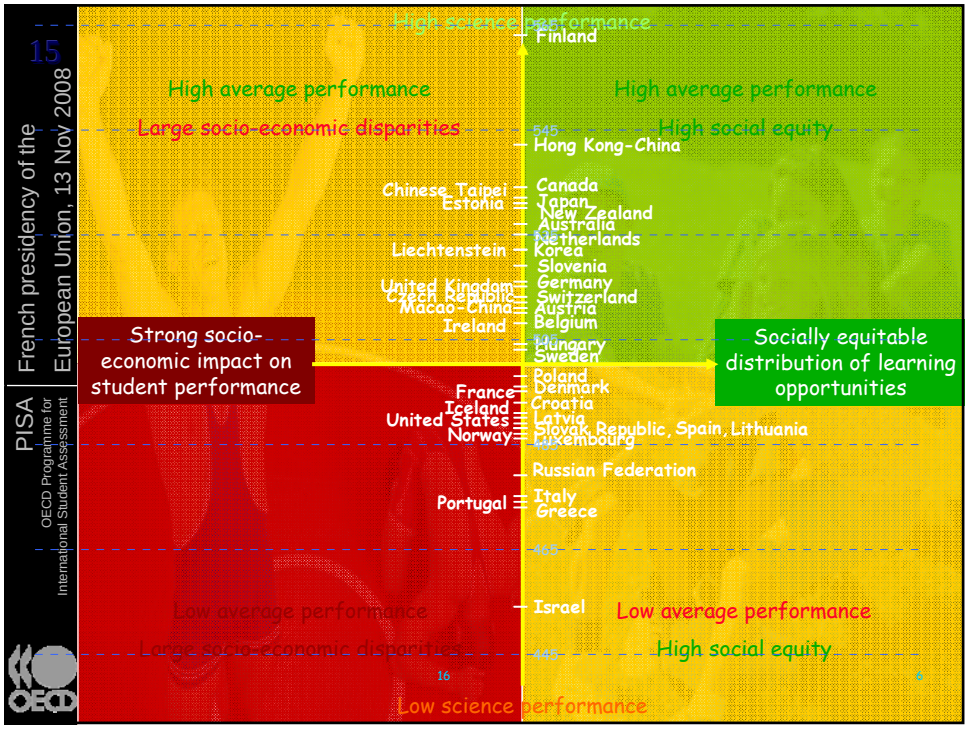
14

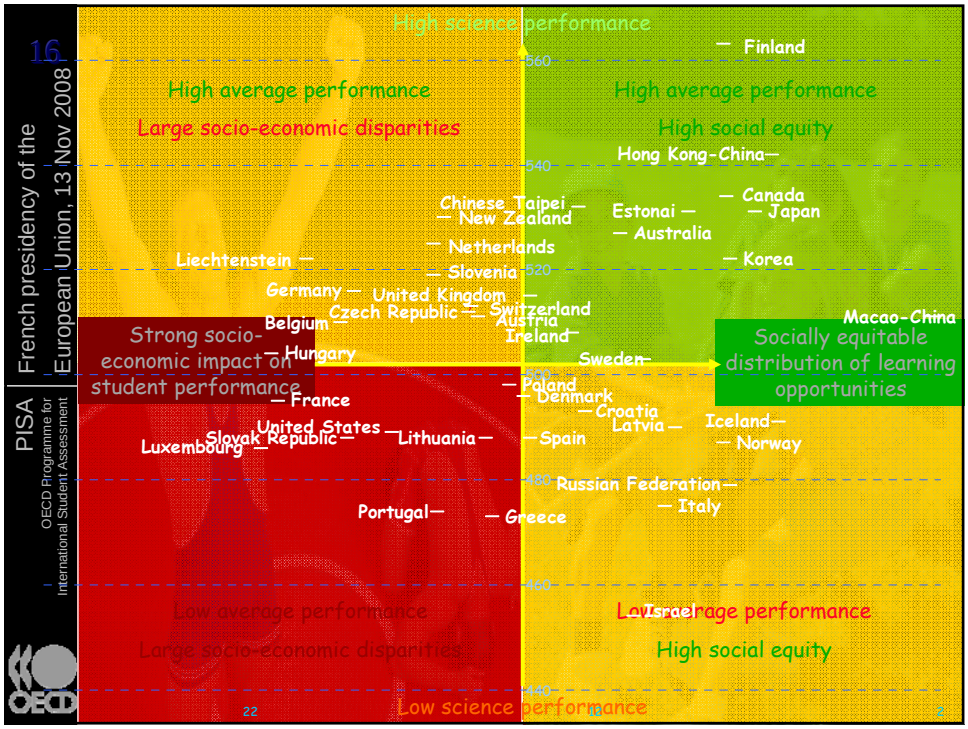
French presidency of the European Union, 13 Nov 2008

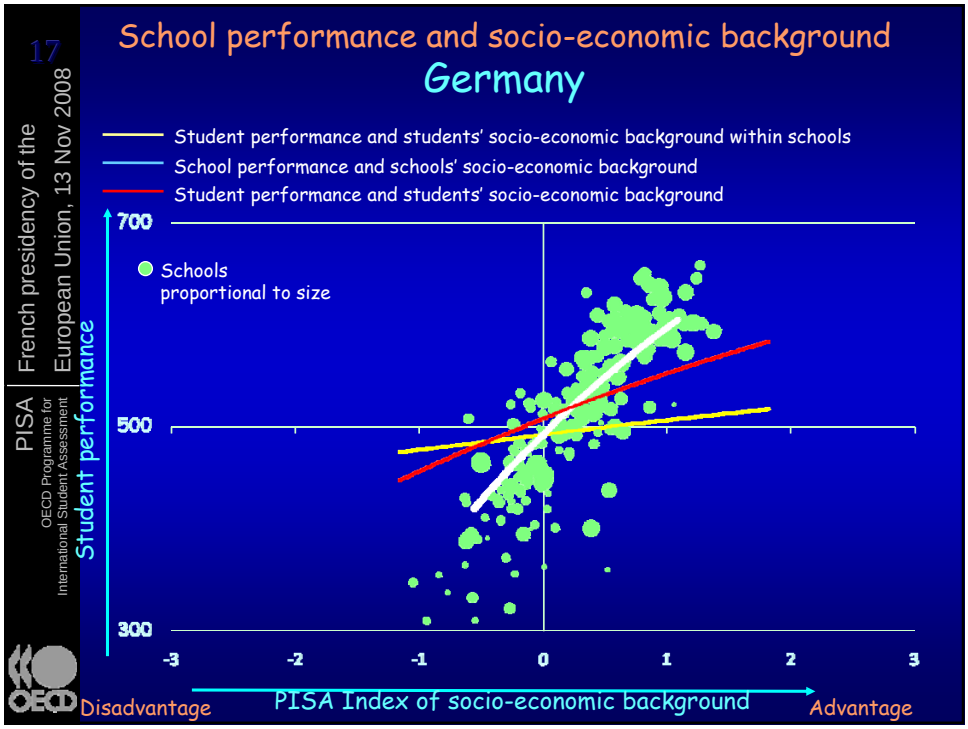
PISA OECD Programme for International Student Assessment

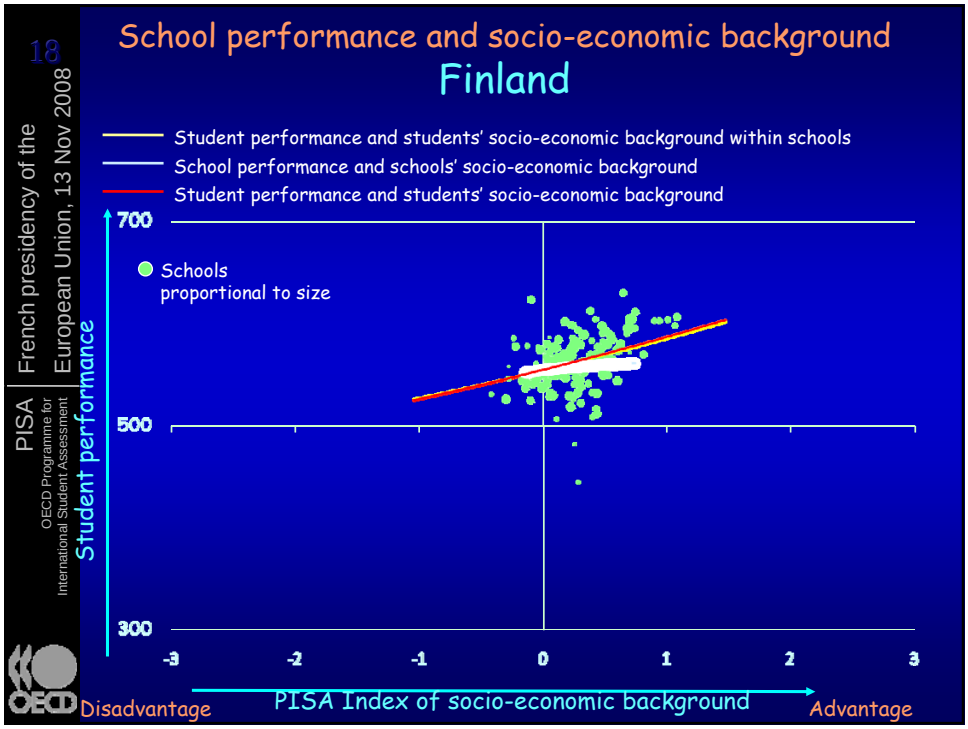
Top and bottom performers in science

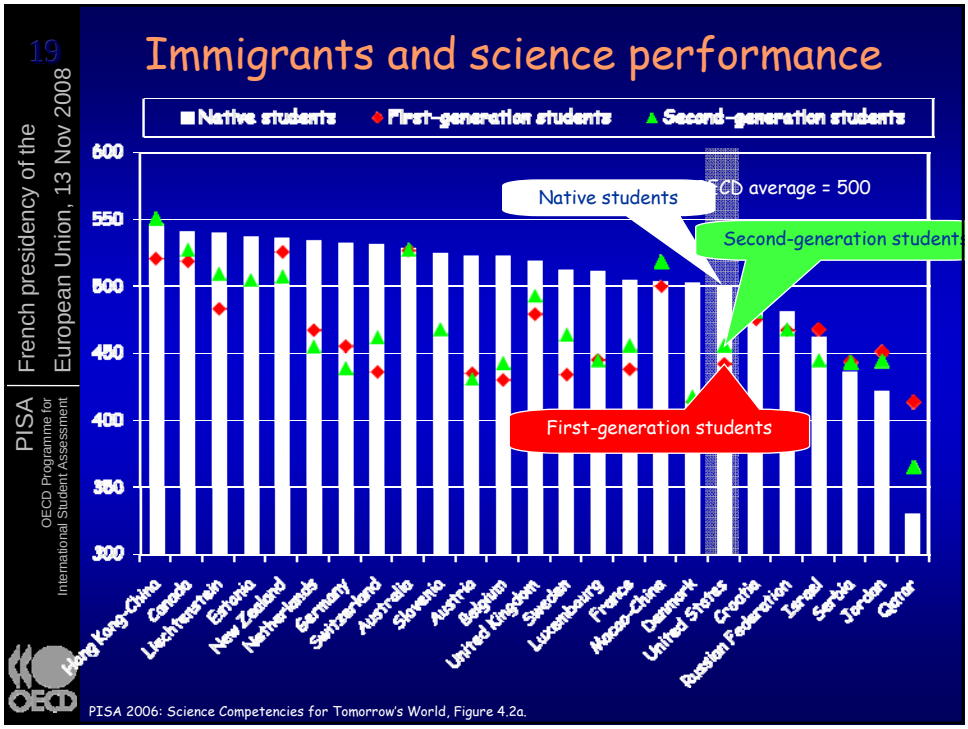


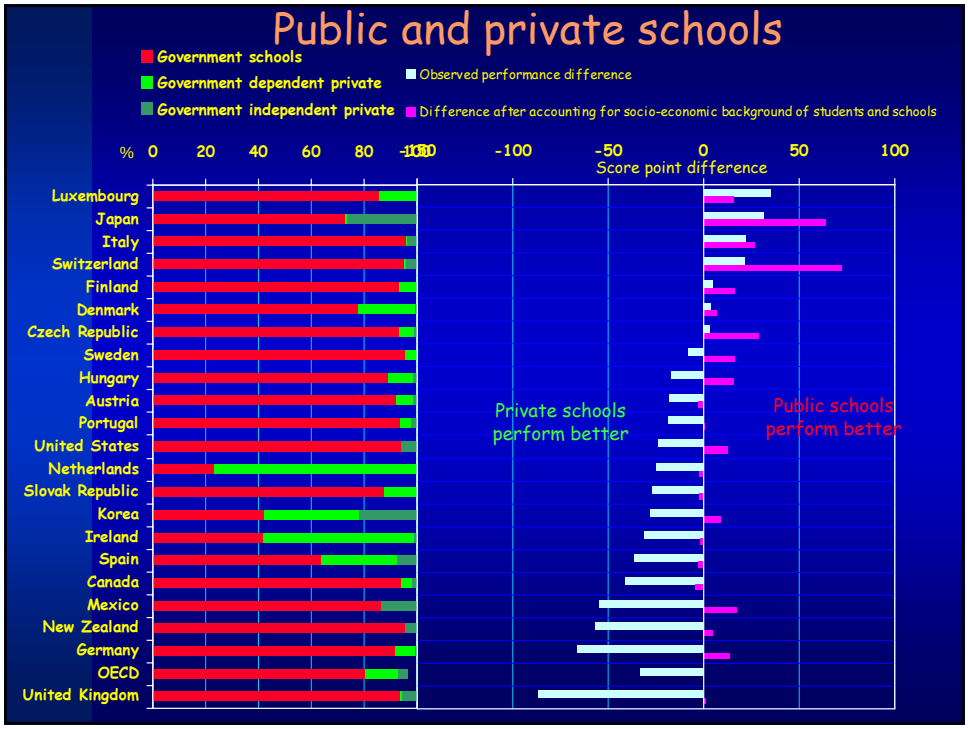

15
French presidency of the European Union, 13 Nov 2008
PISA
OECD Programme for International Student Assessment
High science performance
Finland
High average performance
Large socio-economic disparities
High average performance
High social equity
545
Hong Kong-China
Chinese Taipei
Canada
Estonia
Japan
New Zealand
Australia
Netherlands
Liechtenstein
Korea
Slovenia
United Kingdom
Germany
Czech Republic
Switzerland
Macao-China
Austria
Ireland
Belgium
Hungary
Sweden
Strong socio-economic impact on student performance
Socially equitable distribution of learning opportunities
Poland
Denmark
France
Croatia
Iceland
Latvia
United States
Slovak Republic, Spain, Lithuania
Norway
Luxembourg
Russian Federation
Portugal
Italy
Greece
465
Israel
Low average performance
High social equity
Low average performance
Large socio-economic disparities
445
16
8
Low science performance


16
French presidency of the European Union, 13 Nov 2008
PISA
OECD Programme for International Student Assessment
High science performance
Finland
560
High average performance
Large socio-economic disparities
High average performance
High social equity
Hong Kong-China
540
Canada
Chinese Taipei
Estonia
Japan
New Zealand
Australia
Netherlands
Korea
Liechtenstein
Slovenia
520
Germany
United Kingdom
Switzerland
Czech Republic
Macao-China
Belgium
Austria
Ireland
Strong socio-economic impact on student performance
Hungary
Sweden
Socially equitable distribution of learning opportunities
500
Poland
France
Denmark
Croatia
Latvia
Iceland
United States
Slovak Republic
Lithuania
Spain
Norway
Luxembourg
480
Russian Federation
Italy
Portugal
Greece
460
Low average performance
Large socio-economic disparities
Israel
Low average performance
High social equity
440
22
Low science performance

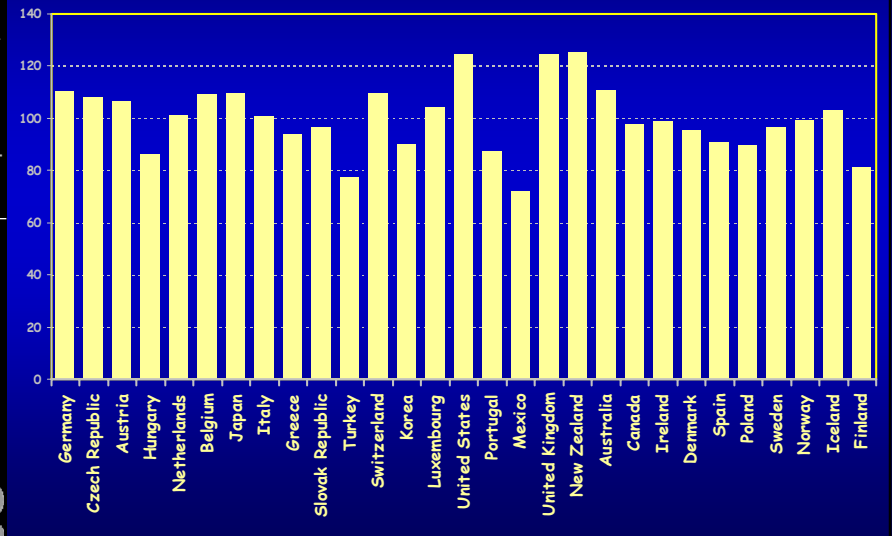

17
French presidency of the European Union, 13 Nov 2008
PISA
OECD Programme for International Student Assessment
School performance and socio-economic background
Germany
Student performance and students' socio-economic background within schools
School performance and schools' socio-economic background
Student performance and students' socio-economic background
Schools proportional to size
Student performance
700
500
300
-3
-2
-1
0
1
2
3
Disadvantage
PISA Index of socio-economic background
Advantage


18
French presidency of the European Union, 13 Nov 2008
PISA
OECD Programme for International Student Assessment
School performance and socio-economic background
Finland
Student performance and students' socio-economic background within schools
School performance and schools' socio-economic background
Student performance and students' socio-economic background
Schools proportional to size
Student performance
700
500
300
-3
-2
-1
0
1
2
3
Disadvantage
PISA Index of socio-economic background
Advantage


19
French presidency of the European Union, 13 Nov 2008
PISA
OECD Programme for International Student Assessment
Immigrants and science performance
Native students
First-generation students
Second-generation students
600
550
500
450
400
350
300
Native students
OECD average = 500
Second-generation students
First-generation students
Hong Kong-China
Canada
Liechtenstein
Estonia
New Zealand
Netherlands
Germany
Switzerland
Australia
Slovenia
Austria
Belgium
United Kingdom
Sweden
Luxembourg
France
Macao-China
Denmark
United States
Croatia
Russian Federation
Israel
Serbia
Jordan
Qatar
PISA 2006: Science Competencies for Tomorrow's World, Figure 4.2a.

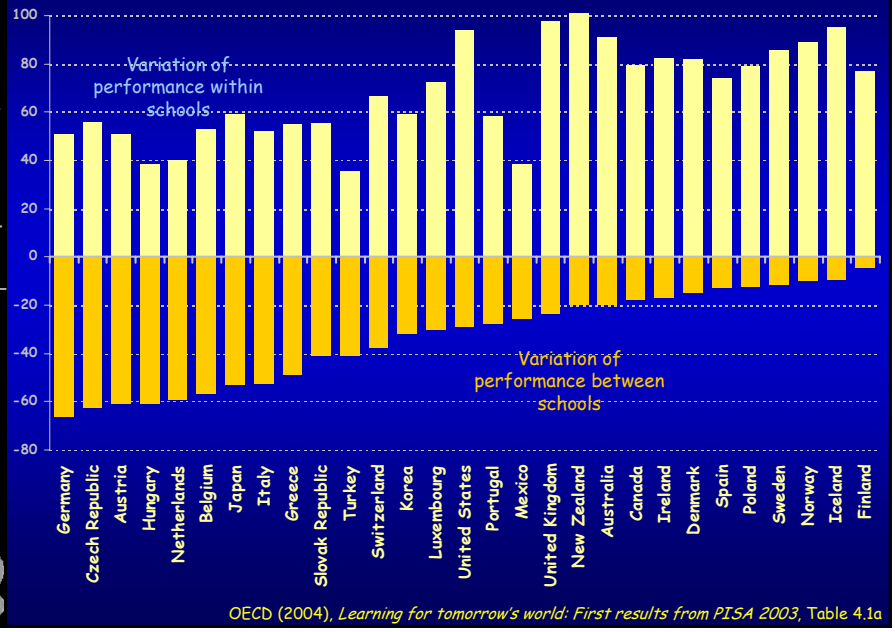

Public and private schools
Government schools
Government dependent private
Government independent private
Observed performance difference
Difference after accounting for socio-economic background of students and schools
% 0 20 40 60 80 100
-100 -50 0 50 100
Score point difference
Luxembourg
Japan
Italy
Switzerland
Finland
Denmark
Czech Republic
Sweden
Hungary
Austria
Portugal
United States
Netherlands
Slovak Republic
Korea
Ireland
Spain
Canada
Mexico
New Zealand
Germany
OECD
United Kingdom
Private schools perform better
Public schools perform better

Variation in student performance



OECD (2007), *Learning for tomorrow's world: First results from PISA 2006*, Table 4.1a

Variation in student performance

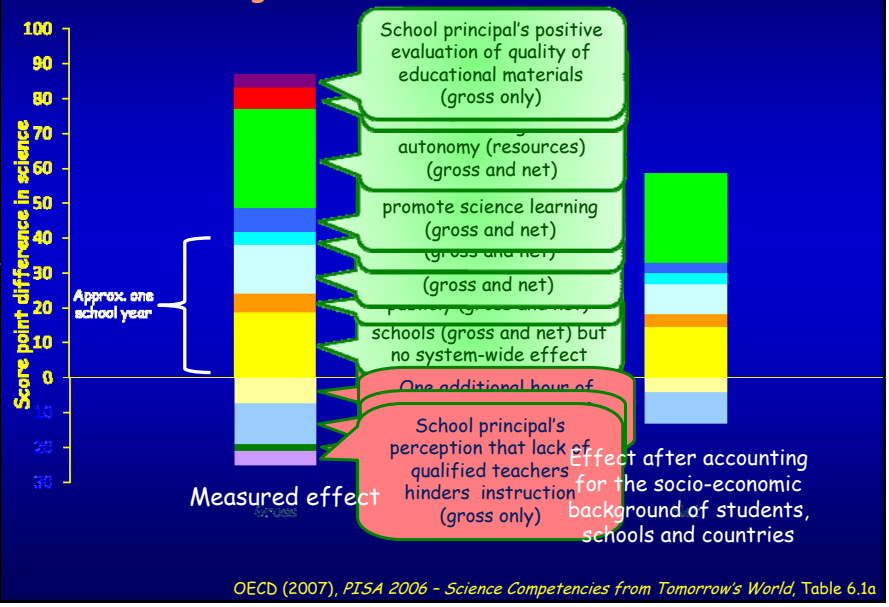


OECD (2004), *Learning for tomorrow's world: First results from PISA 2003*, Table 4.1a

OECD's PISA framework for assessment

		Domain 1	Domain 2	Domain 3
		Outputs and Outcomes impact of learning	**Policy Levers** shape educational outcomes	**Antecedents** contextualise or constrain ed policy
Level A	Individual learner	Quality and distribution of knowledge & skills	Individ attitudes, engagement and behaviour	Socio-economic background of learners
Level B	Instructional settings	Quality of instructional delivery	Teaching, learning practices and classroom climate	Student learning, teacher working conditions
Level C	Schools, other institutions	Output and performance of institutions	The learning environment at school	Community and school characteristics
Level D	Country or system	Social & economic outcomes of education	Structures, resource alloc and policies	National educ, social and economic context

Pooled international dataset, effects of selected school/system factors on science performance after accounting for all other factors in the model



OECD (2007), *PISA 2006 - Science Competencies from Tomorrow's World*, Table 6.1a

Future challenges

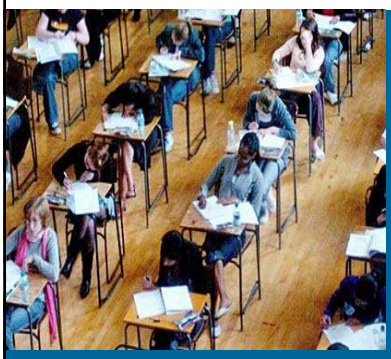
- Planned assessments
  - Learning outcomes at school 2009, 2012, 2015, 2018
  - Adult competencies 2011
- Broadening the range of competencies covered
  - Intra-personal dimensions
  - Inter-personal dimensions
- Measuring growth in learning outcomes
- Connecting learning outcomes with teaching policies and practices
- Bridging the gap between formative and summative assessments
  - Computer-delivered dynamic assessment tools
  - Adaptive assessment
  - Feeding student solution strategies back to learners and teachers .

- www.oecd.org; www.pisa.oecd.org
  - All national and international publications
  - The complete micro-level database
- email: pisa@oecd.org
- Andreas.Schleicher@OECD.org

Thank you !

... and remember:

Without data, you are just another person with an opinion



Testing times

Changes to national testing in England

Lorna Bertrand
International Evidence Manager
Department for Children, Schools and Families

department for
children, schools and families

Guiding principles

Our system of testing and assessment should:

- Give parents the information they need to compare different schools, choose the right school for their child and then track their child's progress.
- Enable head teachers and teachers to secure the progress of every child and their school as a whole, without unnecessary burdens or bureaucracy.
- Allow the public to hold national and local government and governing bodies to account for the performance of schools.

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National testing in England pre-Oct 2008

Key Stage 1

- Teacher assessments in reading, writing, speaking and listening, mathematics and science.
- Tasks and tests in reading, writing and mathematics.
- Schools publish their Key Stage 1 performance data.
- DCSF publishes national summary Key Stage 1 results but not school-level data.

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National testing in England pre-Oct 2008

Key Stages 2 and 3

- Tests in the core subjects of English, mathematics and science, and teacher assessments in core subjects at Key Stage 2, and in core and foundation subjects at Key Stage 3.
- Schools report teacher assessments alongside test results.
- No moderation arrangements for teacher assessments at these Key Stages as externally-marked tests provide the basis for assessing all pupils in the country on a consistent basis.

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National testing in England pre-Oct 2008

Age 16 and beyond

- General Certificate of Secondary Education (GCSE) and Advanced level (A level) qualifications are internationally respected qualifications at the heart of our assessment system at 16 and after.
- The GCSE is currently the principal means of assessing standards at the end of compulsory schooling at age 16.

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What has changed?

- Ending of Key Stage 3 testing regime in secondary schools with immediate effect.
- Introduction of a new School Report Card for all primary and secondary schools.

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Maintaining accountability

- Every parent will receive regular reports on their child's progress in years 7, 8 and 9 (KS3).
- Will continue to provide Key Stage 3 test papers to any schools that want to use them internally.
- Will ensure that schools properly focus in Year 7 and 8 on the progress of those children who did not reach the expected standard at Key Stage 2, with effective one-to-one tuition and catch-up learning.
- Will introduce an externally marked test, with a sample of pupils to measure national performance, so that the public can hold government to account.

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Impact on international comparisons studies

- Potential for a strengthened evidential role
  - TIMSS Grade 8 cohort = end of Key Stage 3
  - But is it an effective measure of England's national curriculum?
  - Further exploration required.
- Schools might find participation more attractive
  - Improved sample response rates.

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UNDERVISNINGS MINISTERIET

Assessment of student skills in Denmark

Steen Harbild

Chief adviser - Ministry of Education

Paris, 13 November 2008

The Danish Folkeskole

- primary and lower secondary schools

UNDERVISNINGS MINISTERIET

- Pre-school class - 1st to 9th form - 10th form

- An undivided and comprehensive school system
- Teaching - not pupil - differentiation
- Ongoing evaluation of students' learning outcomes
- Academic skills - social development
- The class teacher
- Teaching methods and materials
- School-home cooperation

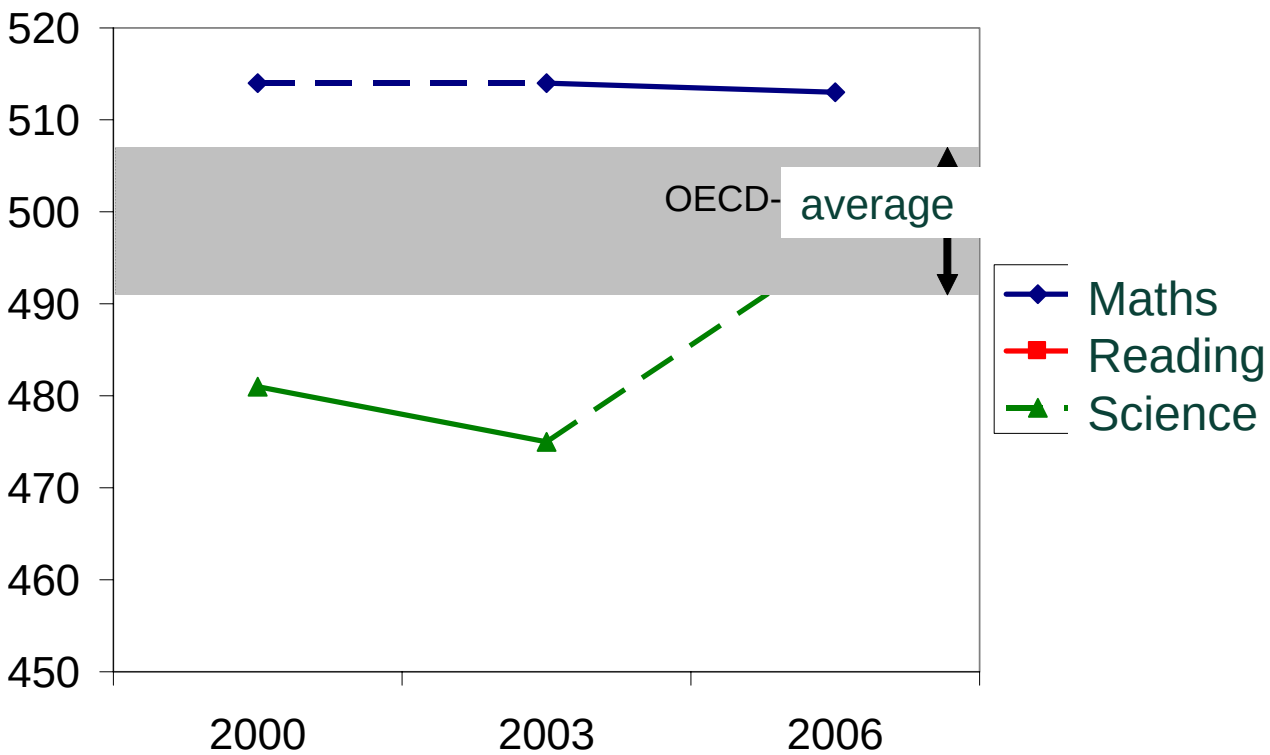
- The national school system / the local municipal school
- Centralization / decentralization

UNDERVISNINGS MINISTERIET

2001:	New government
	PISA 2000 (reading)
2002:	New political agreement
2003:	New Act of the Folkeskole
2004:	OECD review + recommendations
	National follow-up
	EVA reports
	PISA 2003 (maths)
2005:	New government – “New goals”
2006:	Globalisation strategies
	New Council + Agency for evaluation …
2007:	PISA 2006 (science)
2008:	Follow-up report - the OECD recommendations
2010:	PISA 2009 (reading)

Denmark's PISA results in 2000, 2003 og 2006

UNDERVISNINGS MINISTERIET



2004

UNDERVISNINGS MINISTERIET

June: OECD review of national policies for education

- Strengths and weaknesses - 35 recommendations

September: National follow-up with central stakeholders

- Intense debate

November: National evaluations of teaching differentiation and of internal evaluation

December: PISA 2003

OECD review 2004

UNDERVISNINGS MINISTERIET

Strengths:

Among the strengths, the experts identified the commitment of the State and municipalities to education, evidenced for example by generous staffing and adequate premises and equipment.

The experts also identified frequent opportunities for parental choice, dedicated teachers as well as confident and happy students.

OECD review 2004

UNDERVISNINGS MINISTERIET

Weaknesses:

Among the weaknesses, the experts identified the lack of a strong culture of student evaluation as well as a lack of adequate feedback on student performance.

There was also an absence of school self-appraisal and not enough sharing of good practice. In addition, schools did not pay adequate attention to early reading problems, and schools also failed to counter the efforts of home disadvantage.

The experts identified an ambivalent attitude to school leadership as well as an over-restrictive teachers' contract.

UNDERVISNINGS MINISTERIET

Government initiatives from 2005

"Reforming the Folkeskole":

- More lessons in key subjects
- More focus on integration of ICT
- Improved teacher training programme
- Strengthened in-service training of teachers and school leaders
- Raising the academic level in reading, science, mathematics and English
- Focus on history teaching
- Bilingual children
- Inclusion and special needs education.

UNDERVISNINGS MINISTERIET

Government initiatives – 2)

- Better preparation of the children for schooling
- Tailoring the present 10th form subject range

- Promotion of an evaluation culture
- Student plans
- Compulsory leaving examinations
- Documentation of the Folkeskole's results
- A new council for evaluation and quality development
- Strengthened municipal monitoring of schools
- More documentation and use of best practice.

National tests

UNDERVISNINGS MINISTERIET

Class / *Subjects*	1.	2.	3.	4.	5.	6.	7.	8.	9.
Danish / reading		x		x		x		x	
Mathematics			x			x			
English							x		
Geography								x	
Biology								x	
Physics/chemistry								x	
Danish as a second language (opt.)					x		x		

National tests

UNDERVISNINGS MINISTERIET

- Compulsory

- Computer-based
- Adaptive
- No two students receive the exact same test

- The test results – and test items - are confidential
- No ranking
- The parents are informed in writing about the results

- The test is one of many pedagogical tools
- A national evaluation portal for teachers with inspiration for better evaluation in the individual subjects and examples of good practice

UNDERVISNINGS MINISTERIET

Danish follow-up report in April 2008

- on the basis of the OECD review and the 35 concrete recommendations

1. Learning standards, evaluation of student performance and school effectiveness
2. Roles and competences of school leaders
3. Pre- and in-service professional development of teachers
4. The collective agreement regulating the roles and hours of teachers
5. Opportunities for bilingual and special needs students
6. Other necessary actions.

UNDERVISNINGS MINISTERIET

Ministry of Education
Denmark

www.uvm.dk

International comparison of education systems: a European model?
Workshop 1
International comparison of compulsory education
Paris 13 november 2008

What role could the European community and the European countries play to fuel the reflection in the field of international survey of pupils' assessment?

Pierre Vrignaud
Professor of Psychology
Université de Paris Ouest

As regard pupils' assessment many European countries:

- Have a long tradition of research and development
- Have established departments or organizations dedicated to national assessment since a long time
- Have participated - sometimes from the beginning - to the work of IEA and then OECD

Between national and international survey what could be the place of European Community to fuel the reflection in this field ?

- Let evolve the international surveys to the best practices and the state-of-the-art methodology
- Encourage and develop cross-national projects aiming at innovative approaches

Forewarning

- I shall limit my reflection to international literacy surveys (IALS, ALL, PISA, PIAAC)
- The concept of literacy introduced an innovation in the definition of the skill to be assessed
  - From curricula based skills (IEA) to a broad skill necessary "to achieve one's goals, to develop one's knowledge and potential, and to participate in society." (OECD) that should be the output of compulsory education

A quick glance at history

- More than fifty years of international surveys on pupils'skills aim at developing a real know how in this field
  - IEA work was really pioneering work
- Since about twenty years (IALS and then PISA) the complexity of the assessment and the need for reliability leads to a design considered as optimal and that has been becoming a kind of dogma

A general question

- What is the impact of globalization (more and more participating countries) and of the pressure put by the political decision-maker and media on the design of international pupils' and adults' skills surveys ?
-

Are the International Surveys at the state of the art ?

- A.C.Porter et A.Gamoran : *Methodological Advances in Cross-national Surveys of Educational Achievement*. National Research Council, National Academy Press, Washington DC 2002.
- These surveys are in general well constructed but several points need further development in particular the issues of equivalence and translation
- Take insufficiently into account the most recent knowledge

Two main issues

- Is the measurement model reductionist?

- Is the cultural/linguistic bias identification reliable?

Is the measurement model reductionist?

- The choice of the Item Response Modeling (IRT) introduce many constraints on the measure and its interpretation:
  - Unidimensionality
  - Results limited to a league table
  - Skill allowing poor interpretation
  - An old model that has not so much evolved

Drawbacks of an unidimensional model

- Conduct to the dropping of item that didn’t fit the model while these items can convey many interesting information for the comparison between countries

- Even after droping of items this model doesn’t really fit the data since some studies (Goldstein) have demonstrated that the data were at least bidimensionnal

Caution about what multidimensionnality means

- The international survey are using several scales (Prose, document, etc.) to report the results
- The use of such scales is not supporting multidimensionnality from a our point of view
- The distinction between the scales is not actually supported by the data (very high correlations between scales)
  - For example the correlations between the PISA's scale are very close to .90

Should the measurement model evolve ?

- IRT models are today more than fifty years old
  - Rasch's seminal work 1960
  - Birnbaum's paper 1958
- Other approaches allowing multidimensionality are available
  - Structural Equation Modeling
  - Multilevel Modeling

Should the algorithm evolve ?

- The EM algorithm (Rubin et al.) 1977
- The use of plausible values 1980
- The algorithm used is not completely unbiased
  - The format of the exercices (testlets : several questions on the same text) introduces a dependency between items
  - An appropriate algorithm as well as a software for testlets has been proposed by Wainer

Identification of cultural/linguistic biases

- To compare implies to ensure equivalence between the different linguistic/national versions of the test

- Identification of biased items (Differential Item Functioning) is henceforth crucial to ensure equivalence

Some problems for identification of biased items

- In the IALS survey, secondary analysis of the French data have demonstrated that some wrongly translated items were not detected by the methods used
- The methods used have been developed for the comparison of groups sharing a common national/linguistic context
  - i.e. Gender, SES,..

Issues needing to be clarified

- The method used for detecting biased items are perhaps not robust when working on different linguistic version of a test (Sireci)
- The number of groups (countries) implied in the comparison process is far higher than the number of groups usually studied (about ten or less)

What role can European community plays to support innovation ?

- Several European countries have a log tradition of pupils' assessment surveys
- European community offers the opportunity to develop innovative projects to test new approaches and design for a between countries comparison of pupils' skills

An illustrative example

- **The use of national reading tests for international comparisons : Results from a feasibility study.**
  - Socrates contract n° 98-01-3PE-0414-00.

- **Forewarning:**
  - **Limited aims**
  - **Need to be refined**

Aim of the feasibility study

- Test a framework designed to compare reading literacy in the different countries using national tests
- Compare different anchoring methods
  - a vocabulary test already adapted in the participating countries
  - Bilingual pupils
- Check the data analysis method adapted to the data collection design

Main questions:

- To which extent are the different national tests measuring the same concept ?
- Are the item taxonomies in the different countries comparable ?
- Can we get a way to compare subjects and groups cross nationaly using our national tests ?

Data treatment

- A multidimensional method (Principal Components Analysis)
- An algorithm adapted to the data collection design (structural missing values):
  - NIPALS : Nonlinear Iterative Partial Least Squares (Hermann Wold)
- Possibility to handle missing data without estimating plausible values or discarding incomplete observations or variables

What we learned from feasibility study

- The vocabulary subtest presented a rather high relationship with reading test
- Linking through vocabulary subtest and through bilinguals showed very similar results
- The data were bi-dimensional

References of the report

Bonnet, G., Braxmeyer, N., Horner, S., Lappalainen,h., Levasseur, J., Nardi, E., Rémond, M., Vrignaud, P., & White, J. (2000). *The use of national reading tests for international comparisons: ways of overcoming cultural bias*. Socrates contract n° 98-01-3PE-0414-00.

Other examples

- A study continuing the preceeding one (2004):

  Culturally Balanced Assessment of Reading (C-BAR). (pp. 51-57). European network of policy makers for the evaluation of education systems. Paris MEN/DEP Édition. Site **http://cisad.adc.education.fr/reva/**

- A study about the Skills in English (2004):

  The assessment of pupils' skills in English in eight European countries. (pp. 67-77). European network of policy makers for the evaluation of education systems. Paris MEN/DEP Édition.
  Site **http://cisad.adc.education.fr/reva/**

Conclusion

- Between national and International pupils' assessment surveys there is a place for European projects

- Let's go!

Thanks for your attention

1er intervenant : Jean-Claude Emin rapporteur de la 1ère session de l'atelier 1

Dans cet atelier, nous avons traité la question de l'évaluation des acquis des élèves au sein des comparaisons internationales de l'enseignement obligatoire.
Je n'ai pas la prétention de rendre compte de toute la richesse et de la diversité de ce qui s'est dit dans l'atelier, puisque six interventions ont occupé pratiquement tout le temps qui nous était imparti, et qu'il n'en est que peu resté pour discuter.
Je vais donc dire quelques mots sur les interventions, avant d'aborder trois points qui ont été évoqués dans les interventions ou au cours des quelques discussions, et je me permettrai, sur ces points, d'avancer un certain nombre d'idées qui n'ont pas toujours été évoquées dans l'atelier, mais qui me paraissent importantes.

1. Si je résume très rapidement les interventions,

- c'est d'abord Anders HINGEL qui nous a fait un catalogue du dispositif des "benchmarks" – terme difficilement traduisible en français – et des indicateurs retenus par l'Union européenne dans le cadre de la méthode ouverte de convergence.
  Les projets en la matière sont nombreux, et l'ambition est de couvrir avec des indicateurs fondés sur les enquêtes de l'OCDE et de l'IEA et, à défaut, sur des travaux de l'Union, tous les domaines relevant des compétences-clés retenues par les ministres européens.

- puis, Michael MARTIN, et Andreas SCHLEICHER nous ont respectivement rappelé ce qu'étaient les programmes d'enquêtes de l'IEA – à qui personne ne contestera la paternité des enquêtes comparatives des acquis des élèves – et de l'OCDE. Nous n'avons pas approfondi les différences entre les méthodes des enquêtes conduites par les deux organisations, mais ces différences sont importantes : pour l'IEA, les protocoles tiennent compte des objectifs des curricula aux différents niveaux scolaires des pays enquêtés, alors que l'OCDE s'intéresse moins aux résultats en termes de connaissances des élèves, qu'à leur capacité à se servir de ce qu'ils ont appris et à leur comportement en matière d'apprentissage.
  Je crois que ces différences sont importantes et intéressantes et qu'il faut les conserver, j'y reviendrai.

- ensuite Lorna BERTRAND et Steen HARBILD nous ont fait le point des expériences nationales, en Angleterre – où des évolutions importantes ont lieu en matière d'évaluation et d'utilisation des évaluations – pour la première, et au Danemark, pour le second. Je n'entrerai pas dans le détail et vous renvoie à leurs présentations respectives, mais je crois qu'il est intéressant de noter que ces deux pays ont des expériences extrêmement contrastées, voire quelque peu contradictoires, en matière d'évaluation et d'utilisation des évaluations des acquis des élèves.

- enfin Pierre VRIGNAUD nous a posé des questions scientifiques et techniques et nous a montré que l'on ne prenait pas assez le temps de discuter du fond et de la méthode des enquêtes, que les modèles de mesure utilisés étaient réducteurs, et, qu'en fin de compte, on mesurait « ce qu'on savait mesurer » et on mesurait « là où on savait mesurer », ce qui ne permettait pas de rendre compte de tous les résultats recherchés et pouvait – c'est moi qui l'ajoute – restreindre les ambitions des systèmes éducatifs à ce que l'on sait mesurer.

  Il a surtout ouvert des pistes en montrant que l'on pouvait progresser et qu'un champ de recherche était ouvert et devait être approfondi – pourquoi pas par l'Europe, j'y reviendrai aussi – dans le domaine de la mesure en éducation. Il a d'ailleurs cité à ce sujet plusieurs

projets innovants, dont certains ont été financés par l'Union européenne, et que celle-ci pourrait promouvoir dans le domaine de l'évaluation comparative des acquis des élèves.

2. **Après ce rappel évidemment trop bref et extrêmement réducteur par rapport à la richesse des interventions, je voudrais aller un petit peu au-delà, en évoquant trois questions qui ont été abordées dans les interventions et dans les quelques discussions ; et les aborder compte tenu du thème, voire de l'enjeu de notre séminaire : quelle place peut jouer, quelle place doit prendre l'Europe, en matière d'évaluation des acquis des élèves ?**

- La première question, qui a aussi été évoquée par Norberto Bottani lors de la séance d'hier matin, est qu'à l'heure actuelle, nous avons énormément de données tirées des enquêtes et de nombreuses batteries d'indicateurs. Pour reprendre une expression qu'a utilisée Anders HINGEL, *"we have a fantastic amount of data"*. Mais le problème est, qu'à l'heure actuelle, on tire de cet amas de données – j'utilise à dessein le mot amas – des questions plutôt que des réponses. Il ne suffit pas aux responsables des politiques éducatives de savoir que d'autres pays ont eu des résultats différents des leurs, de repérer leurs points forts et leurs points faibles par rapport aux autres, de percevoir qu'ils ont des marges de progression à explorer ; il leur faut savoir pourquoi, dans quel contexte, tels ou tels résultats ont été obtenus, et il faut être capable de leur proposer des pistes pour explorer les marges de progression mises en lumière.
  L'évaluation, la comparaison ne sont pas en elles-mêmes porteuses d'améliorations et il est indispensable que l'on travaille à partir de la masse de données disponible qui, si elle n'est pas analysée et étudiée, risque d'aboutir – comme le disait Norberto BOTTANI hier – à un appauvrissement plutôt qu'à un enrichissement des recommandations qui peuvent être faites aux responsables politiques.
  Ceux-ci – cela a été souligné – ne sont pas naturellement enclins à utiliser les données que leur proposent les évaluations et les comparaisons. Mais nous devons nous demander si nous répondons aux questions qu'ils se posent. J'en prendrai quelques exemples: à l'heure actuelle, dans la plupart des politiques éducatives, se posent des questions comme « l'autonomie » mais laquelle ? Celle de l'enseignant, celle de l'établissement, celle de la région ? Des questions comme le choix de l'établissement, mais quel choix et selon quelles modalités ? La question de la décentralisation, mais à quel niveau ? La question de l'école compréhensive ou au contraire de filières avec une orientation relativement précoce.
  Je ne suis pas convaincu qu'à l'heure actuelle nous exploitions suffisamment les données dont nous disposons, pour répondre valablement à ce type de questions et pour y répondre en termes compréhensibles par les responsables politiques. On a ainsi évoqué dans l'atelier la nécessité de démontrer la valeur ajoutée de ce que nous proposons, et de la démontrer en termes utilisables par les responsables politiques.
  Je crois qu'à ce sujet, il y a un vaste champ de recherche qui reste à ouvrir, dans lequel l'Europe a sa place. En effet, plus les comparaisons internationales s'ouvrent à de nombreux pays, plus il devient nécessaire d'en exploiter des données en fonction des contextes spécifiques des systèmes éducatifs, c'est-à-dire, pour ce qui nous concerne, en fonction du contexte de nos systèmes éducatifs européens

.

- Nous avons aussi évoqué, de façon indirecte, une autre question qui avait également été posée par Norberto Bottani hier matin : le risque que ferait courir un monopole des enquêtes.
  Certains ont dit que l'on avait sans doute trop d'enquêtes, qu'il fallait les coordonner, mais en même temps, d'autres, voire les mêmes, ont souligné qu'il nous fallait des comparaisons

internationale**s**, et qu'il aurait fallu que le titre de notre conférence ait eu une « s » à comparaison(s) internationale(s), comme me l'a suggéré Christian FORESTIER.
A ce sujet, Lorna BERTRAND, comme Steen HARBILD nous ont montré, en nous exposant leurs expériences nationales respectives, que le pilotage d'un système éducatif implique de combiner des travaux nationaux et des travaux internationaux. D'autant plus, et je reprends là ce que disait Steen HARBILD, qu'en fin de compte une des seules explications des différences entre les caractéristiques et les résultats de nos systèmes éducatifs nationaux, est l'*ethos* ou les valeurs de chacun de nos pays.
A partir de là, c'est un autre champ de recherche que l'Europe doit explorer : comment coordonner et combiner au mieux travaux internationaux et travaux nationaux, et comment confronter les résultats d'enquêtes à la méthodologie et aux objectifs différents ? Etant entendu que ces différences constituent, je crois, une richesse. Dans cet ordre d'idées, il faut aussi s'interroger sur le fait qu'il est sans doute vain de vouloir répondre valablement avec les mêmes outils aux deux grands objectifs des évaluations des acquis des élèves qui sont, d'une part, le pilotage global des systèmes éducatifs, et, d'autre part, le pilotage individuel des progrès de chaque élève ou de chaque établissement.

- Le dernier point que je voudrais aborder touche également à la question du développement de la recherche. Il se situe dans le prolongement de ce que nous a dit Pierre VRIGNAUD lors de l'atelier ; dans le domaine de la mesure en éducation, qu'il reste des progrès à faire. On ne peut pas admettre, me semble-t-il, que la mesure en éducation soit le seul domaine dont on puisse dire aujourd'hui que l'on y est au bout des recherches, qu'il n'y a plus de progrès à faire, que tout a été dit et que les méthodes y sont parfaites. Je le dis aussi crûment parce que nous avons entendu de telles affirmations à la suite de l'intervention de Pierre VRIGNAUD. Une telle attitude ne serait pas scientifique, et il y a, à ce sujet aussi, un champ de recherche à approfondir pour l'Europe.

  Je conclurai volontiers en disant que l'Europe, qui veut être une économie de la connaissance, ne peut pas laisser vacant le champ des évaluations internationales des acquis des élèves, et ceci sur deux plans au moins : celui de l'approfondissement de ce qu'elles peuvent nous dire en relation avec les politiques éducatives et celui, plus méthodologique, de la technologie des enquêtes et de la mesure en éducation.

  Je vous remercie.

  Jean-Claude Emin

- The limits of fata collection on teachers at national level linked with the decentralisation **presentation_arlette_Delhaxe**
- OECD indicators on teachers and the new Teaching ans Learning Internationale Survey (TALIS) / **presentation_michael_Davidson**
- Quelques éléments de comparaison sur la situation des enseignants dans le monde **presentation_Thomas_Smith**
- Comparing induction programs in Europe: the Estonia case **presentation_eve_Eisenschmidt**
- Comparing European Teacher Education Structures according to the Bologna process **presentation_apostolis_Dimitropoulos**
- Conclusions du rapporteur Sten Soderberg / **report_sten_Soderberg**

THE LIMITS OF DATA COLLECTION ON TEACHERS AT NATIONAL LEVEL LINKED WITH THE DECENTRALISATION

Arlette Delhaxhe
EACEA - European Unit of Eurydice

CONFERENCE

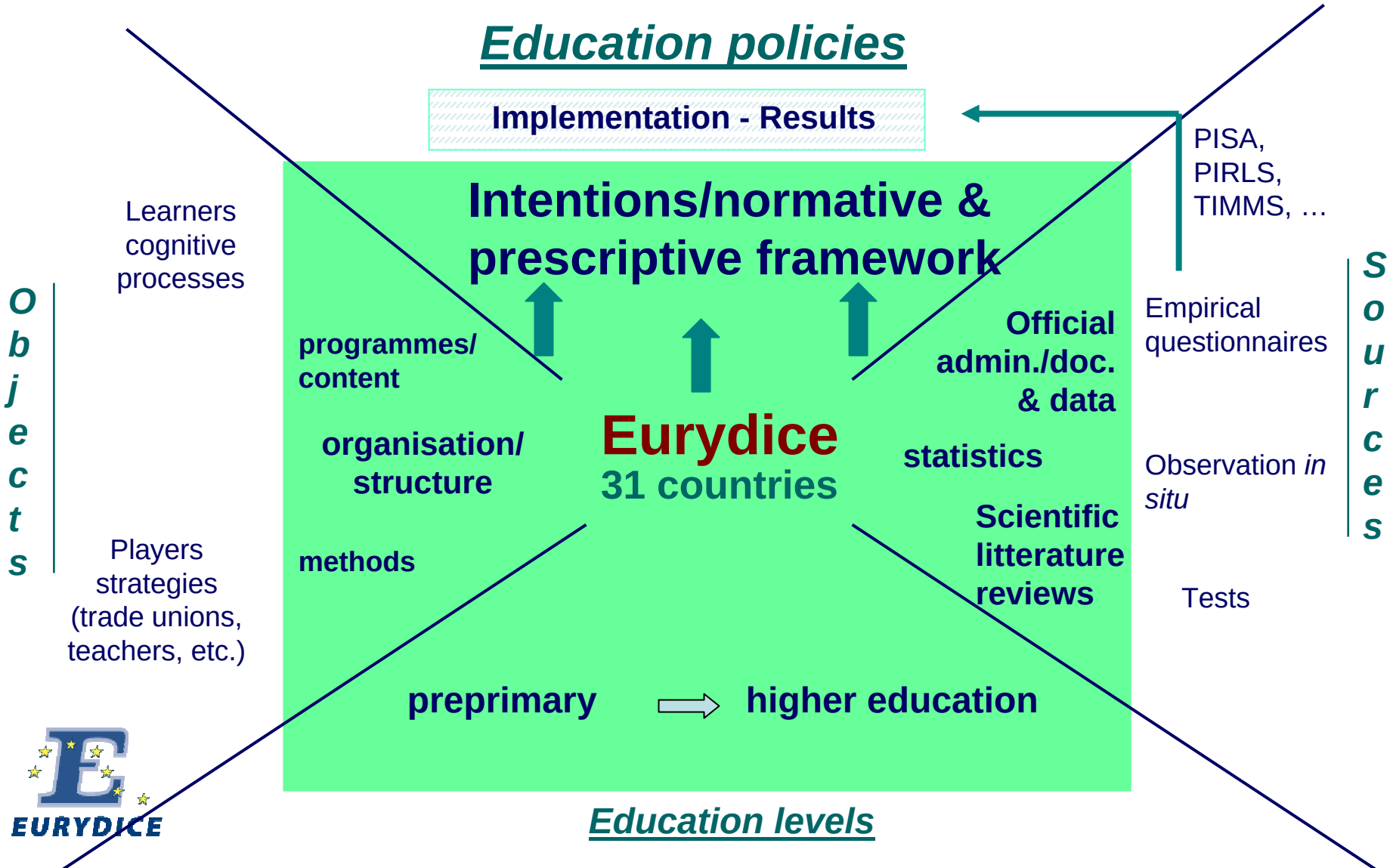
International comparison of education suystems : a european model?

PARIS 13 & 14 NOVEMBER

THE LIMITS OF DATA COLLECTION ON TEACHERS AT NATIONAL LEVEL LINKED WITH THE DECENTRALISATION

EACEA Education, Audiovisual & Culture Executive Agency

Scope



EURYDICE

LACK OF INFORMATION
Eurydice CODES

 No regulations no recommandations

⊗ Local autonomy

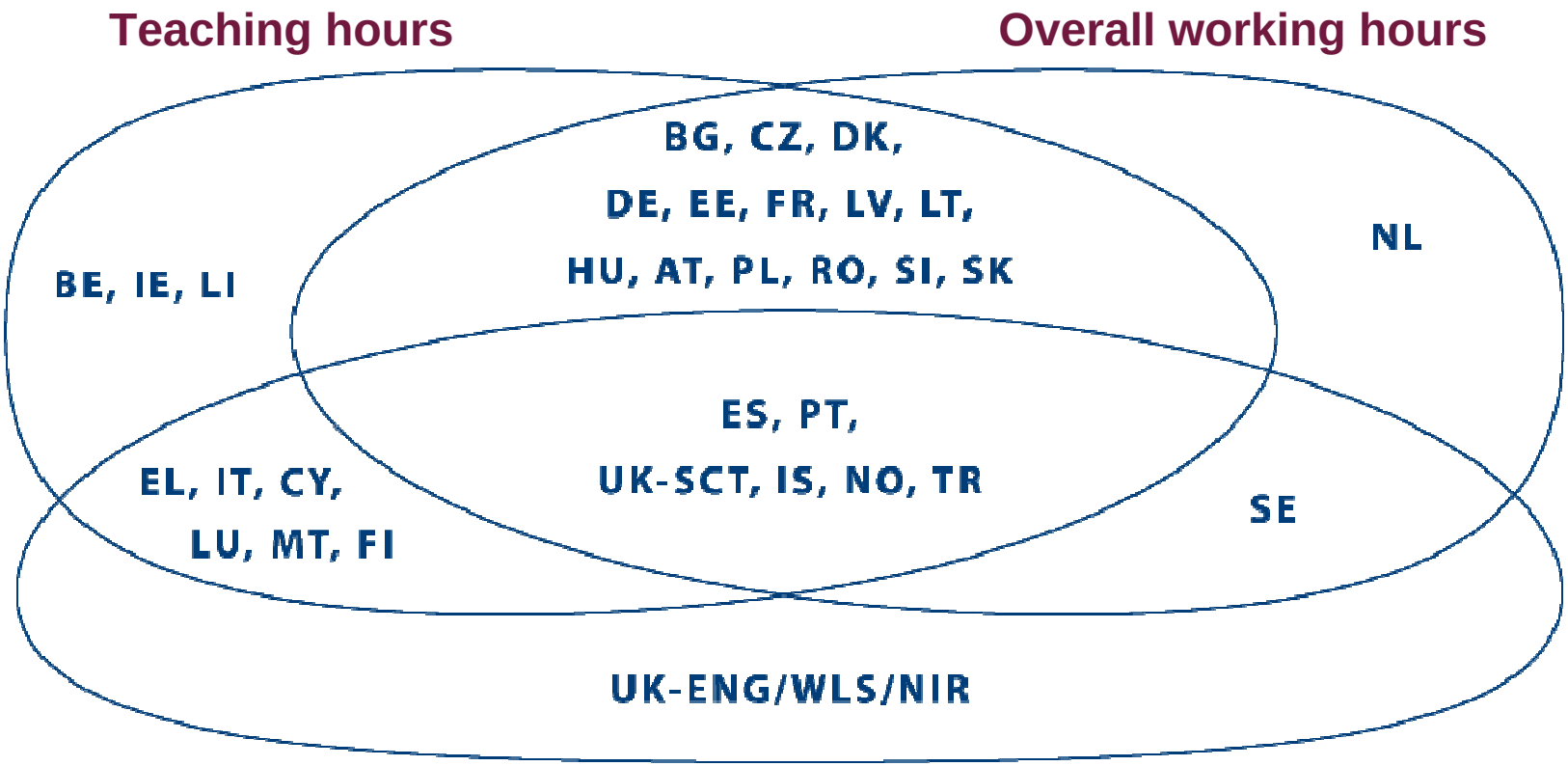
✓ Variable

Δ Variable duration

Working time

THE LIMITS OF DATA COLLECTION ON TEACHERS AT NATIONAL LEVEL LINKED WITH THE DECENTRALISATION

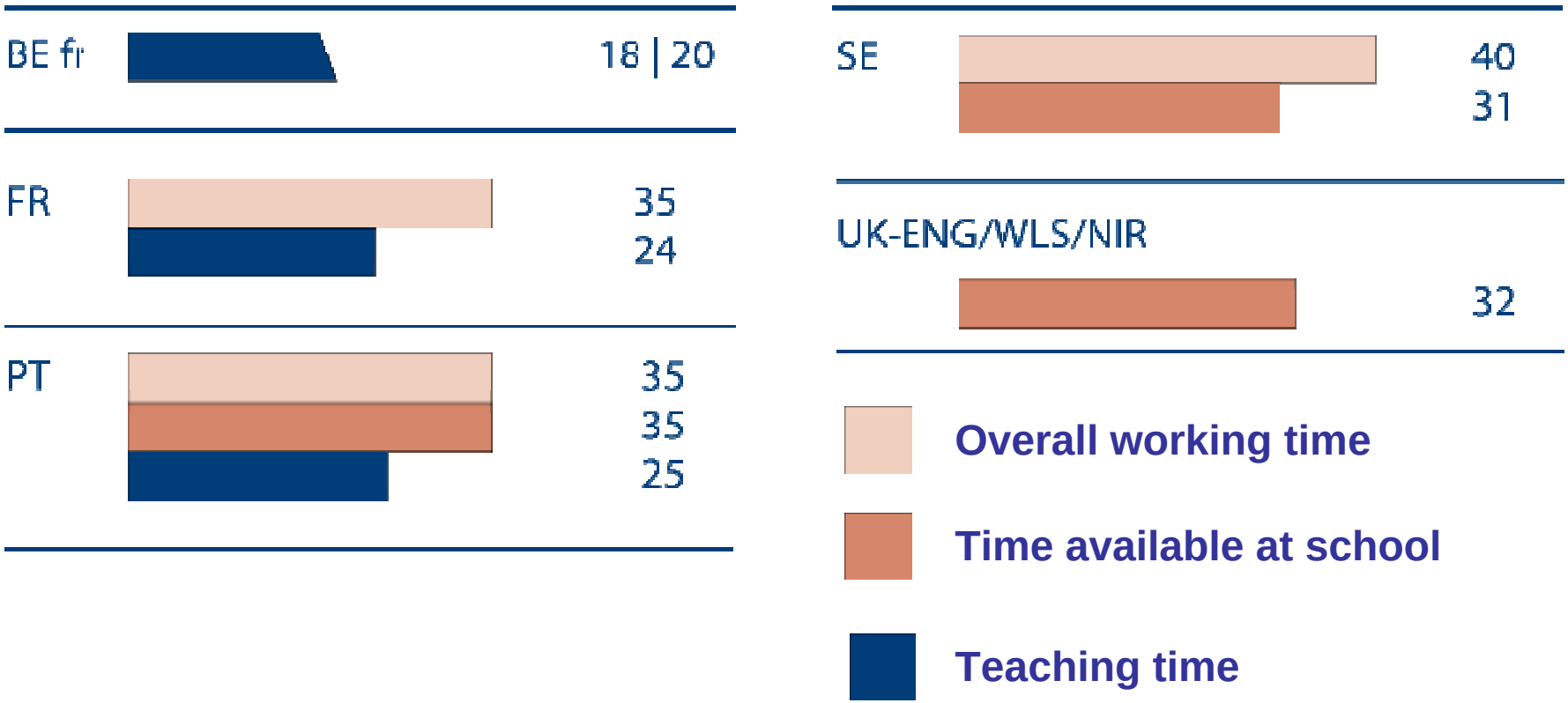
Official definitions of the working time of teachers, primary and general (lower and upper) secondary level (ISCED 1, 2, 3), 2006/07



EURYDICE

THE LIMITS OF DATA COLLECTION ON TEACHERS AT NATIONAL LEVEL LINKED WITH THE DECENTRALISATION

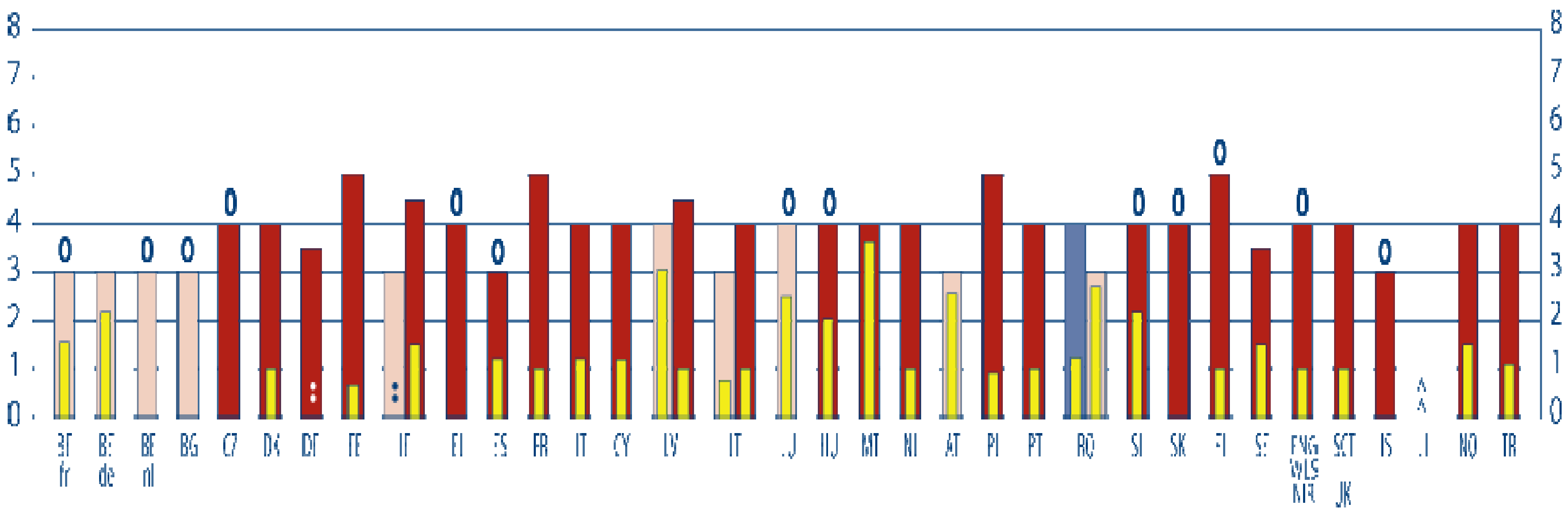
Breakdown of the weekly workload of full-time teachers in hours for primary education (ISCED 1), 2006/07



EURYDICE

Teacher education

Level and minimum length of initial teacher education for primary education (ISCED 1), and the compulsory minimum proportion of time spent on professional training, 2006/07



ISCED 3 or 4 | ISCED 5A | ISCED 5B | ^ Teacher education abroad

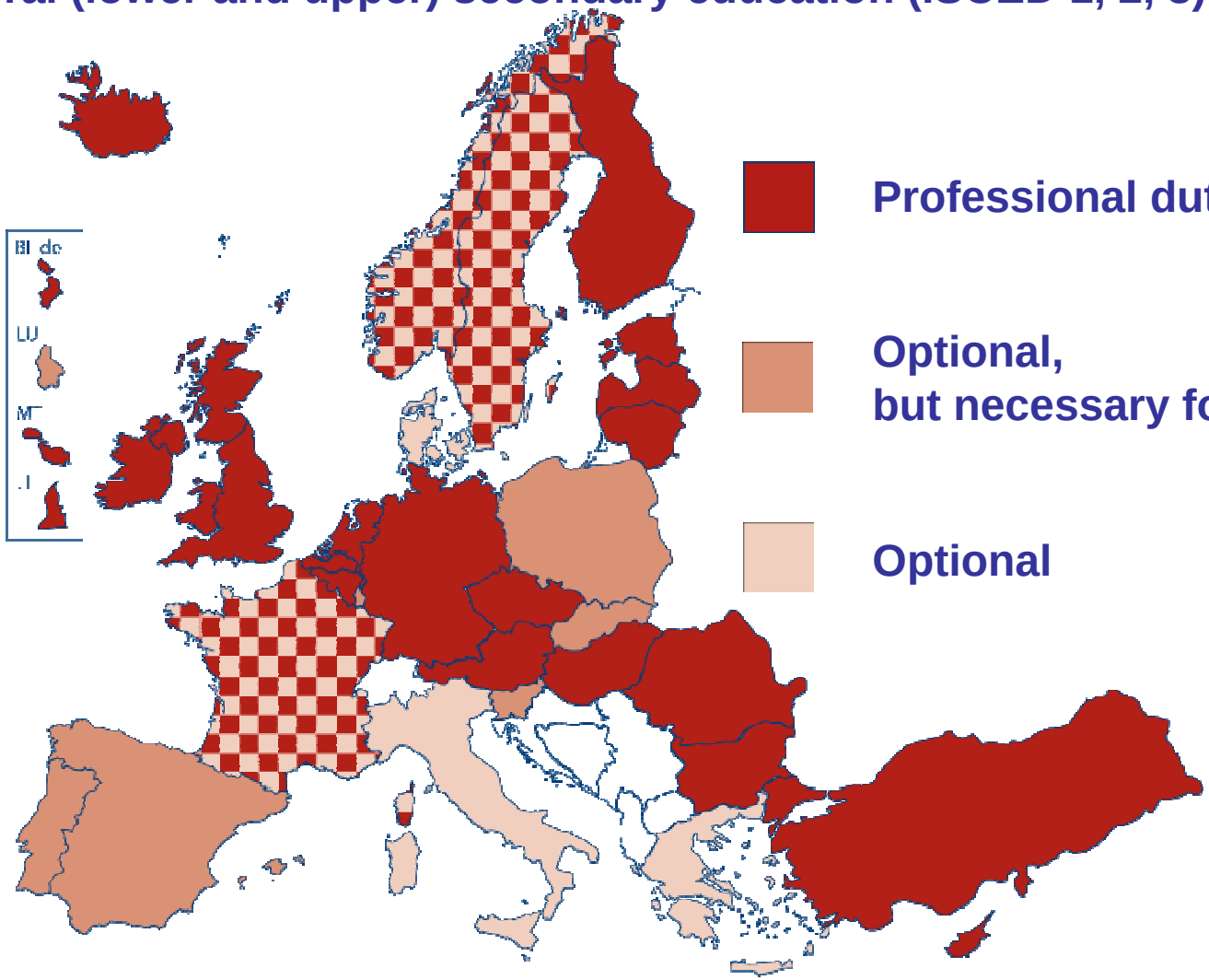
Compulsory minimum proportion of professional training

0 Institutional autonomy

EURYDICE

THE LIMITS OF DATA COLLECTION ON TEACHERS AT NATIONAL LEVEL LINKED WITH THE DECENTRALISATION

Status of continuing professional development for teachers in primary and general (lower and upper) secondary education (ISCED 1, 2, 3), 2006/07



EURYDICE

THE LIMITS OF DATA COLLECTION ON TEACHERS AT NATIONAL LEVEL LINKED WITH THE DECENTRALISATION

Minimum annual time (in hours) that teachers have to spend on continuing professional development, ISCED 1 and 2, 2006/07

ISCED 1 and 2

BE fr	BE de	EE	CY	LV	LT	HU
21	21	32	57	36	35	17

MT	AT	RO	FI	UK		NO
12	15	19	18	35		35

No time indications

BE nl, BG, DE, CZ, IE, FR, LU, NL, SK, SE, IS, LI

Data from international surveys:
A useful addition to official Eurydice sources

This statistical material

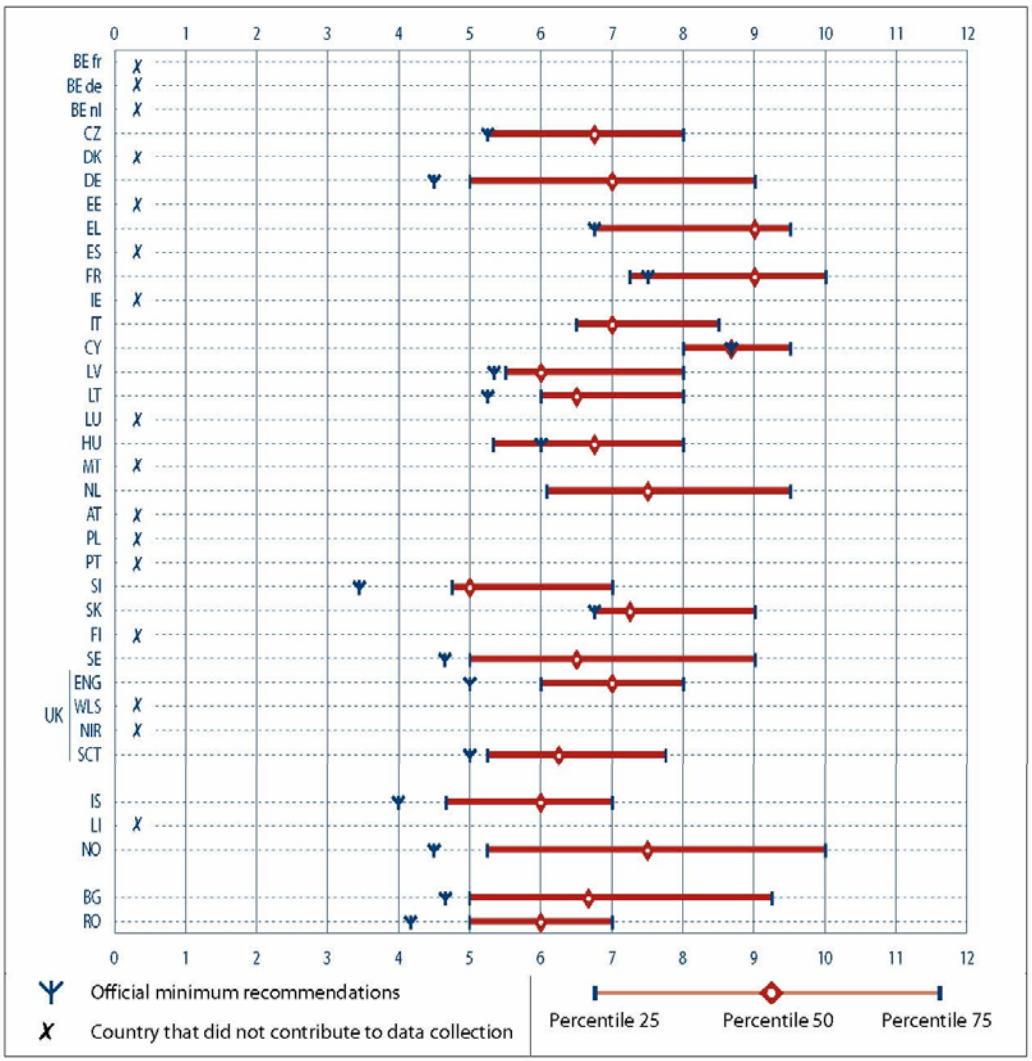
- compensates for the **lack of information** in national regulations or legislation, as a result of decentralisation or school autonomy

- enables one to estimate how far a regulation **differs from practice** in the field or from **the situation as perceived** by those actively involved

An example of complementary information from Eurydice and PIRLS: Taught time recommendations and practices

THE LIMITS OF DATA COLLECTION ON TEACHERS AT NATIONAL LEVEL LINKED WITH THE DECENTRALISATION

Figure E4: Distribution of fourth-year pupils in primary education according to the number of hours a week they are taught the language of instruction, compared to the official minimum recommended time, public and private sectors combined, 2000/01



	CZ	DE	EL	FR	IT	CY	LV	LT	HU	NL
Percentile 10	5.0	4.0	6.7	5.0	5.7	7.0	5.2	5.3	4.8	4.5
Percentile 25	5.3	5.0	6.8	7.3	6.5	8.0	5.5	6.0	5.3	6.1
Percentile 50	6.8	7.0	9.0	9.0	7.0	8.7	6.0	6.5	6.8	7.5
Percentile 75	8.0	9.0	9.5	10.0	8.5	9.5	8.0	8.0	8.0	9.5
Percentile 90	10.0	10.5	11.0	11.5	10.0	12.0	10.0	10.0	10.0	10.8
Recommended minimum	5.3	4.5	6.8	7.5	●	8.7	5.3	5.3	6.0	●

	SI	SK	SE	UK-ENG	UK-SCT	IS	NO	BG	RO	
Percentile 10	3.8	4.5	4.0	5.3	5.0	4.0	4.5	3.5	4.4	
Percentile 25	4.8	6.8	5.0	6.0	5.3	4.7	5.3	5.0	5.0	
Percentile 50	5.0	7.3	6.5	7.0	6.3	6.0	7.5	6.7	6.0	
Percentile 75	7.0	9.0	9.0	8.0	7.8	7.0	10.0	9.3	7.0	
Percentile 90	10.0	10.5	10.2	10.0	10.0	8.3	15.0	10.2	8.0	
Recommended minimum	4.8	6.8	4.7	5.0	5.0	4.0	4.5	4.7	4.2	

● Flexible timetable

Sources: **Percentile**: IEA, PIRLS 2001 database; **Recommended minimum**: Eurydice, 2000/01.

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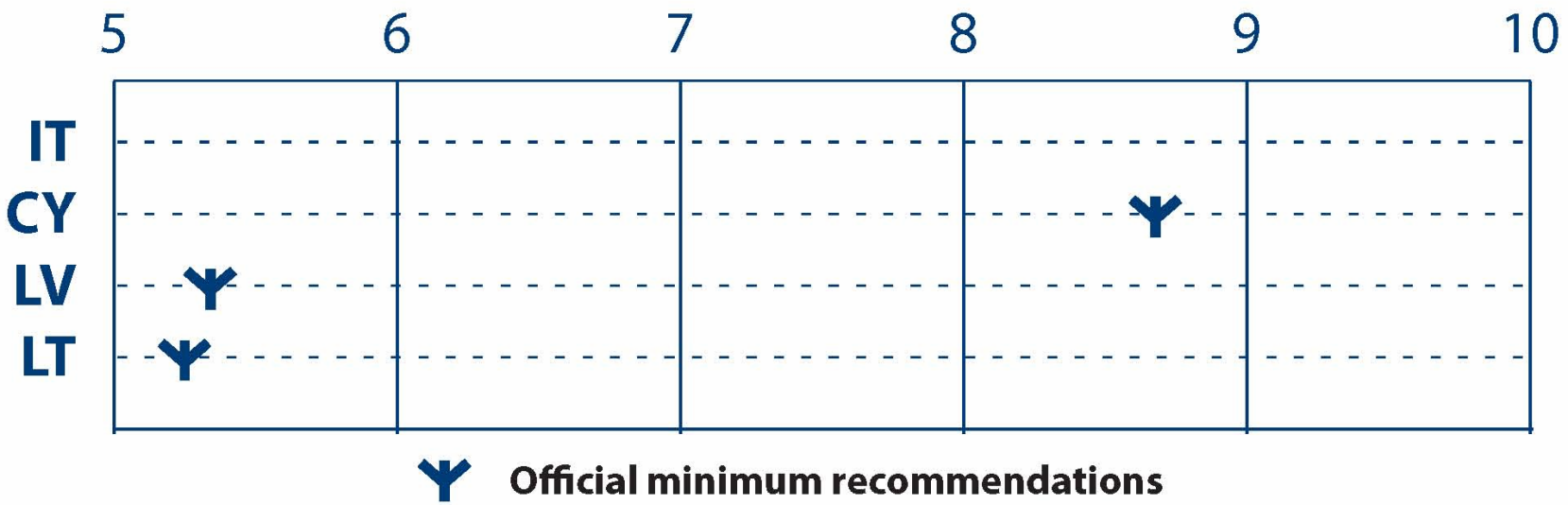

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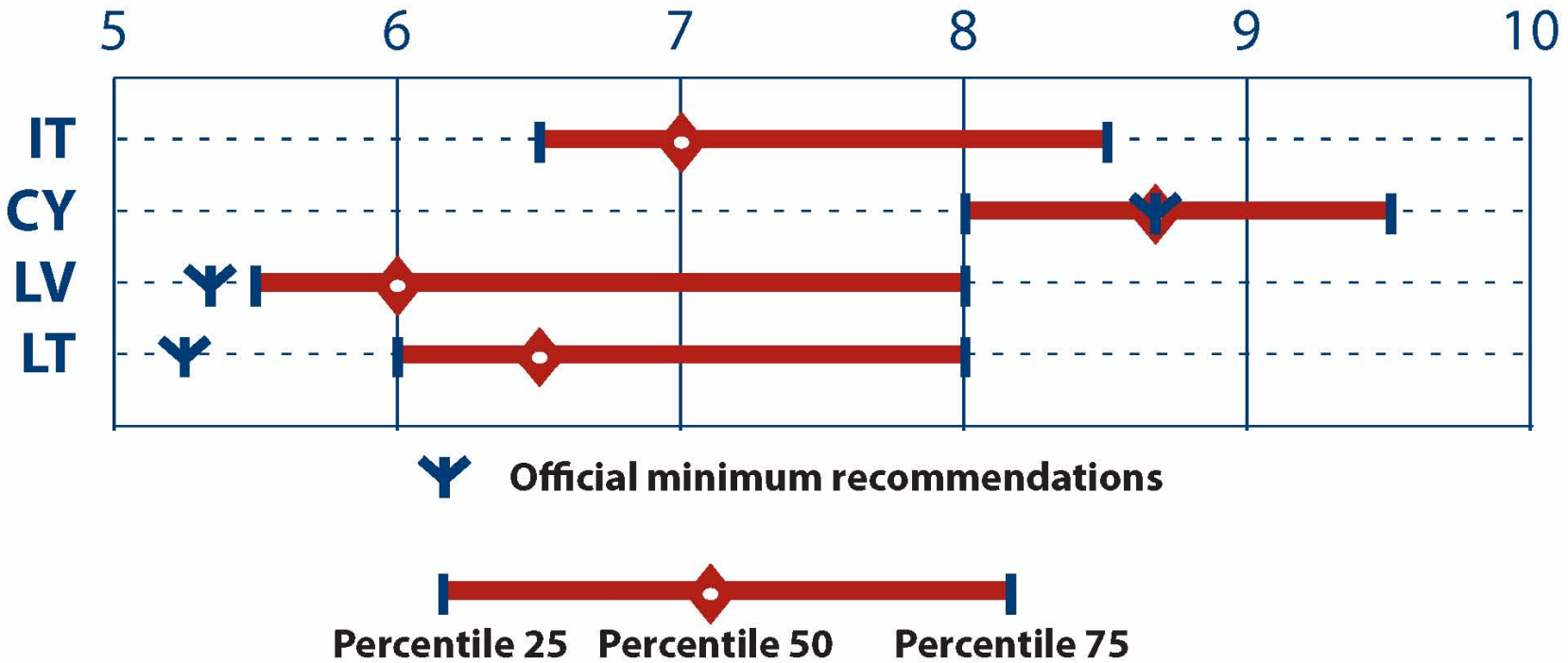

THE LIMITS OF DATA COLLECTION ON TEACHERS AT NATIONAL LEVEL LINKED WITH THE DECENTRALISATION

http://www.eurydice.org

EURYDICE

Organisation for Economic Cooperation and Development (OECD)

OECD indicators on teachers and the new Teaching and Learning International Survey (TALIS)

International comparison of education systems: a European model?
13-14 November 2008, Paris

Michael Davidson
Senior Analyst, Indicators and Analysis Division
Directorate for Education

OECD OCDE

Why do we need TALIS?

- Current OECD teacher –related indicators fairly limited
  - Age and gender distribution of teachers
  - Teachers' statutory salaries
  - Teachers' working time
  - Average class sizes
  - Student-teacher ratios
  - Teacher-related factors that hinder instruction (PISA)
    - Teacher supply problems (school principal responses)
    - Student learning activities (student responses)
- But this tells us little about teachers' work in schools and what factors help or hinder in the development of effective teachers

So what is TALIS?

- A representative sample of teachers of lower secondary education and their school principals
  - 200 schools, 20 teachers
    - Response rate (75%, 75%)
  - Teacher and Principal questionnaires (45 Minutes each)
    - Paper and pen or on-line
- In 24 countries:
  - Australia; Austria; Belgium (Flanders); Denmark; Hungary; Iceland; Ireland; Italy; Korea; Mexico; Netherlands; Norway; Poland; Portugal; Spain; Slovak Republic; Turkey; Brazil; Bulgaria; Estonia; Lithuania; Malta; Slovenia; Malaysia.

Policy focus of TALIS

- Appraisal of teachers and feedback to teachers
- Teaching practices, attitudes and beliefs
- School leadership
- Professional development of teachers

Professional Development (PD)

- Key indicators
  - Amount of PD undertaken
  - Type of PD
  - Impact of PD
  - PD needs
- Analyses
  - Relationship with appraisal and feedback in the school

Appraisal of and feedback to teachers

- How do teachers receive feedback on their work? Who from and how often?
- How does the appraisal system reward good teachers and provide support for those teachers who need it?
- How do different feedback and appraisal systems impact on the school culture, cooperation and collaboration between staff?

Appraisal of and feedback to teachers

- Key indicators:
  - Source of appraisal
  - Criteria used in appraisal
  - Outcomes of appraisal
  - Impact of the appraisal
- Analyses
  - Relationship between appraisal system and…
    - Teacher cooperation
    - School climate
    - Teacher job satisfaction
    - Teaching practices
    - School leadership
  - How does appraisal system support professional development of teachers?

School leadership

- Key indicators:
  - Roles and responsibilities of school leaders
  - Teachers' perceptions of the school leadership
- Scales for school leadership
  - Framing and communicating school's goals
  - Supervision and evaluation of instruction
  - Curricular coordination
  - Monitoring student progress
  - Promoting instructional improvements and professional development
  - Negotiator role
  - Coordinator and controller role

School leadership

- Analysis of prevailing styles of leadership within and between schools
  - Extent to which leadership team exists
- How these differ between countries and between different types of schools within countries
- Association between school leadership styles and practices and (for instance)
  - The evaluation and accountability frameworks in place
  - School climate
  - Teacher cooperation and collaboration
  - Teaching approaches in schools
  - The development of and support for teachers

Teaching practices, beliefs and attitudes

- Key indicators:
  - Beliefs about the nature of teaching and learning
  - Beliefs about self-efficacy
  - Teacher classroom practices
  - Cooperation among staff
  - Classroom environment
  - School climate
- Scales for teaching practices
  - Teacher controlled instruction
  - Student centred instruction
  - Structuring and scaffolding
  - Advanced verbal reflection

Teaching practices, beliefs and attitudes

- Analysis e.g.:
  - How do teachers' practices, beliefs and attitudes differ with regard to teacher perceptions of leadership, school and classroom climate, self-efficacy and job satisfaction?
  - Do school level factors impact on classroom practices?
  - Are teacher beliefs and attitudes correlated with professional activities?

TALIS Products

- Initial report – mid June 2009
- Thematic report on professional development (with EC) – 2nd half 2009
- Technical report – 2nd half 2009
- International database
- On-line analysis tool - (being considered)
- Website (www.oecd.org/edu/TALIS)
- Dissemination events in 2009 and 2010

Thank you for Listening

www.oecd.org/edu/TALIS

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Quelques éléments de comparaison sur la situation des enseignants dans le monde

Thomas M. Smith
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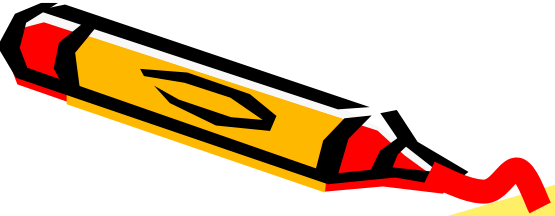


Some elements of comparison of the situation of teachers in the world

Thomas M. Smith
Vanderbilt University, United States

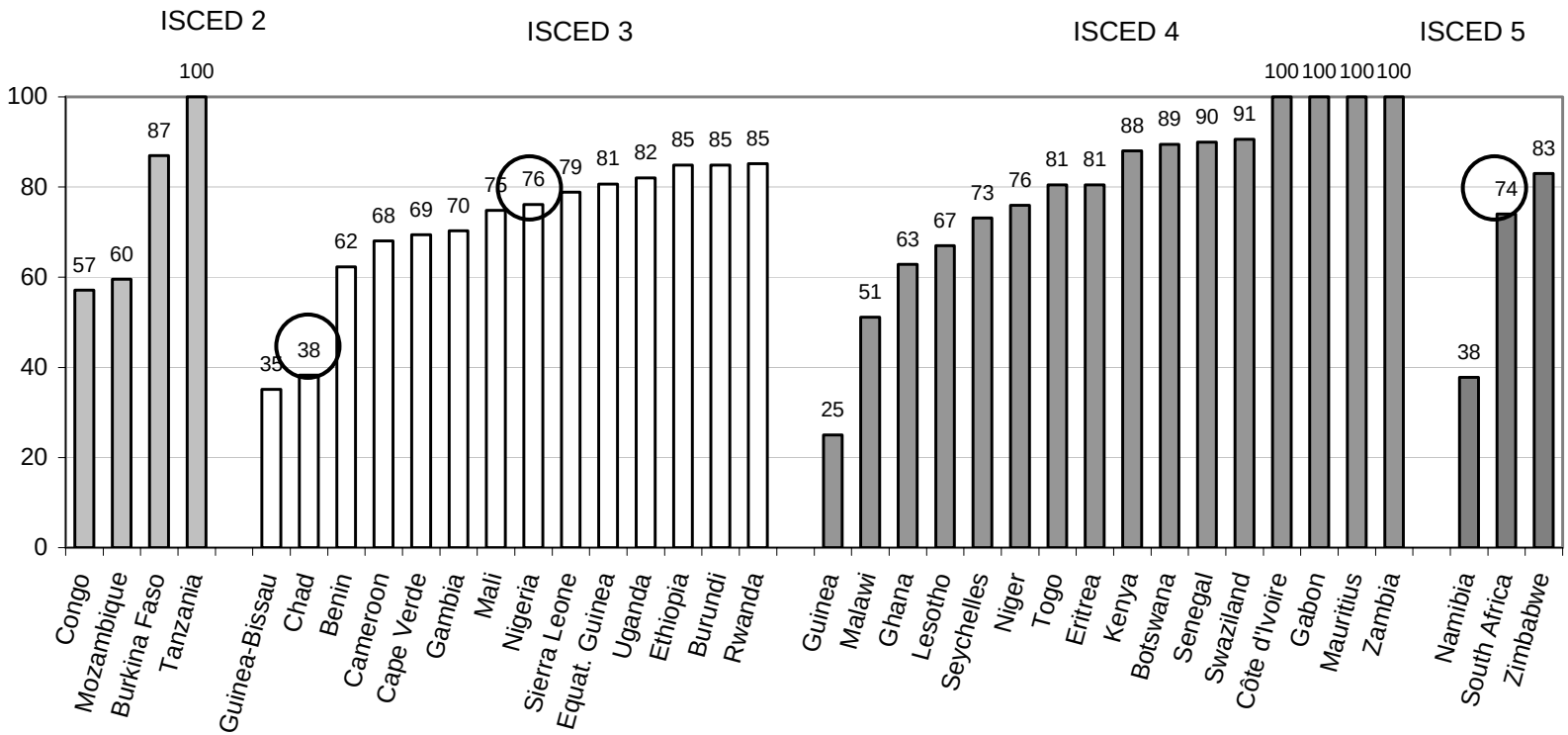
Starting point

Measuring teacher quality is difficult to do within countries, let alone between countries

- Availability of data
  - Administrative data collected by Ministries of Education
  - Sample surveys (expensive, coverage, frequency)
    - OECD Teaching and Learning International Survey (TALIS)
    - IEA Teacher and Development Study in Mathematics (TEDS)
- Uncertainty about the measurable characteristics of effective teachers

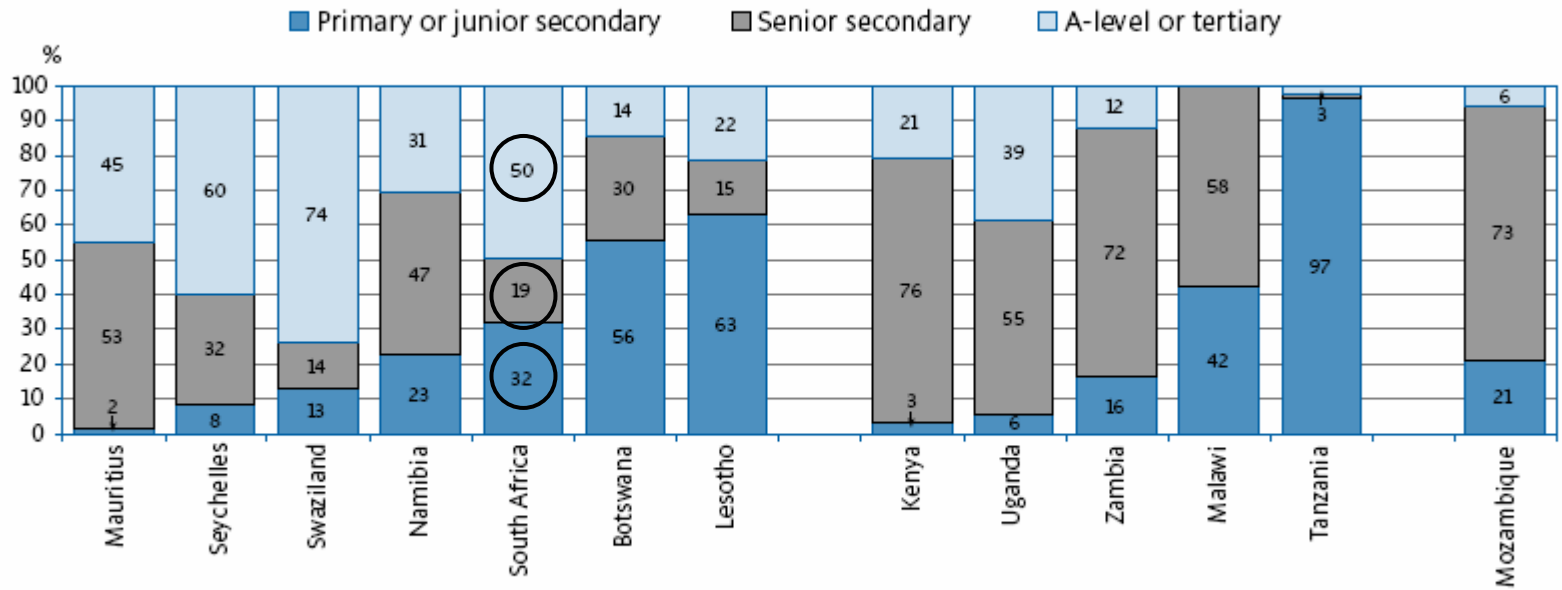
What UIS currently collects

Minimum standards for teaching at the primary level and proportions of teachers meeting these standards



Compared to school survey data from SACMEQ

Percentage of 6th grade students with reading teachers having completed various education levels, 2000-2002



Note: In this figure, as in others based on SACMEQ data, countries are grouped according to need for expansion of primary teacher stock by 2015. The highest expected need for teachers is found in Mozambique.

Source: Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ), 2000-2002.

Bigger problem…

- Measures only reflect degrees earned, not knowledge of content or pedagogy
- Research in high income country's suggest a weak relationship, if any, between level of educational attainment of teachers and their students' learning

What types of comparisons about teacher training are policymakers most interested in and what types of measures would be most appropriate for comparing across countries?

Professional preparation of teachers is seen in terms of life-long learning

- Pre-service training,
- Induction support,
- In-service or continuing professional development

are seen as part of a continuum
(Feiman-Nemser, 2001)

…makes sense from a human capital point of view. Learning of teachers does not stop at the end of pre-service training.

Preservice training

- No single organizational structure that is considered most effective, given its cost
- Key aspects of pre-service teacher education include
  - entry requirements (e.g., ISCED 2 or 3?) & level of content knowledge expected on entry
  - duration of program (3 months to 5 or more years) & what proportion is school based?
  - to what degree do participants get a chance to do "practice teaching", when does it occur, and how long is it?
  - timing within a teachers career (some courses "sandwich" content and pedagogical training in between experiences teaching in classrooms)
  - balance between developing subject-specific content knowledge, pedagogical content knowledge, and professional studies
  - what is the typical/required education level and background of teacher trainers?
  - philosophy of effective instruction, e.g., behaviorist vs. constructivist models

(Lewin, 2004; Schwille and Dembélé, 2007; Stuart and Tatto, 2000).

Do we need an international standard classification of teacher training?

- If yes, start with a meta data collection on teacher training programs
  - Comparative framework
    - Expert meeting sponsored by UIS
    - Pilot among countries participating in the World Education Indicators (WEI Project)
      - Argentina, Brazil, China, Egypt, India, Indonesia, Jamaica, Jordan, Malaysia, Paraguay, Peru, the Philippines, Sri Lanka, Thailand, Tunisia, Uruguay and Zimbabwe.
  - Decide on essential characteristics of programs
    - Allow for the collection of data on student flows through the system.
    - Relationship to placements and outcomes

What do we know about effective models for induction?

- Prior research conducted in the United States suggests that
  - Mentorship by a teacher in the same field
  - Collaboration with other teachers on instructional issues
  - Positive administrative support

have a positive impact on commitment and retention among new teachers

- Induction programs in other countries, including France, Japan, New Zealand, Switzerland, and China tend to be well funded, incorporated multiple sources of support, typically last two or more years and actively support learning about teaching (Britton et al, 2003).

What would we want to know about induction programs cross nationally?

- What are the goals and rationale for induction programs?
- Who is eligible to participate?
- How long are the programs?
- Who is involved, what types of support are provided?
- How do the programs balance assistance in teaching and assessment of teaching?
- What are the costs and how are they funded?
- What types of evaluation is done to monitor the effectiveness of induction programs?

What is the correct unit of analysis?

- Induction program
  - country, region, LEA
- School?
- Individual teacher?

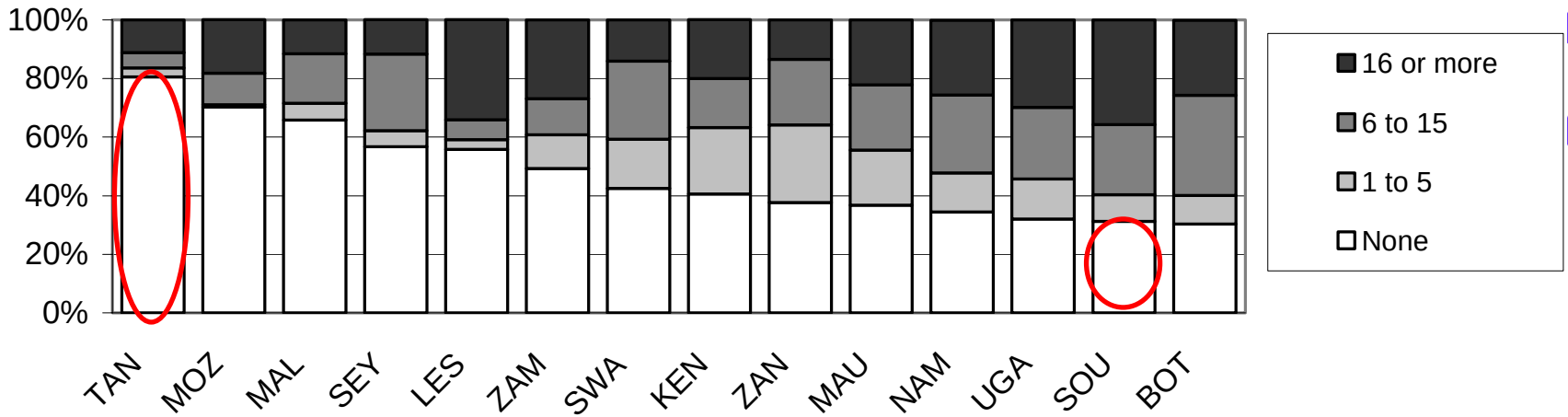
- Depends on the goal
  - Alternative models or monitoring?
  - Designed vs. enacted

What do we know about effective models for continuing professional development?

- Research on the effects of professional development on student achievement is limited
  - US—Student achievement gains in math if CPD is on **content specific pedagogy** (Cohen and Hill 1997; Wiley and Yoon 1995)
  - Israel--CPD less expensive strategy for raising test scores than reducing class size or adding school hours (Angrist and Lavy 2001).

Survey data available on participation rates

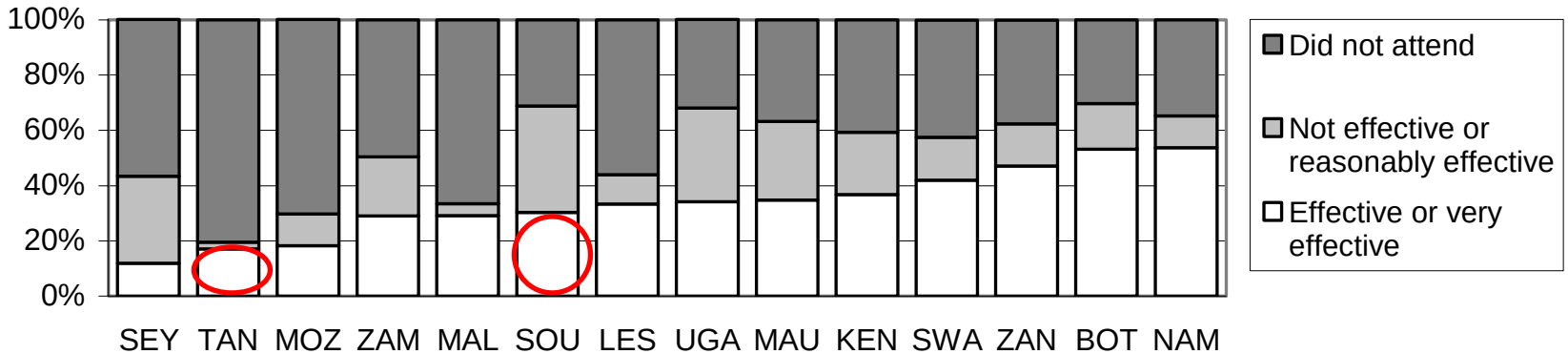
Percentage of 6th grade students whose reading teachers participated in different numbers of days of in-service courses in the prior 3 years



Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ), 2000-2002

But research suggests that most PD is of low quality

Percentage of 6th grade students whose reading teachers rated their in-service training as effective



Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ), 2000-2002

More difficult to conceptualize professional development from a "national" perspective

- Likely to be locally developed and administered, rather than administered by national authorities
- This would imply that data collection would need to occur at the regional, school, or teacher level.

Some programmatic questions that might be worth exploring include:

- What are the goals and rationale for professional development programs?
- What are the incentives for teachers to participate?
- How is it organized and provided?
- Who is involved, what types of support are provided?
- To what extent does the content of CPD focus on subject-area content and the teaching of that content?
- What are the costs and how are they funded?
- What types of evaluation is done to monitor the effectiveness of professional development programs?

And what might we want to know at the teacher level?

- Participation rates in continuing professional development of different lengths
- Participation rates in different types of CPD, including
  - Content focused
  - Based on the curriculum teachers are implementing in the classroom
  - Analysis of student work
  - Observation and feedback of teachers teaching
- Perceptions of alignment of CPD with the teachers' learning goals, the curriculum, and any external assessments

Other measures of teacher quality

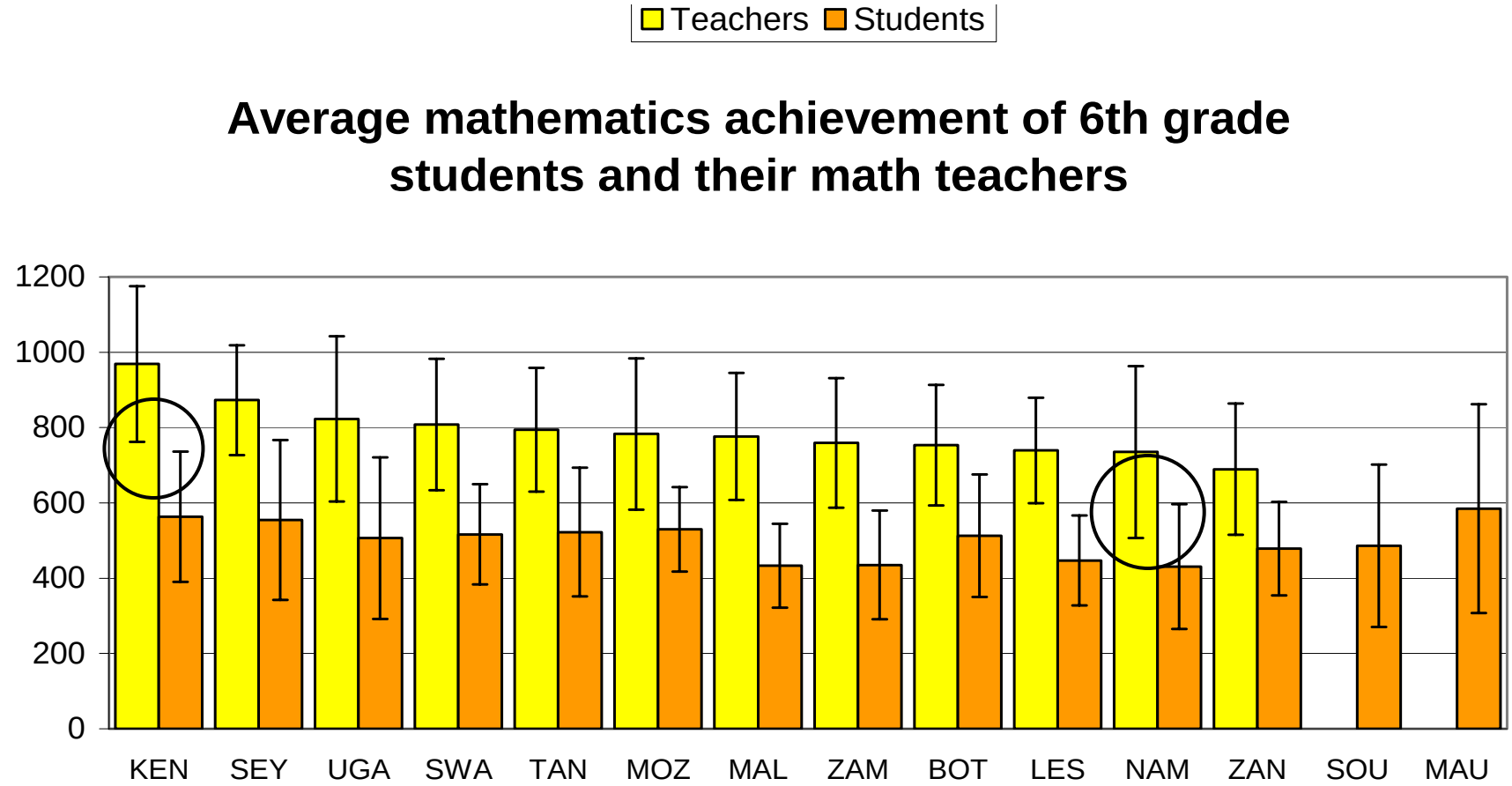
- Teachers' academic skills
- Content knowledge
- Pedagogical content knowledge
- Experience teaching
- But,

  current research suggests that these measures explain a relatively small proportion of the variation in student achievement that is associated with the assignment of a student to a particular teacher.

What do we want to know about the teacher professional continuum?

- Benchmarking standards
  - What proportion of teachers meet national standards and what are those standards?
- Visible measures of teacher quality
  - Variability across schools by student SES, urban/rural, high/low performing
- Natural experiments
  - Alternate designs for preservice, induction, and professional development

When teachers are assessed as part of assessments of students



The top of the bars represent the average scores of teachers (yellow) and students (orange); the lines bisecting the top of the bars show the range within which 95% of students' and their teachers, respectivevly, in each country scored (+/- 1.96 * SD). Teachers were not assessed in Mauritus or South Africa. Source: Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ), 2000-2002

Pedagogical content knowledge

Learning Mathematics for Teaching

- Measures mathematical knowledge as it is used within particular tasks of teaching that reflect teachers' facility with numbers, patterns, operations, functions, algebra content, and geometry
- Current measures consist of multiple-choice prompts, achieve reliability of .70 or above, and can be used as a pre-/post-test to assess teachers' knowledge growth (Hill, Schilling, & Ball, 2004).

2. Imagine that you are working with your class on multiplying large numbers. Among your students' papers, you notice that some have displayed their work in the following ways:

Student A	Student B	Student C
35 x25 125 +75 875	35 x25 175 +700 875	35 x25 25 150 100 +600 875

Which of these students would you judge to be using a method that could be used to multiply any two whole numbers?

	Method would work for all whole numbers	Method would NOT work for all whole numbers	I'm not sure
a) Method A	1	2	3
b) Method B	1	2	3
c) Method C	1	2	3

Hill, H.C., Schilling, S.G., & Ball, D.L. (2004) Developing measures of teachers' mathematics knowledge for teaching. *Elementary School Journal 105*, 11-30.

9. Mr. Garrett's students were working on strategies for finding the answers to multiplication problems. Which of the following strategies would you expect to see some elementary school students using to find the answer to 8 x 8? (Mark YES, NO, or I'M NOT SURE for each strategy.)

	Yes	No	I'm not sure
a) They might multiply 8 x 4 = 32 and then double that by doing 32 x 2 = 64.	1	2	3
b) They might multiply 10 x 10 = 100 and then subtract 36 to get 64.	1	2	3
c) They might multiply 8 x 10 = 80 and then subtract 8 x 2 from 80: 80 – 16 = 64.	1	2	3
d) They might multiply 8 x 5 = 40 and then count up by 8's: 48, 56, 64.	1	2	3

Hill, H.C., Schilling, S.G., & Ball, D.L. (2004) Developing measures of teachers' mathematics knowledge for teaching. *Elementary School Journal 105*, 11-30.

Other measures of teacher quality

- Teachers' academic skills
- Level of content knowledge (degree match or assessment)
- Pedagogical content knowledge
- Years of experience teaching (age)
- But these measures tend not be maintained by national education authorities.

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- Level of content knowledge (degree match or assessment)
- Pedagogical content knowledge
- Years of experience teaching (age)
- But these measures tend not be maintained by national education authorities.

Even with good measures of

- Teachers' academic skills
- Content knowledge
- Pedagogical content knowledge
- Experience teaching
- as well as other "visible signs" of teacher quality,

current research suggests that these measures explain a relatively small proportion of the variation in student achievement that is associated with the assignment of a student to a particular teacher.

What do we want to know about the teacher professional continuum?

- Benchmarking standards
  - How strongly are the indicators linked to student outcomes?
- Variability across schools by student SES, urban/rural, high/low performing
- Alternate designs for preservice, induction, and professional development

Comparing induction programs in Europe: The Estonian case

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Paris, 13th November 2008

TALLINN UNIVERSITY

Induction- support for beginning teacher

The issue of induction and support for new teachers is of particular concern at a time when several countries have a lack of teachers and large numbers of young teachers who leave the profession after only a few years.

The European Commission Communication *Improving the Quality of Teacher Education* (2007)

- set out the challenges for teacher education in Europe, summarising the changing demands on teachers and stressing the importance of co-ordination between initial and continuing teacher education.

(Ministers of Education 2007):

- to make teaching a **more attractive career choice**,
- to **improve the quality** of teacher education and
- to provide initial education, early career support (induction) and further professional development that is **coordinated, coherent, adequately resourced and quality assured**.

Ministers of Education (2007):

… to ensure that teachers:

- have access to **effective early career support** programmes at the start of their career;
- have access to adequate **mentoring support** throughout their careers;
- are encouraged and supported throughout their careers to **review** their **learning needs** and to **acquire new** knowledge, skills and competence.

European Parliament (2008):

- “particular attention to be paid to new teachers’ **initial induction**;
- encourages development of **support networks and mentoring** programmes,
- **teachers of proven experience** and capacity can play a key role in new colleagues' training, promoting team-learning and helping to tackle drop-out rates among new recruits…”

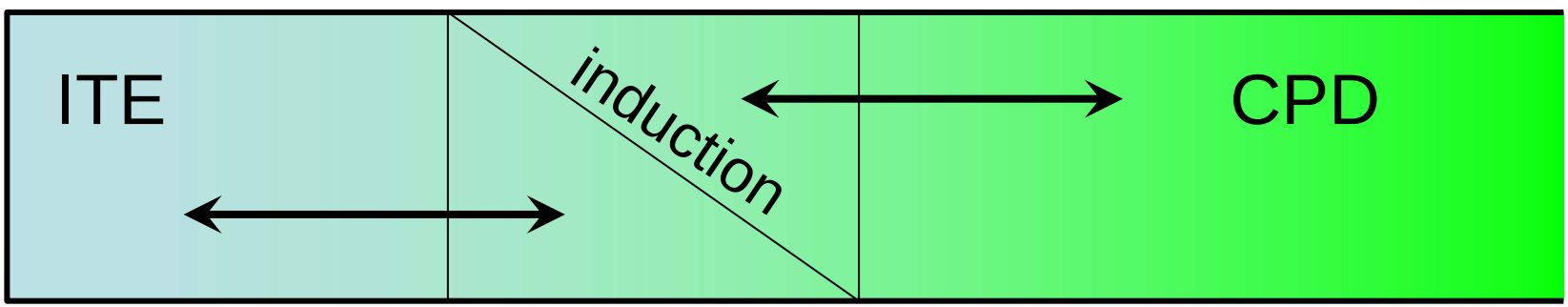
Induction

The induction phase begins after graduation from teacher education and covers the first steps of a teacher's teaching career. This phase lasts from one to three years.

An induction programme is the support that is given to newly qualified teachers in the first steps of their teaching career.

The need for induction

- Support for teachers at a crucial stage of their career
- To support socialisation in the profession
- Support the learning of teachers which is fundamentally different from their learning and their concerns during initial teacher education



From PLA, Tallinn 30th Oct 2008

Reasons for implementing induction year: from theoretical perspective

(Villegas-Reimers 2002)

- Teacher education is based a on constructivist approach where the teacher is a reflective practitioner and active learner who plans her/his professional development.
- Teacher education is a long-term and life-long process where the teacher evaluates his/her previous knowledge in practical situations, this way constructing new knowledge.
- The development of a teacher takes place in a particular context, most effectively at school, and is connected to the teacher's daily activities.

Reasons for implementing induction: from theoretical perspective (Villegas-Reimers 2002)

- A teacher's professional growth is an integral component of school culture and related to school development.
- Professional development is a collaborative process; schools are becoming professional learning communities.
- Professional development is multidimensional and personal and depends on a context. School culture, social, economical and political contexts influence teacher's effectiveness and his/her motivation to work and study.

Essential elements of an induction programme

- Mentoring system
  - Individual
  - Group mentoring

  Using portfolio & feedback, observations, co-teaching, diaries, …
- Expert system
  - Seminars, courses, supportive materials, …
- Peer system
  - peer-support
  - peer-networking (and infrastructure)
- Self-reflection system

From PLA, Tallinn 30th Oct 2008

Conditions for success

- Induction as a part of continuum
- Adequate resources and recognition
- Clear roles and responsibilities
  - Beginning teacher
  - Mentor
  - School leader
  - Teacher education staff
  - Ministry and/or local authority
  - Unions/professional bodies/steering boards
- Close co-operation (based on mutual trust)
- Supportive learning environment in school
- Quality of actors: mentor, school leader,teacher educator

From PLA, Tallinn 30th Oct 2008

The first experiences of implementation have provided the following suggestions:

- Initial teacher training should put more emphasis on and create preconditions for the development of a future teacher's professional identity (including professional self-conception)
- Mentor training should pay more attention to the mentors' skills and readiness to support the professional growth of the novice teacher through the process of feedback and reflection.

The first experiences…

- More and more significance lies in organisational learning and learning communities as setting for fostering teacher's professional development.

- The question of changes in implementation of the induction programme is complex. The changes on the level of understanding are more easily achieved in schools which have the characteristics of a learning organisation.

Beginning teaher's voice:

A good thing is that the beginning is over, it will neve come back!

Mentor gave me advice, opened my eyes. But the main process was, of course, in my hands.

Comparing European Teacher Education Structures according to the Bologna process

Dr Apostolis Dimitropoulos

The ENTEP Network

The Bologna process: main goals by 2010

- improve quality of European higher education systems
- construct a European Higher Education Area
- increase international competitiveness of European HE system
- make higher education degree structures **more comparable and readable with the introduction of a two-cycle system with a first cycle of at least 3 years**
- **facilitate mobility** and recognition of qualifications in the EU

The Bologna process: main goals by 2010

The goals have expanded…..

- Introduction of the ECTS (credit transfer & accumulation device)
- Quality assurance
- Lifelong learning
- The third cycle-doctoral training
- Learning outcomes
- A European Qualifications Framework

The Bologna process:

main characteristics

- **Intergovernmental** -NOT a European process
- Implementation at national level
- An **holistic approach** -NOT a sectoral subject-by-subject approach
- **No particular reference to teacher education structures**
- No reference to teacher education of different levels (**pre-primary/ primary/secondary**)
- Large **variation** in initial teacher education structures in the EU countries

The Bologna process and Teacher Education structures: 10 years on

The ENTEP survey: Main questions

- Have teacher education structures become more comparable and readable?
- Is the Bologna process **a success story** for initial teacher education structures?
- What trends are identified in TE structures in the EU?

The Bologna process and Teacher Education structures: 10 years on

- A focus on initial teacher education structures
- The introduction of the ECTS
- The 3 levels of teachers

  the pre-primary

  the primary

  the subject school teacher

The Bologna process and teacher education in Europe: 10 years on

Findings of the ENTEP survey of 18 EU countries:

Available at:

http://entep.bildung.hessen.de/papers.php

The Pre-Primary School Teacher Education
Key findings

- Over half of the countries have introduced **reforms** after 1999
- In most cases reforms were **connected** to the implementation of the **Bologna** process
- In over 2/3 of the countries a HE level degree is required. Mostly this is a **BA**. A few countries introduce an **MA**
- In over 2/3 countries no alternative pathways to pre-primary teacher status

The Pre-Primary School Teacher Education
Key findings

- About ¾ countries apply the concurrent model. A few countries both models or combine with consecutive models
- Duration ranges from 3 to 4 years of study
- In over half countries education at university type of institutions
- Only a few countries have implemented the ECTS

The Primary School Teacher Education
Key findings

- Almost all countries introduced reforms after 1999
- In most cases reforms were connected to the implementation of the Bologna process
- All countries require a HE degree. In most cases this is a BA. The MA is rather rare as a requirement
- Alternative pathways are rare (mainly for holders of other HE degrees)

The Primary School Teacher Education
Key findings

- Most countries apply the concurrent model. A few offer both or combine with consecutive models
- Duration ranges from 3 to 5 years of study
- In over ¾ countries education in universities. A few countries in non-university HE institutions
- About half of the countries have introduced the ECTS. In many cases implementation of the ECTS is unclear

The Subject School Teacher Education

Key findings

- Most countries introduced reforms after 1999
- Reforms were connected to the implementation of the Bologna process
- All countries require a HE degree. In most cases this is a BA. A few countries introduce the MA
- A few countries offer alternative pathways

The Subject School Teacher Education
Key findings

- In most cases education in universities. A few countries in non-university HE institutions.
- Most countries apply consecutive models. A few the concurrent or both, if for different subjects
- Duration ranges from 4 to 6.5 years of study
- Most countries have introduced the ECTS. In many cases implementation of the ECTS is unclear

Trends identified in initial Teacher Education in Europe

- A clear and longer-term trend for countries to move initial education of pre-primary, primary and subject school teachers **into universities**
- A clear trend **to increase** years of study to qualify as a teacher
- A somewhat weaker trend to introduce an MA level degree as requirement to qualify as a teacher in Europe

Conclusions

- TE structures have changed and continue to change in the EU
- The Bologna process appears to have **triggered** reforms in TE structures in the EU countries and has **facilitated** these reform processes
- The Bologna process also appears to have facilitated the implementation of longer term trends in TE (university level subject & increased length), in some countries
- Professionalisation of TE is enhanced in Europe
- Comparability and readability of TE qualifications is **questionable!!!**

The Bologna process beyond 2010: Issues for a shared reflection

- Is a **sectoral**, instead of a holistic, approach in the Bologna process needed?
- Would a **special reference** to TE in the Bologna process be helpful in increasing Europe-wide awareness?
- Would more and better **information** availability on TE structures and reforms be of help?
- Would such information, accessible by all actors involved in the design of TE programmes (policy-makers/HEIs) facilitate the exchange of best practices in TE policy and enhance comparability and readability of TE structures?

Thank you!

- European Commission's work on equity : a comparative vision / **presentation_maria_Hrabinska**
- Questions of Equity in the USA / **presentation_susan_Sclafani**
- The Question of Equity in the German Educational System / **presentation_hans-peter_Fuessel**
- Efficiency ans equity in European Education ans training systems / **presentation_marc_Demeuse**

CEDEFOP | European Centre for the Development of Vocational Training

European Commission's work on equity: a comparative vision

Maria Hrabinska

Paris, 13 – 14 November 2008

Policy context of monitoring of equity in E&T

- 2000 - Lisbon European Council – more and better jobs, competitivenss but also social cohesion
- 2006 - European Spring Council: High quality education and training systems that are both, efficient and equitable
  - Communication of the Commission on efficiency and equity in European E&T systems
- 2007 - Report on progress towards Lisbon objectives in education and training (2007 Progress report) with focus on equity
- 2008 - Renewed Social Agenda: Green paper on education and migration

Monitoring and Analysing Progress

FIVE EUROPEAN BENCHMARKS FOR 2010

10% Early school leavers (young people)
20 % Less low performers in reading literacy
15% More new Math, Science and Technology graduates
85 % Upper secondary graduates (young people)
12.5% Lifelong learning participation (adults)

SIXTEEN CORE INDICATORS

1. Participation in pre-school education
2. Special needs education
3. Early school leavers
4. Literacy in reading, maths and science
5. Language skills
6. ICT skills
7. Civic skills
8. Learning to learn skills
9. Upper secondary completion rates of young people
10. Professional development of teachers
11. Higher education graduates
12. Cross-national mobility of students
13. Participation of adults in lifelong learning
14. Adults' skills
15. Educational attainment of the population
16. Investment in education and training

2008 Progress report

- Making lifelong learning a reality
- Developing school education
- Developing vocational education and training
- Developing higher education
- Key competences for lifelong learning
- Improving equity in education and training
- Employability
- Investment in education and training

Main messages of the 2008 report

EDUCATION AND TRAINING IN THE EU IS IMPROVING SLOWLY BUT STEADILY.

PARTICIPATION IN LIFELONG LEARNING IS BECOMING A REALITY IN SOME COUNTRIES.

THERE ARE STILL IMPORTANT INEQUITIES IN EDUCATIONAL SYSTEMS IN EUROPE.

Commission's approach to equity

► Equitable systems ensure that the outcomes of E&T are independent of socio-economic background and other factors that lead to educational disadvantage and that treatment reflects individuals' specific learning needs.

(Communication on efficiency and equity, 2006

► Equity is viewed as the extent to which individuals can take advantage of E&T in terms of

opportunities and access,
treatment and outcomes

(2007 Progress report)

► A holistic and integrated approach to equity issues (outcome of peer learning)

EU benchmarks as a powerful instrument

- Open method of coordination
- National priorities corresponding to the agreed EU targets (national enchmarks)
- Equity dimension in all five benchmarks:

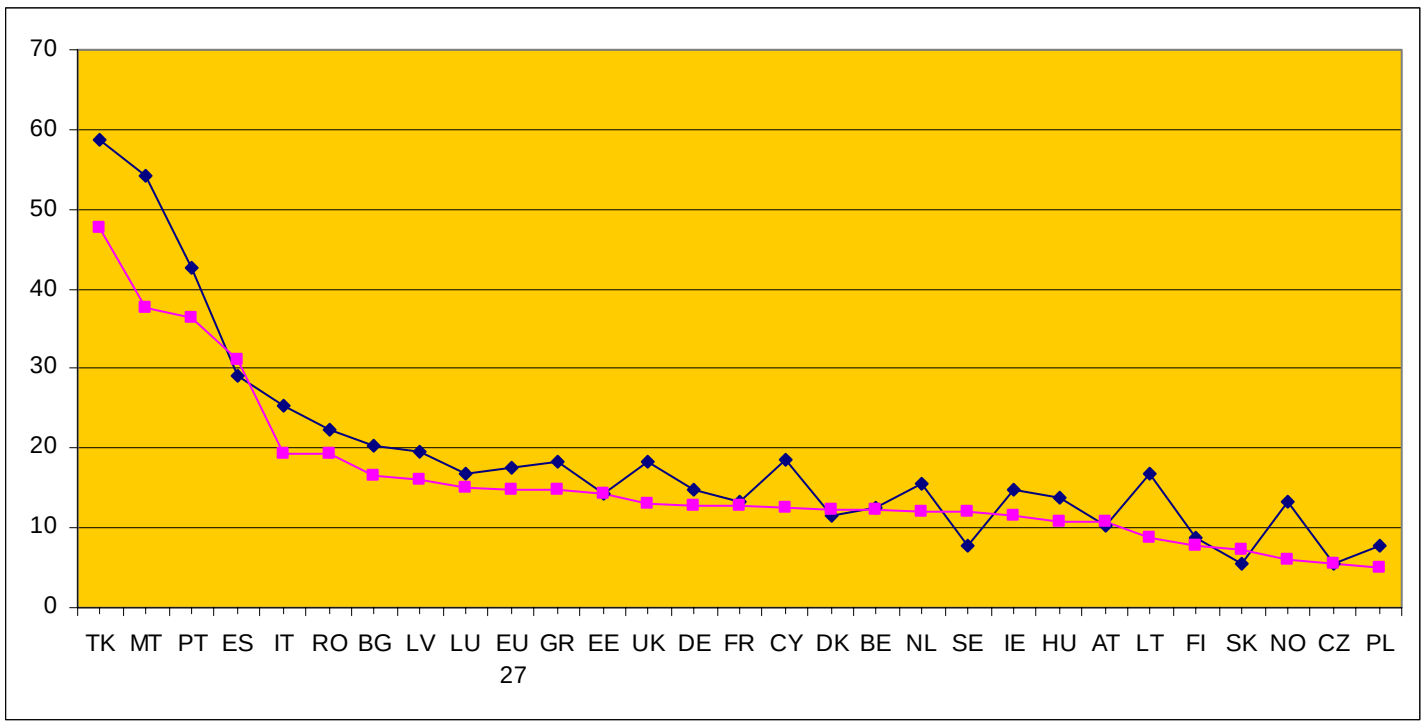
  Early school leavers
  Low achievers in Reading
  Completion of upper secondary education
  Participation in LLL
  MST graduates (female)

2008 Progress report – Chapter on Equity

- **Early school leavers**
  (by gender, by highest educational level achieved, by migrant background, by employment, participation in LLL, drop-outs in VET in Norway, status droop-outs in the USA)
- Special needs education
  (pupils recognized as SEN, pupils with SEN in segregated educational settings, education of pupils with SEN depending on type of difficulty)
- Gender issue in E&T
- Children at risk and intergenerational transmission of disadvantages (children by educational level of parents, by migrant background, probability of attaining higher education)

1. Early school leavers

- progress, but very slow



Source: LFS, 2007

Some findings on early school leavers

- ESL do not represent a homogenous group, there are also positive leavers (mainly under those who leave the the school in higher grades).
- Unemployment rate of ESL is in majority of countries higher. More employment opportunities for low skilled seems to have negative impact on the rate of ESL.
- In general, ESL tend to have lower earnings
- The chance that ESL will participate in formal education after to be 30 years old is very low
- Early school leaving is a more common phenomena among non-nationals than among nationals.
- ESL as adults participate less in LLL

Other factors negatively influencing early school leaving

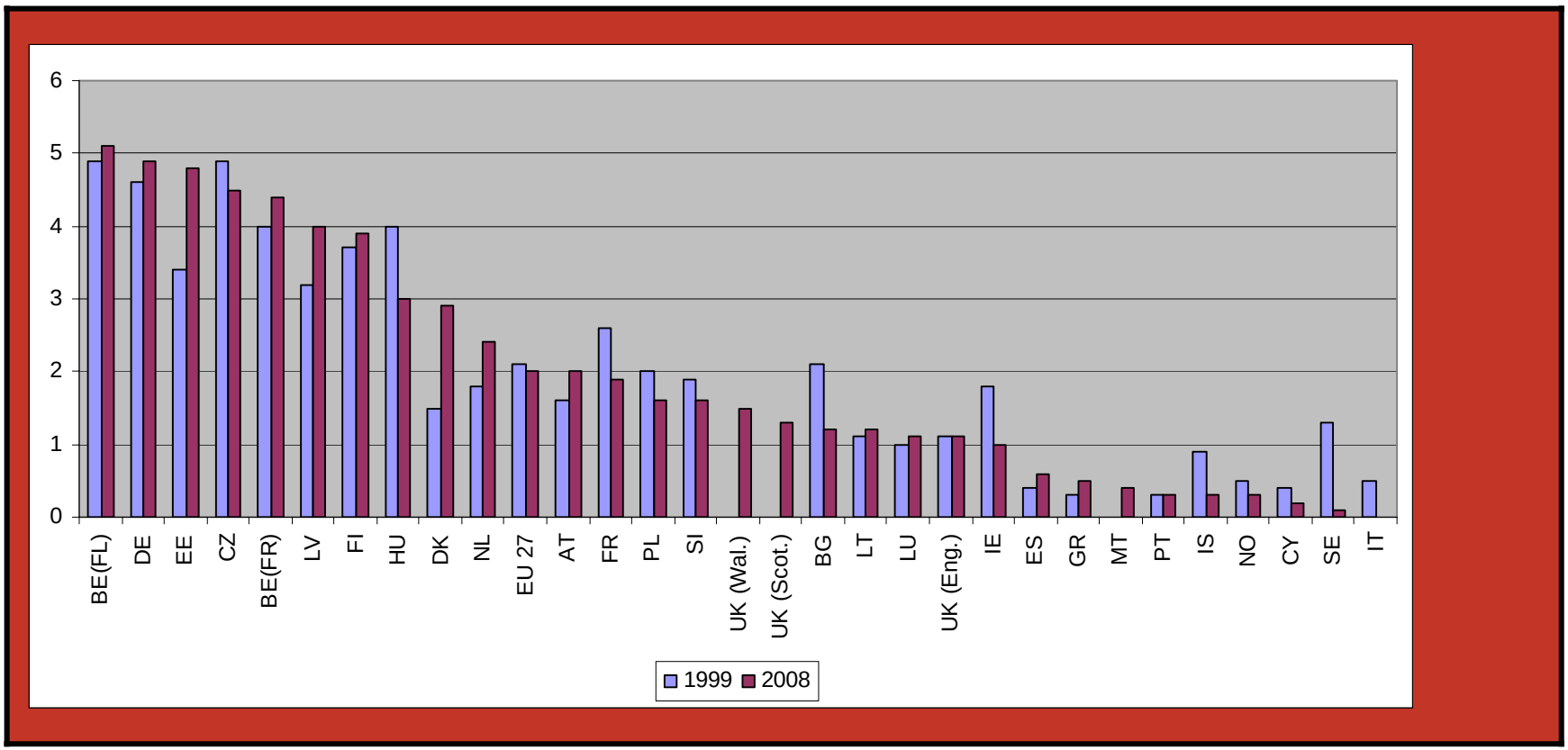
- repetition of grades
- early selection in various streams of E&T systems

No impact:

- pupil-teacher ratio
- class size
- total public and private expenditure on E&T

2. 1 in 50 students in compulsory education educated in segregated settings

Students with special education needs educated in segregated settings,1999 and 2008

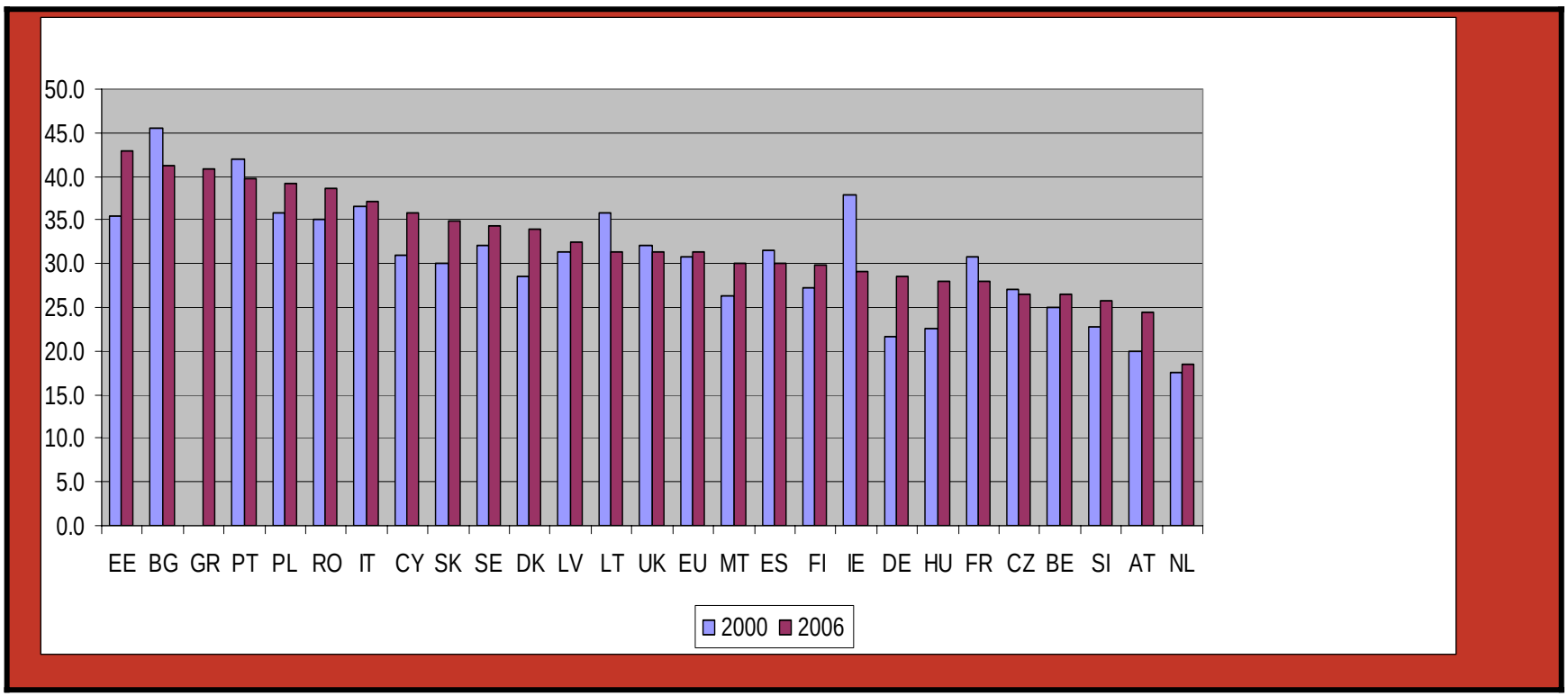


Source: European Agency for Development in Special Needs Education and Eurydice

3. Gender differences still play a role

- girls performing less well in Math and Science, boys worse performing in Reading (PISA)
- only about 30% of female MST graduates

Female Math, Science and Technology (MST) graduates, 2000 and 2006



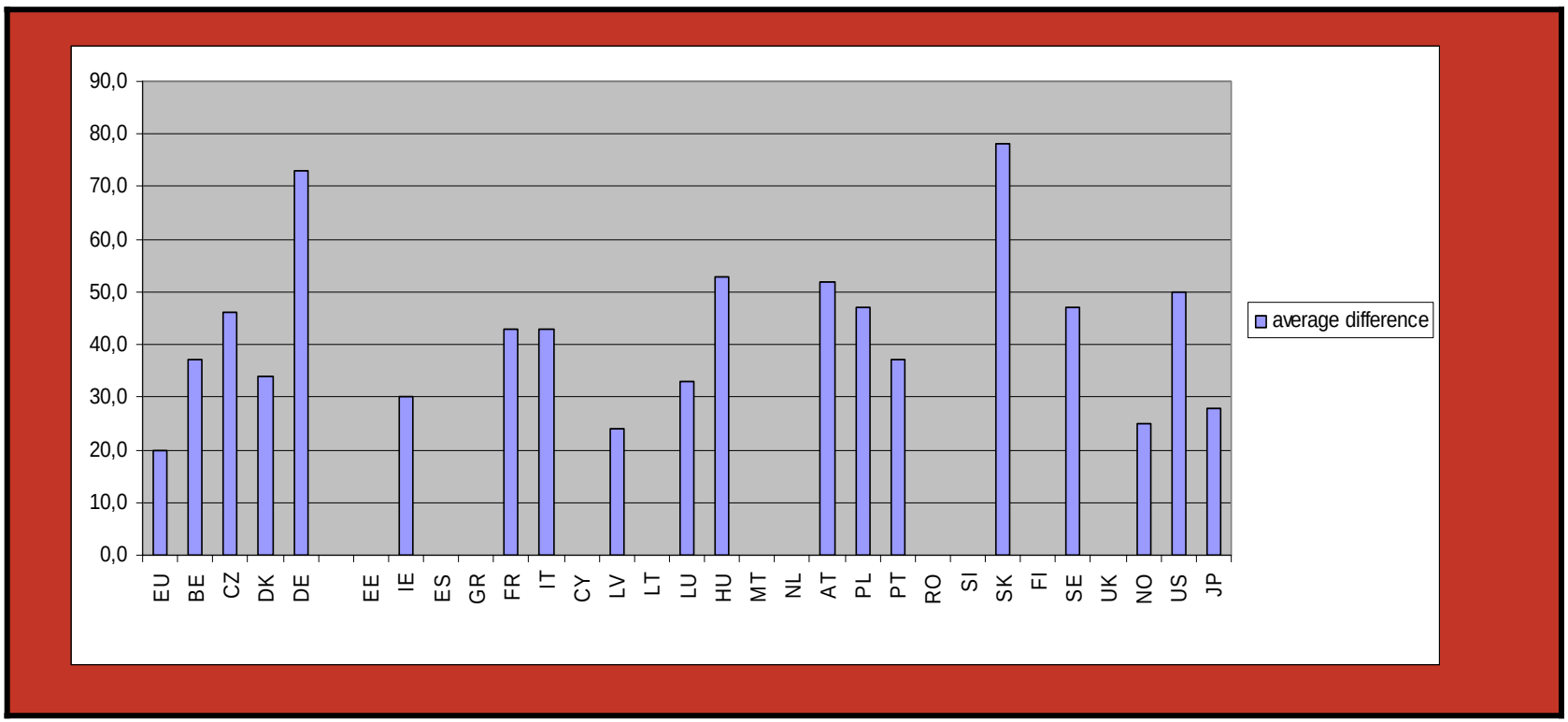
Source: Eurostat (UOE), 2000, 2006

4. Family background of students matters

- Impact of factors such as
  - Parental education
  - Parental occupation
  - Structure of the family
- Even the access to higher education is influenced by socio-economic background of students

The role of parental education

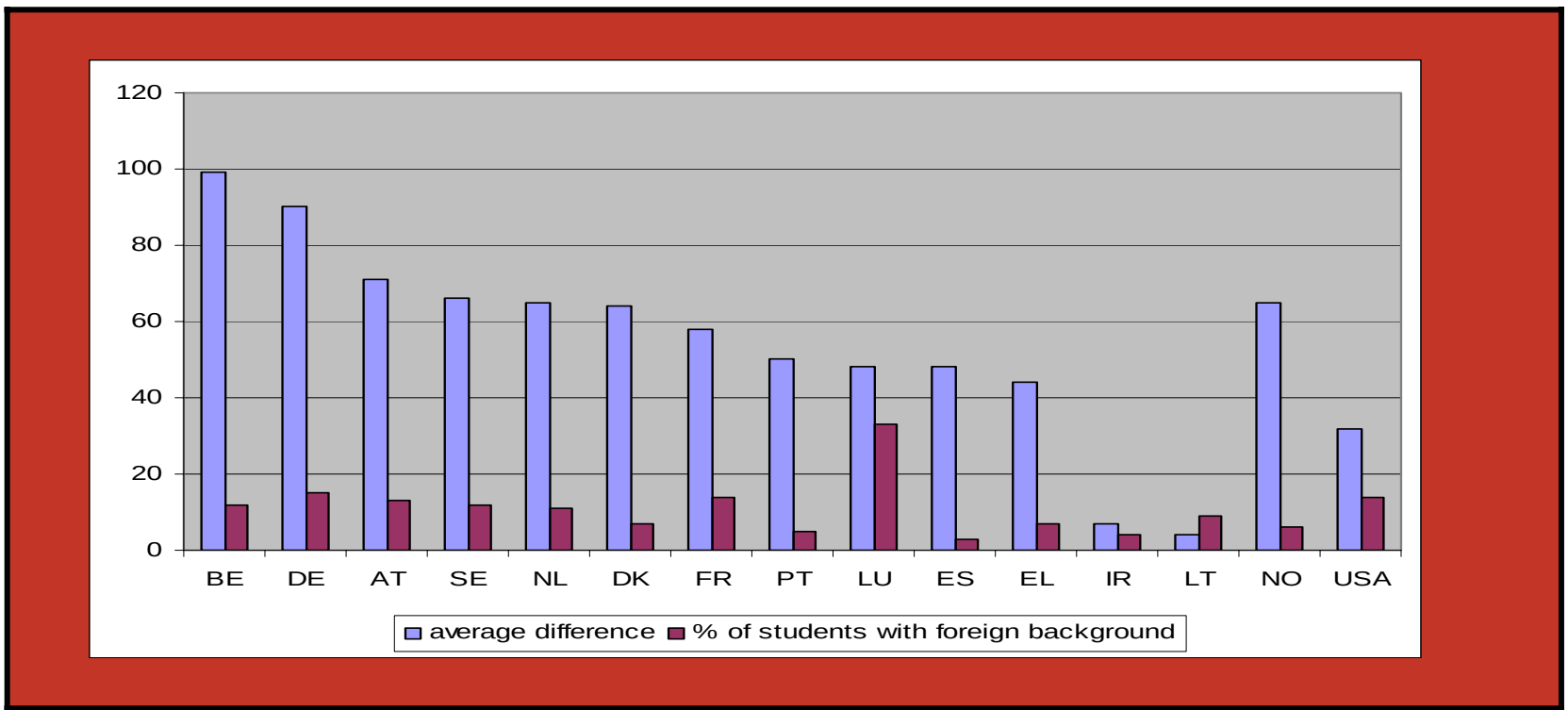
Difference in achievement between students with mothers with upper secondary education and students with mothers with less than upper secondary education



Source: PISA, 2003

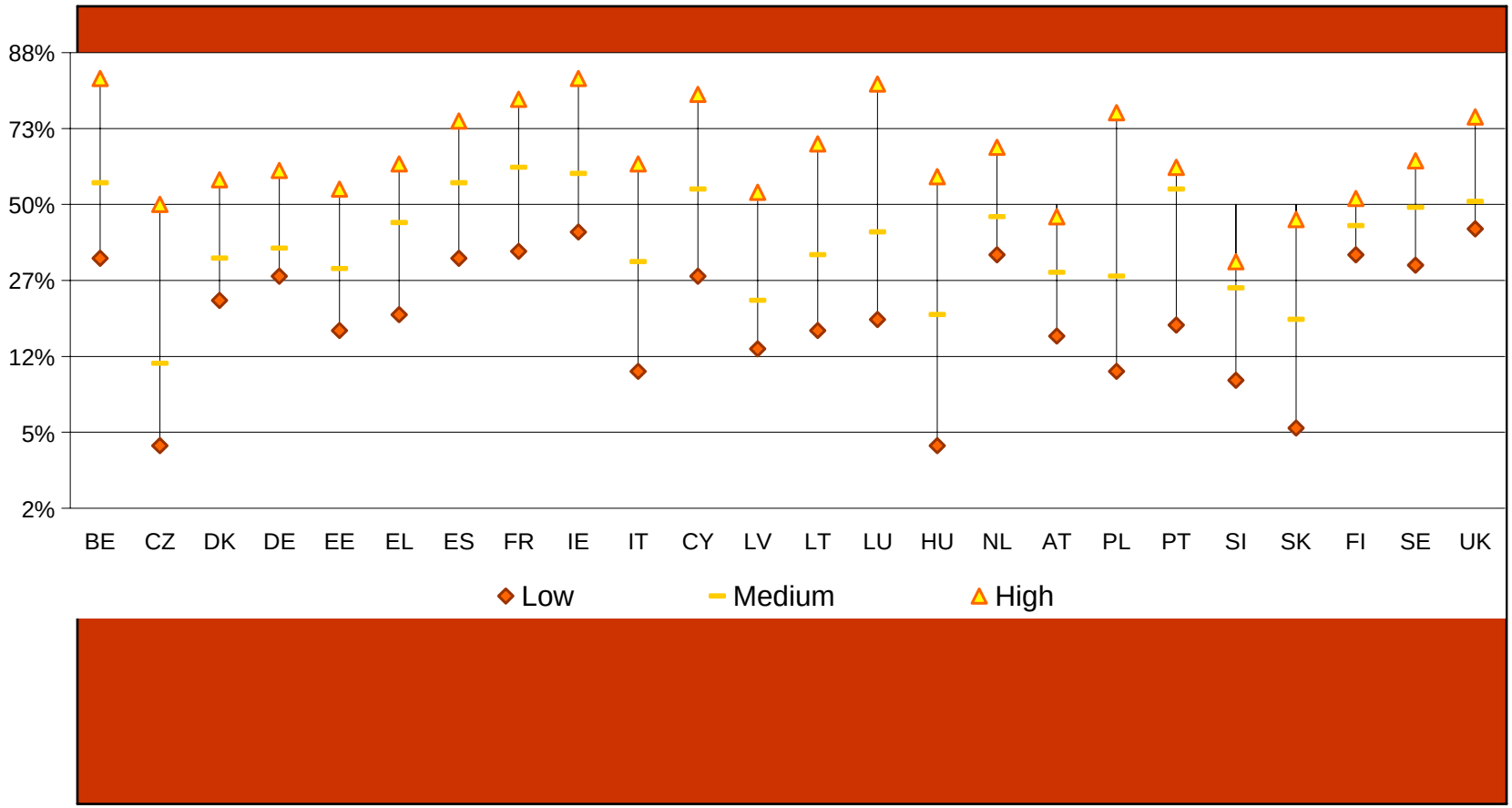
In particular foreign background of students matters:

Difference in achievements of native students and students with foreign background and % of students with foreign background



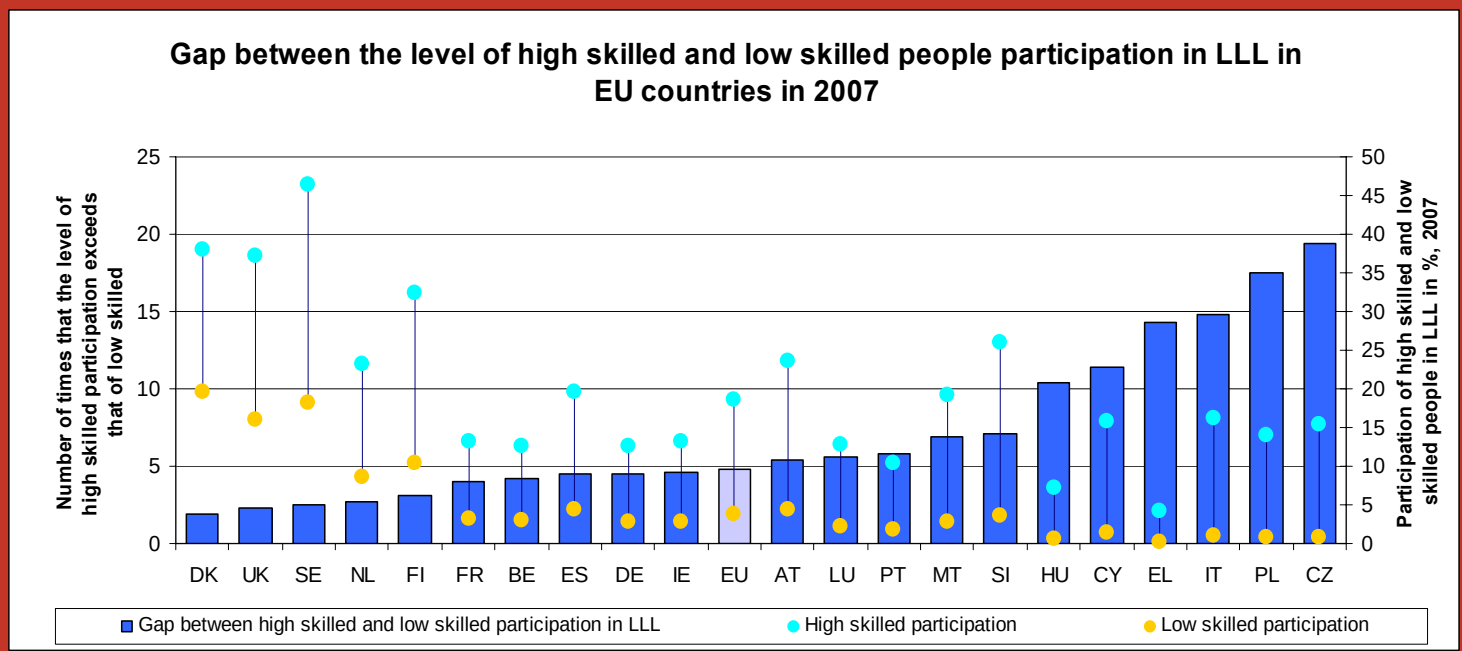
Source: PISA, 2003

Probability of attaining higher education by educational level of father



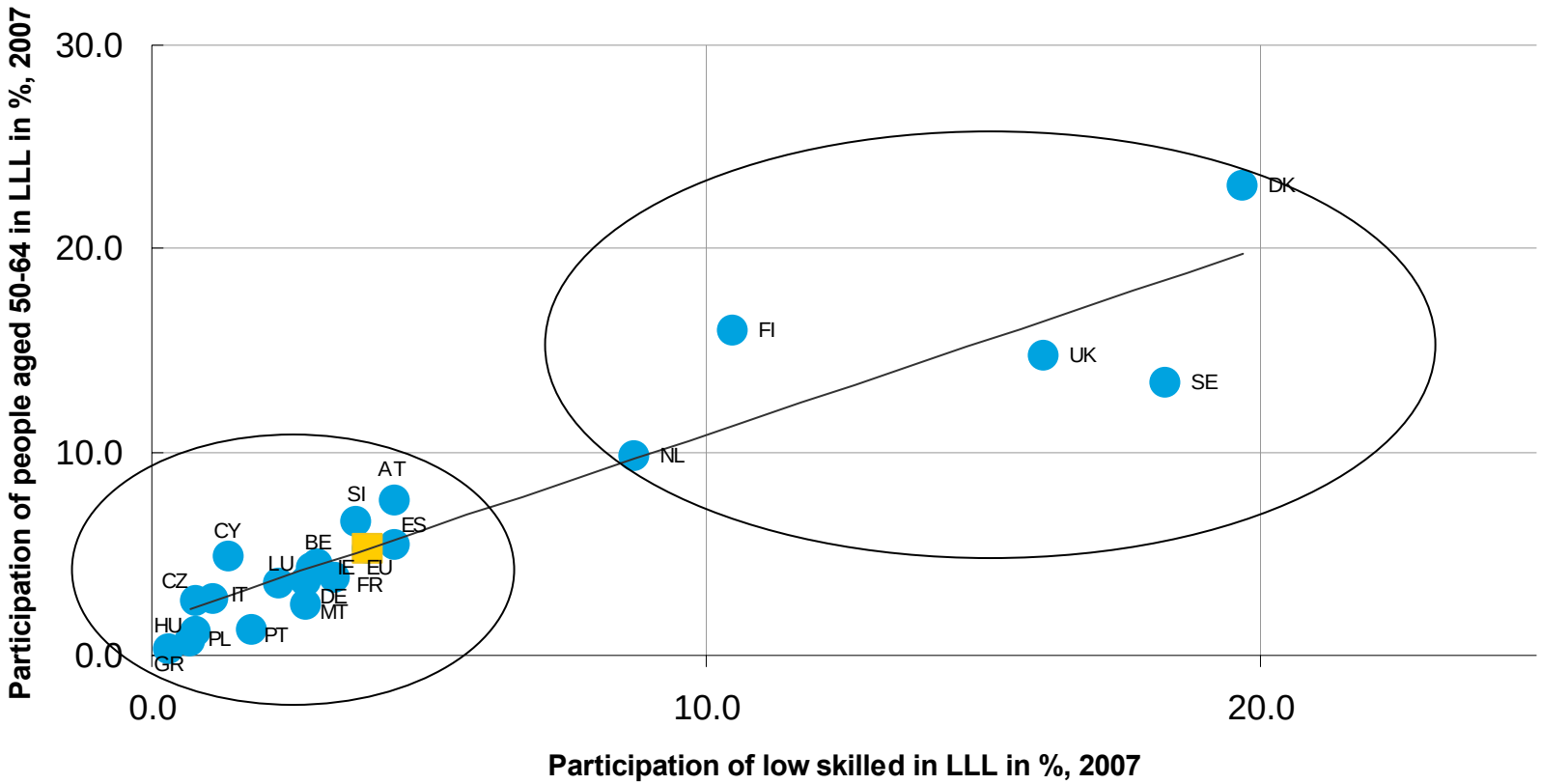
Source: EU-SILC, 2005

5. Low skilled participate in LLL 5-times less than high skilled



Source: LFS, 2007

To conclude: Some countries manage it…



Source: LFS, 2007

However, also availability and quality of data matters.

Composite indicator on equity as a solution?

Thank you very much for your attention!

The Progress report (2008) is available on the web.

http://ec.europa.eu/education/policies/2010/progressreport_en.html

maria.hrabinska@cedefop.europa.eu

Questions of Equity in the USA

Susan Sclafani

Managing Director, Chartwell Education Group

Former US Assistant Secretary for Education

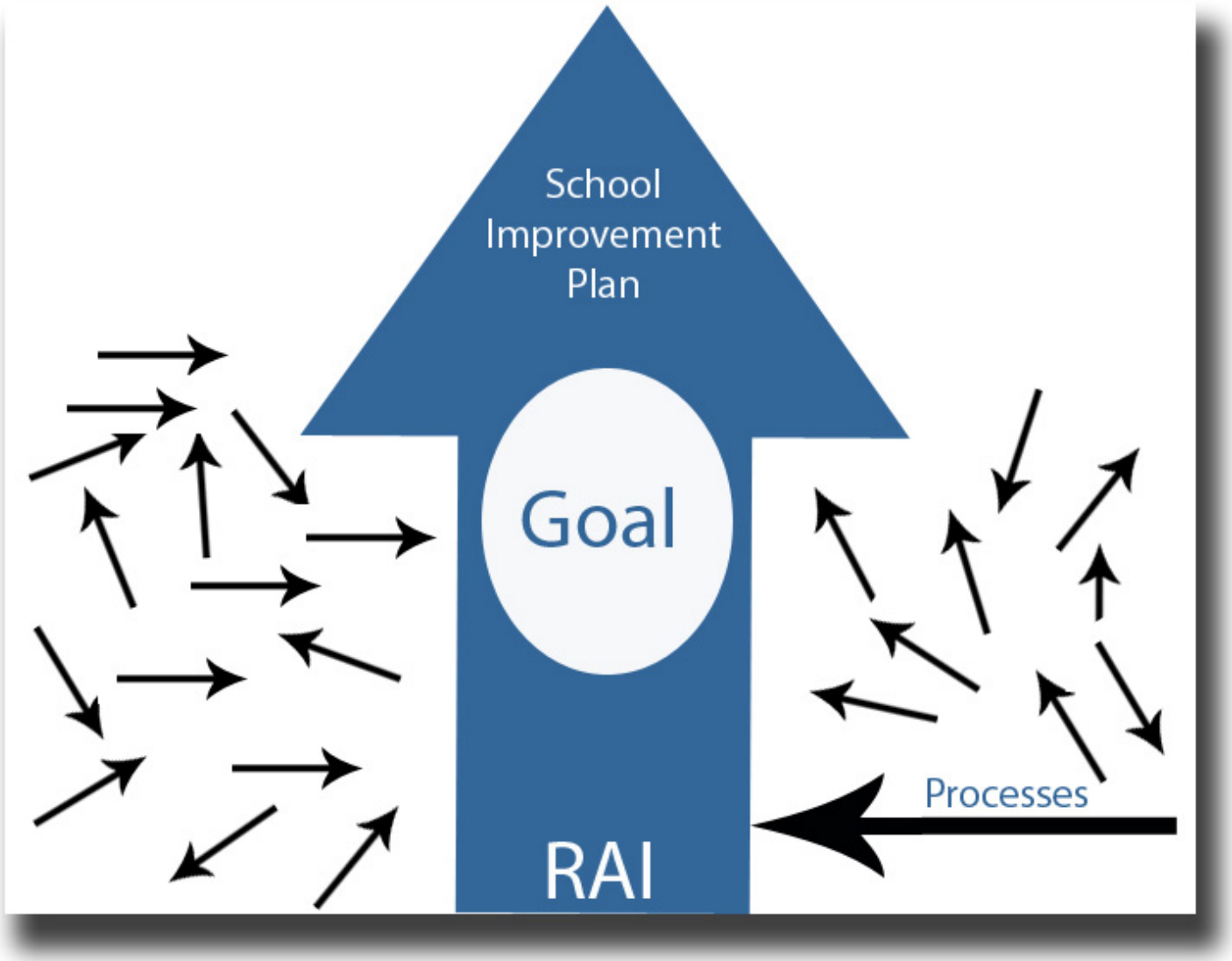
Challenges

- Accountability for ALL Students
- Student Achievement Data Shows Needs
- Poor Public Reporting Systems

An Aligned System

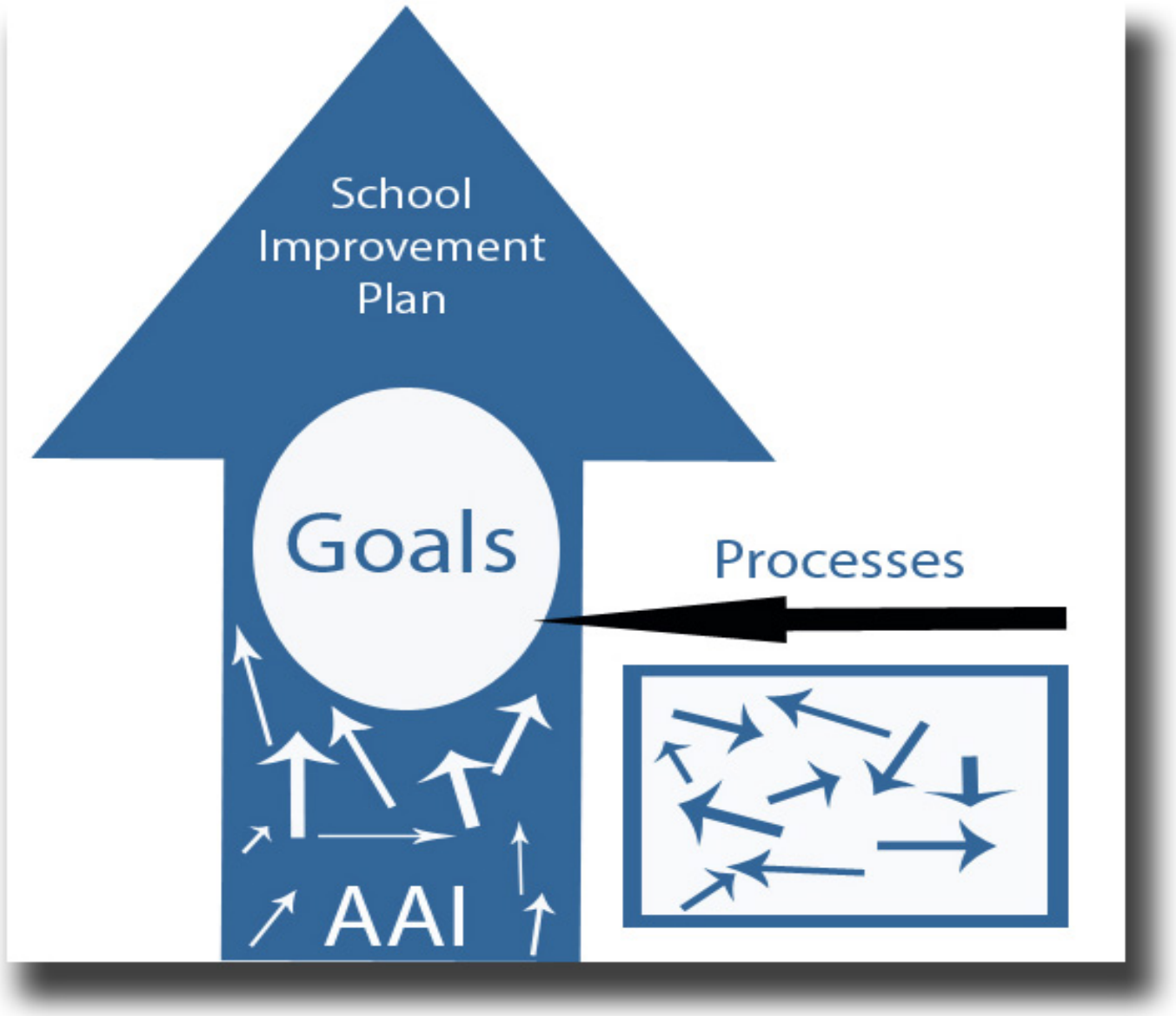
- Challenging Standards
- Professional Development for Teachers
- Coherent Instruction Aligned to Standards
- Rigorous Assessments Based on Standards
- Accountability System That Includes All Students

Random Acts of Improvement



Pinellas County Public Schools

Aligned Acts of Improvement



Where We Were, 2001

- 68% of Inner City 4th Graders Reading Below Proficient on National Assessment of Educational Progress (NAEP)
- NAEP at 4th / 8th /12th Grade in Math
  - 5% of African-American students at or above Proficient
  - 12th grade minority students at same level as 8th grade white students
- PISA 2000:
  - 12% at Level 5
  - 12% at Level 1
  - 6% below Level 1

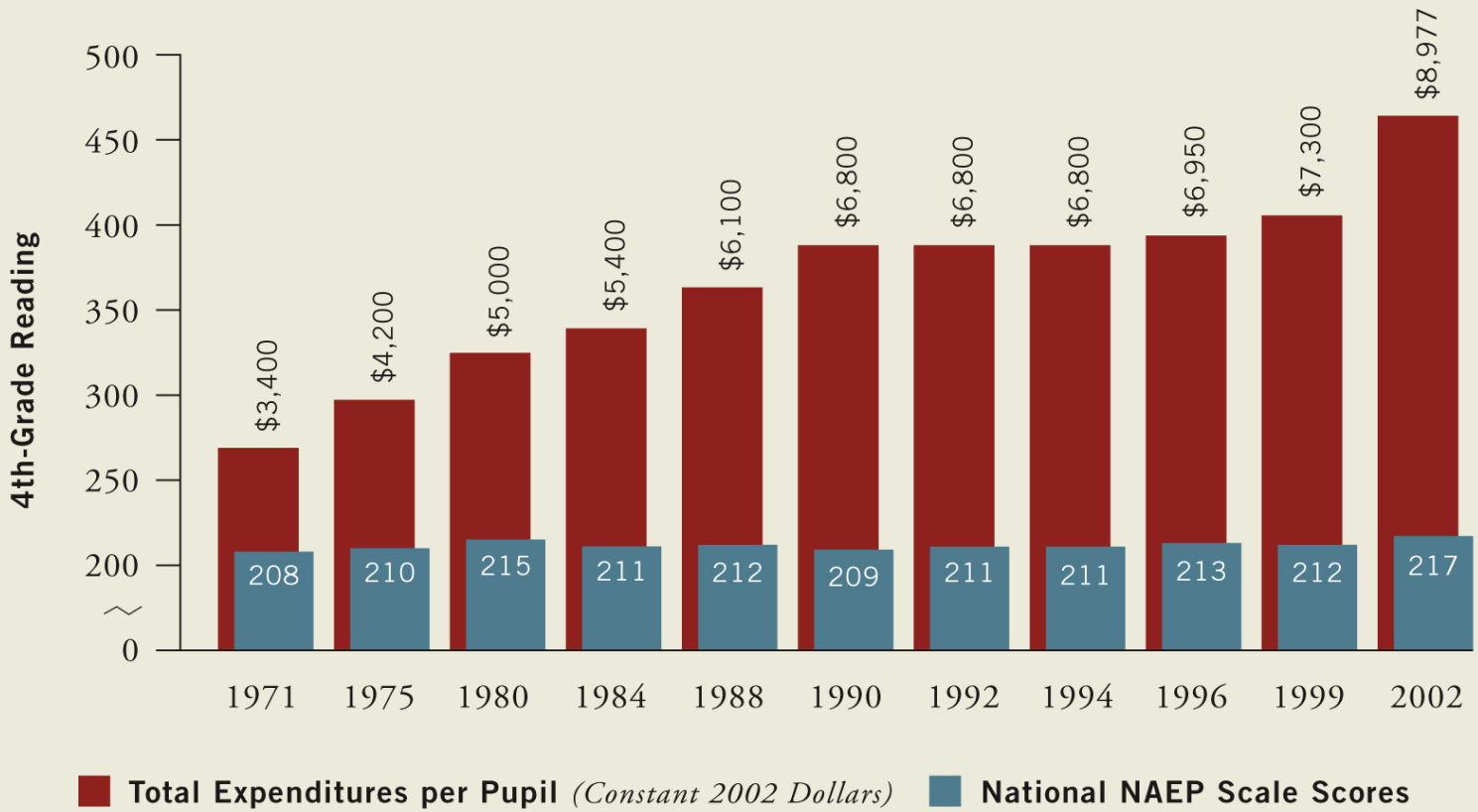
Teacher Quality Issues in 2001

- Teachers Without Major/minor in Subject Taught
  - 51.5% MS Math, 40% MS Science
- National Teacher Exams
  - Exams in subject areas required in only 29 States
  - 15 states set passing rates below 25%ile in reading and math
- 45 States Offer Alternative Certification

Impact of Social Background

- Achievement Gap Based on Social Background in the United States Is Among the Largest in OECD
- 90-point Score Difference Between Students in the Top Quarter and Students in the Bottom Quarter Based on the International Socioeconomic Index
- Only a Few Countries Have Larger Gaps

NAEP Reading Scores and Education Funding



USA outspends most OECD countries

Goal of *No Child Left Behind*

ALL Students Proficient by 2014

Four Pillars of *No Child Left Behind*

- Accountability
- Local Control and Flexibility
- Parental Choice
- Doing What Works

Focus on What Matters – Student Achievement

- Challenging Academic Content Standards and Academic Achievement Standards
  - Mathematics and reading/language arts in 2002
  - Science added in 2005-06
- **Same Expectations for All Children**
- Assessment Results and State Progress Objectives Disaggregated by Poverty, Race, Ethnicity, Disability, and English Proficiency

Adequate Yearly Progress

- Set by Each State to Reach 2014 Proficiency
- Same for All Schools and Leas in the State
- Applied to All Students and Each Subgroup
- Set Separately for Reading/language Arts and Math
- Based Primarily on State Assessments
- Includes Graduation Rate for High Schools and 1 Other Indicator for Elementary Schools
- For Each Subgroup, at Least 95% of Students Enrolled Must Be Assessed

Adequate Yearly Progress

Group	Rdg	Math	Grad	Other
All Students	+	+	+	+
White	+	+		
Black	+	+		
Hispanic	-	+		
Asian	+	+		
African	+	+		
Eco. Disadv.	+	+		
St w	+	+		

Public Reporting

- Student Academic Achievement Disaggregated by Subgroups
- Comparison of Students at Basic, Proficient, and Advanced Levels of Achievement
- Graduation Rates
- Professional Qualifications of Teachers
- Percentages of Students Not Tested
- Whether Schools Has Been Identified As "in Need of Improvement"

Highly Qualified Teachers

- All New Teachers of Core Subjects Must Have Bachelor's Degree
- New Elementary Teachers Must
  - Demonstrate Competence on Subject Matter Tests in Core Areas
  - Hold Full State Certification (Includes Alternative Certification)
  - Meet State Licensure Requirements
- Current Teachers Must Demonstrate Subject Area Competence

Highly Qualified Teachers

- New Secondary Teachers Must
  - Demonstrate competence on subject matter test in core area to be taught or academic major, graduate degree or coursework equivalent
  - Hold full state certification (includes alternative certification)
  - Meet state licensure requirements
- Current Teachers Must Demonstrate Subject Area Competence or Major/Equivalent

Local Control/Flexibility

- 15,000 School Districts in 50 States
- Shift Policy and Practice From Focus on Inputs to Focus on Learning Outcomes
- Devolve Decision-making and Resource Allocation to States, Districts and Schools
- Hold Schools/Districts Accountable for All Students Performing at Proficient Level

Greater Parental Choice

- Choice of Schools
- Supplemental Tutoring Services
- Parent Engagement
  - How parents communicate with their children and what effect this has on student performance
  - High parent engagement can overcome differences in parental occupation

Help Schools Do What Works

- Research-based Instruction
  - Doing research into teaching practices shown to be effective in improving student performance: reading, math, and science
  - Disseminating information about those practices, so that they can become widespread
- *What Works Clearinghouse* Established
- PISA Surveys Provide Insights

States Responded to *NCLB*

- Accountability Plans Submitted on Time by All States
- All Plans Approved by 6/10/2002
- First “Schools in Need of Improvement” Identified Summer 2002
- Choice and Supplemental Services in Place for Fall 2002

Where We Are Now: 4th Grade

Reading Math 2000 vs 2007	% 4th Graders Basic or above Reading	% 4th Graders Proficient or above Reading	% 4th Graders Basic or above Math	% 4th Graders Proficient or above Math
All	59/66	29/32	65/82	24/39
White	70/77	38/42	78/91	31/51
Black	35/46	10/14	36/64	5/15
Hispanic	37/49	13/15	42/70	7/22
Low Income	38/50	13/17	43/70	8/22

Where We Are Now: 8th Grade

Reading Math 2000 vs 2007	% 8th Graders Basic or above Reading	% 8th Graders Proficient or above Reading	% 8th Graders Basic or above Math	% 8th Graders Proficient or above Math
All	75/73	33/29	63/71	26/32
White	84/84	41/40	76/82	34/42
Black	55/55	13/13	31/47	5/11
Hispanic	57/58	15/15	41/55	8/15
Low Income	60/58	17/15	41/55	9/15

Federal/State Responses to AYP

- Federal Rule Changes
  - Higher exemption rate for SWD
  - ELLs able to test in 1st language
  - 95% tested flexibility
- State Plan Changes
  - Larger minimum group sizes
  - Slower path to 100% proficient
  - Growth models vs Snapshot
- State Assessment Changes
  - Lower test cut scores

States' Reactions to *NCLB*

- Schools in Need of Improvement
  - Little help available from state
  - Districts overwhelmed by number
- Schools in Restructuring
  - Districts allow easiest options
  - Schools allowed to remain for years
- Attention Focused on Reading/Math
  - Arts education and science ignored
- Fewer Programs for Gifted Students

NCLB Lessons Learned

- Need for National/External Standards and Assessments in All Subjects
- Build State Department Capacity
  - Federal grants to train staff
  - Requirements for adequate staff
- Build Local District Capacity
  - Training in meeting individual needs
  - Programs for gifted students as well
- Require States to Fund Adequately

Deutsches Institut für Internationale Pädagogische Forschung
German Institute for International Educational Research
Mitglied der Leibniz-Gemeinschaft

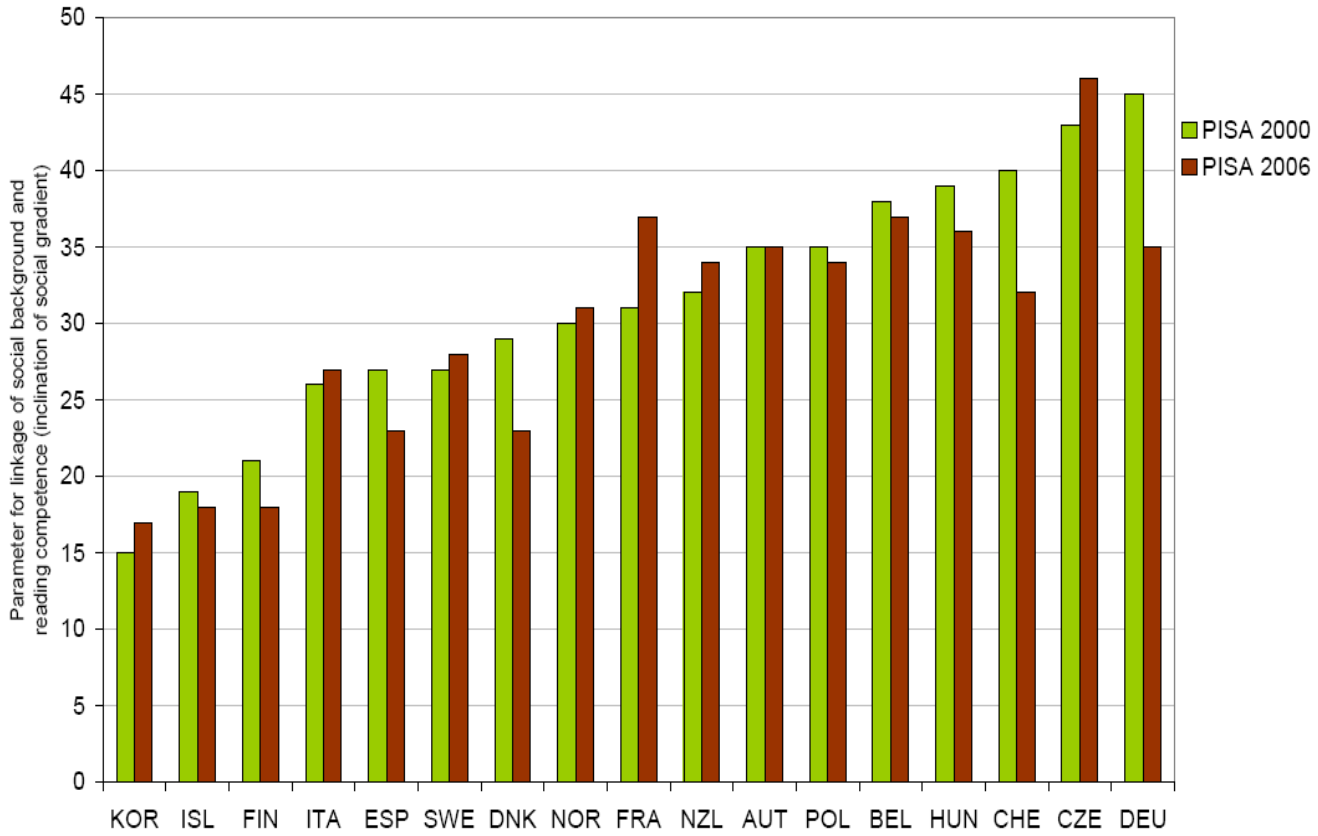
International Comparison of Education Systems :
A European Model ?

Conference of Nice
- French Presidency of the European Union -
13 - 14 November 2008

The Question of Equity in the German Educational System

Prof. Dr. Hans-Peter Füssel
German Institute for International Pedagogical Research Berlin

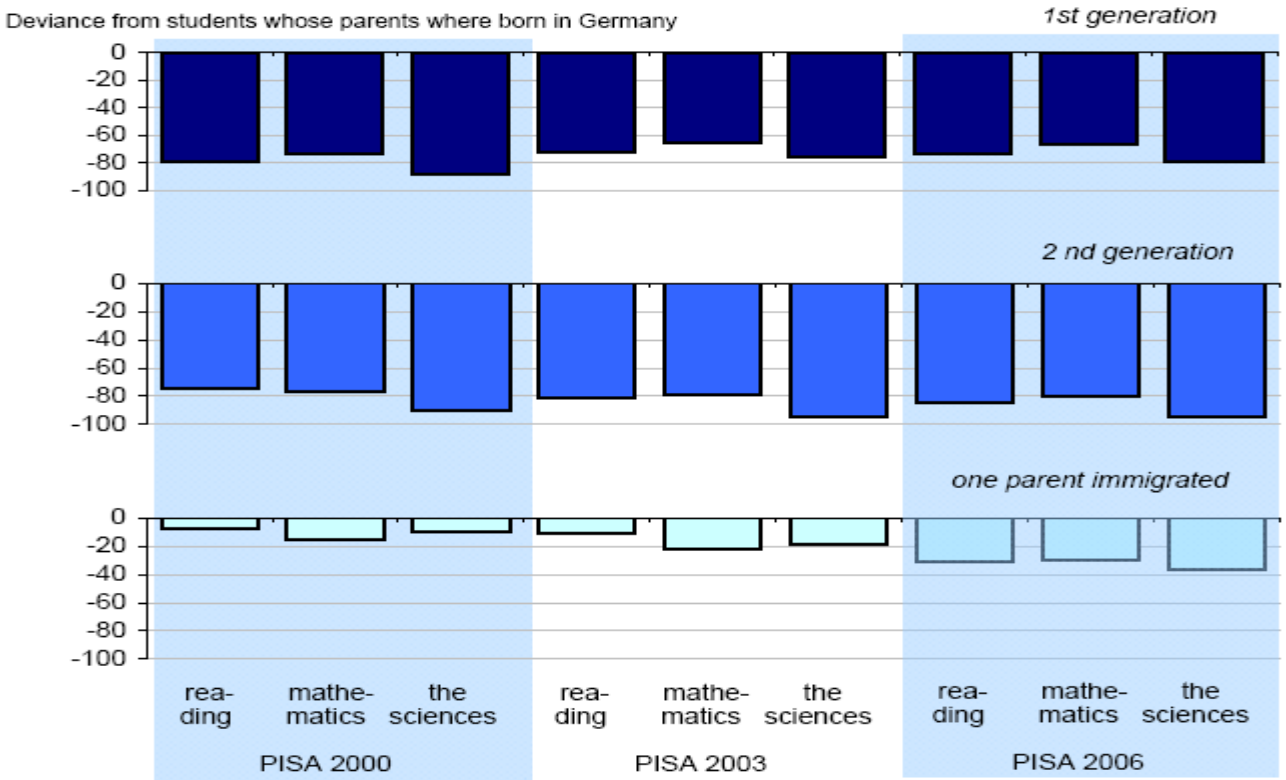
Linkage of Social Background and PISA Reading Achievement between 2000 and 2006 by country - Inclination of the pertinent Social Gradient:



* for all those OECD countries where significant data exist for both assessments

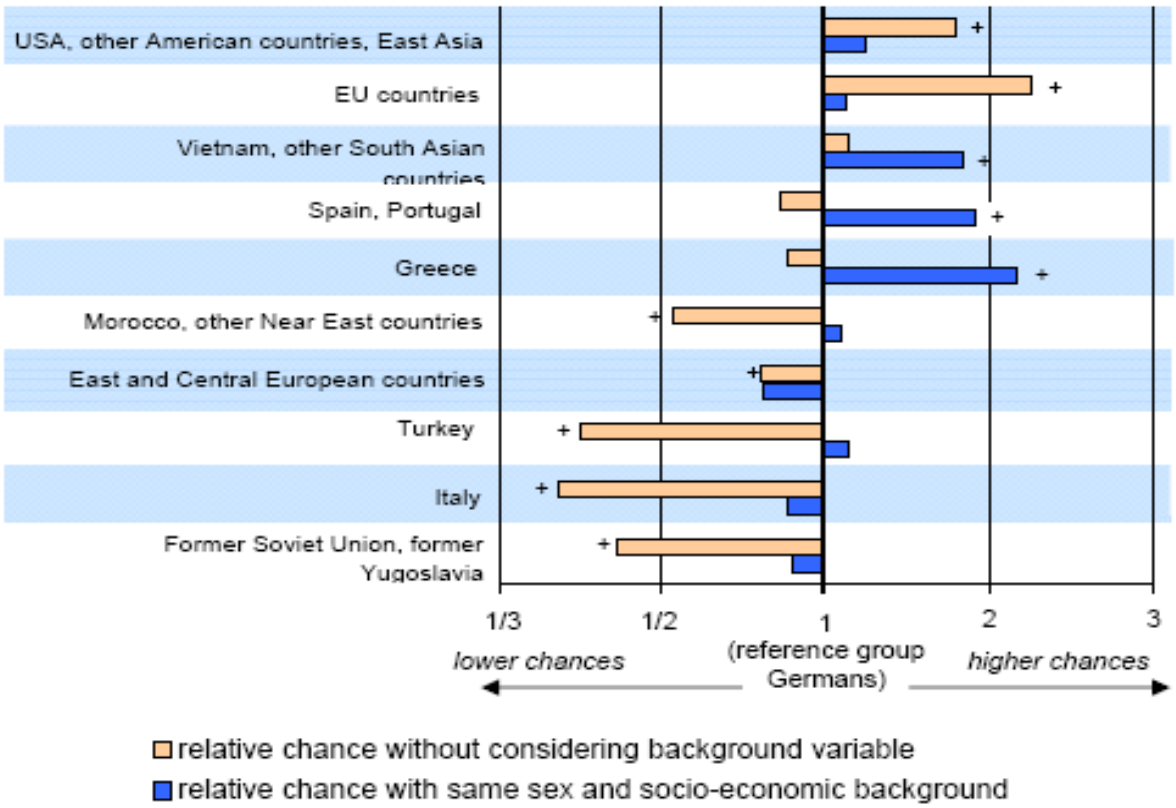
Source: PISA Consortium Germany, PISA 2006, p.323

Competence Deficits of 15-year-old Students with Migration Background (1st Generation, 2nd Generation and Youths with one Parent who has immigrated) as compared to Peers whose Parents where born in Germany:



Source: PISA 2000-E, PISA 2003-E, PISA 2006, own calculations

Relative Chance of Foreign Youths as compared to German Youths of acquiring a Higher Education Entrance Qualification prior to the age of 21:



Source: Federal Statistical Office and statistical offices of the Länder, Microcensus Scientific Use File 2004, own calculations

Thank you !

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Warschauer Strasse 36
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- Germany -

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Efficiency and equity in European education and training systems.
What we know about equity in Europe?

Pr. Marc Demeuse
Institut d'Administration scolaire
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http://www.umh.ac.be/inas

The contexte…

- In fact, « by law », very few EC in the field of education except concerning 3 main objectives*: improvement of* ***quality***, ***cooperation*** *and* ***mobility***
- 2000: European report on the quality of school education (Sixteen quality inidcators)
- 1998-2001: *In Pursuit of Equity in Education. Using international indicators to compare equity policies* (OECD)
- 2003-2006: *Equity in European Educational Systems. A set of indicators.* (EGREES)
- 2006: *Efficiency and equity in European education and training systems* (EC)

Original references…

Commission of the European Communities (2006), *Efficiency and equity in european education and training systems* (COM(2006)481 final), Brussels.

http://ec.europa.eu/education/policies/2010/doc/comm481_cs.pdf (CZ)

http://ec.europa.eu/education/policies/2010/doc/comm481_en.pdf (EN)

http://ec.europa.eu/education/policies/2010/doc/comm481_fr.pdf (FR)

Commission of the European Communities (2004 et sq.), Commission staff working paper, Progress towards the Common Objectives in Education and Training. Indicators and Benchmarks, Bruxelles, CEC

http://ec.europa.eu/education/policies/2010/doc/sec1096_en.pdf (Only in EN)

MEMO/06/321: Frequently Asked Questions: Are European education & training systems equitable and efficient?

http://ec.europa.eu/education/policies/2010/doc/memo1159_en.pdf (EN and also FR and DE)

Wößmann L. & Schültz G. (2006), Efficiency and Equity in European Education and Training Systems, *Analytical Report for the European Commission*

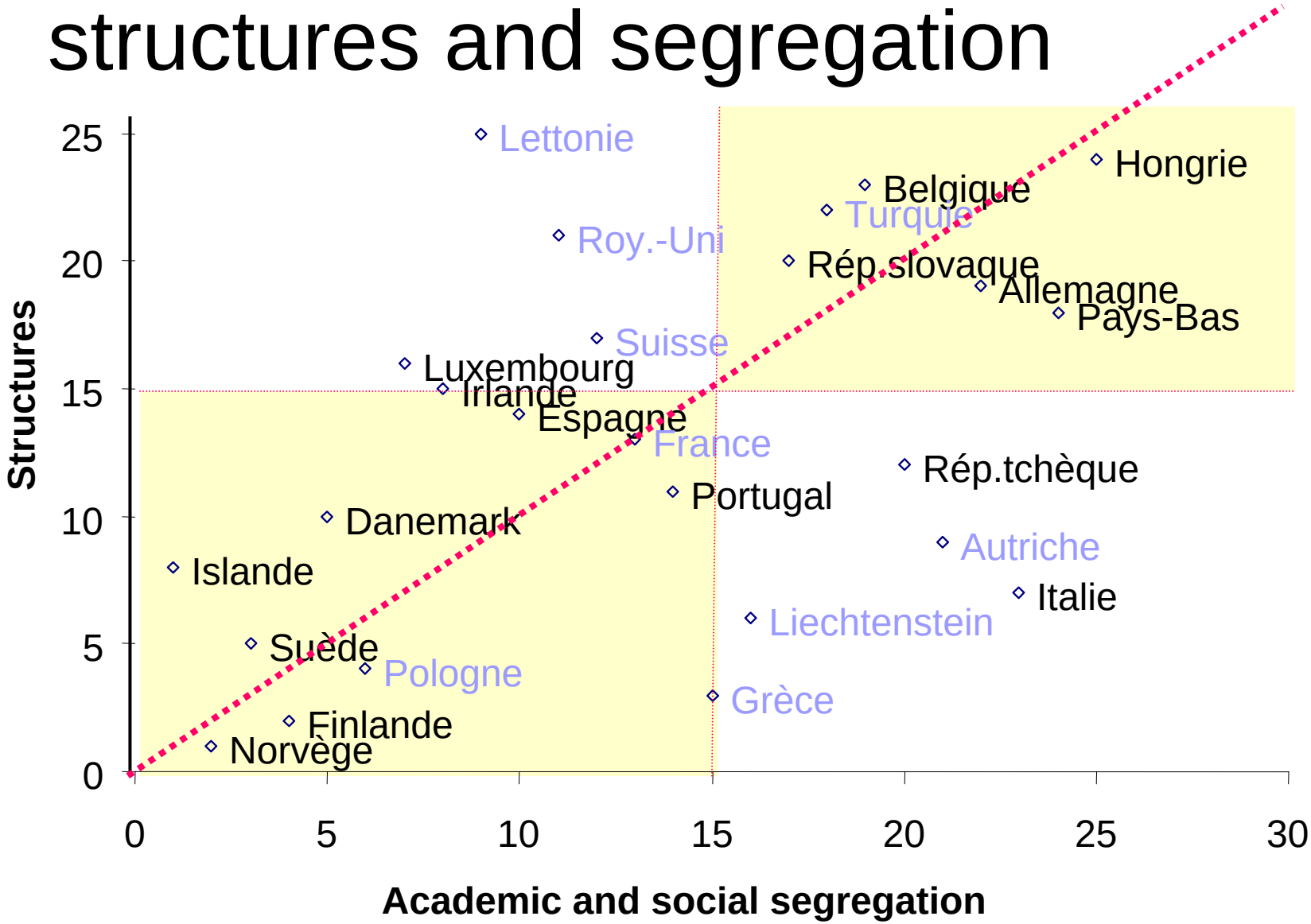
http://ec.europa.eu/education/policies/2010/doc/eenee.pdf (Only in EN)

No « natural » trade off between equity and effectiveness

- Effective AND Fair: ***Finland***
- Effective BUT NOT Fair: ***Flemish Community (BE)***
- NOT Effective BUT Fair: ***Espagne***
- NOT Effective AND NOT Fair : ***French speaking Community (BE)***

- ***Global positive link between the both dimensions: Effective⇑ AND Fair ⇑***

Relation between systemic structures and segregation



Equity and effectiveness / efficiency

What is it about? (1)

EFFECTIVENESS

- Effectiveness: ***Quality of being able to bring out an intended results***
- Efficiency: ***The ratio of the output to the input of any system***

- Average results (utility) or results for each individuals

- Normative approach (relative)
- Criterion-referenced approach (absolute)

Efficiency: EC definition

- ***Efficiency*** *involves the relationship between inputs and outputs in a process.* ***Systems are efficient if the inputs produce the maximum output****. Relative efficiency within education systems is usually measured through test and examination results [internal efficiency], while their efficiency in relation to wider society and the economy is measured through private and social rates of return [external efficiency].*

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND TO THE EUROPEAN PARLIAMENT: Efficiency and equity in European education and training systems, COM(2006) 481 final.

Equality or Equity?

What is it about? (2)

EQUALITY: of WHAT ?
EQUITY: effective OR statistical (virtual)?

Five principles of justice

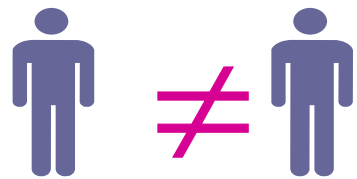
1. *No interest in equity :*
   « natural » or « libertarian » positions
   Maximisation of individual potential, freedom…

2. *Equality of access or opportunity*
3. *Equality of treatment*
4. *Equality of achievement or academic success*
5. *Equality of actualization (social output)*

BUT *« natural » and imprescriptible rights of man*

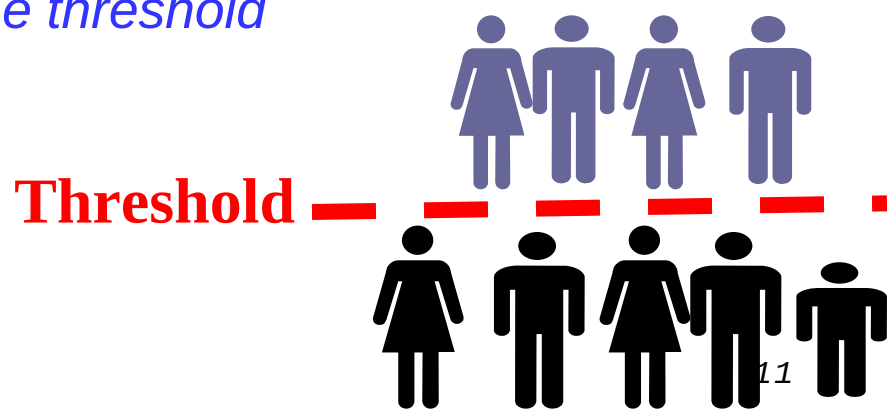
Three kinds of inequalities

- *Inequalities among individuals*



- *Inequalities between groups or categories*

- *Individuals or groups below the threshold*



Which groups are important?

- Those you can’t escape: parental caracteristics and socio-economical status, gender, national origin…

- But: very difficult to distinguish (strong correlations and common causation « out of the model »)

Equity: EC definition

- ***Equity*** *is viewed as the extent to which individuals can take advantage of education and training, in terms of* ***opportunities****,* ***access****,* ***treatment*** *and* ***outcomes****.*
- *Equitable systems ensure that the outcomes of education and training are independent of socio-economic background and other factors that lead to educational disadvantage and that treatment reflects individuals' specific learning needs. Inequity in relation to gender, ethnic minority status, disability and regional disparities etc. is not the prime focus here, but is relevant as far as it contributes to overall socio-economic disadvantage.*

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND TO THE EUROPEAN PARLIAMENT: Efficiency and equity in European education and training systems, COM(2006) 481 final.

To open the discussion about the EC communication…

Recommendations?

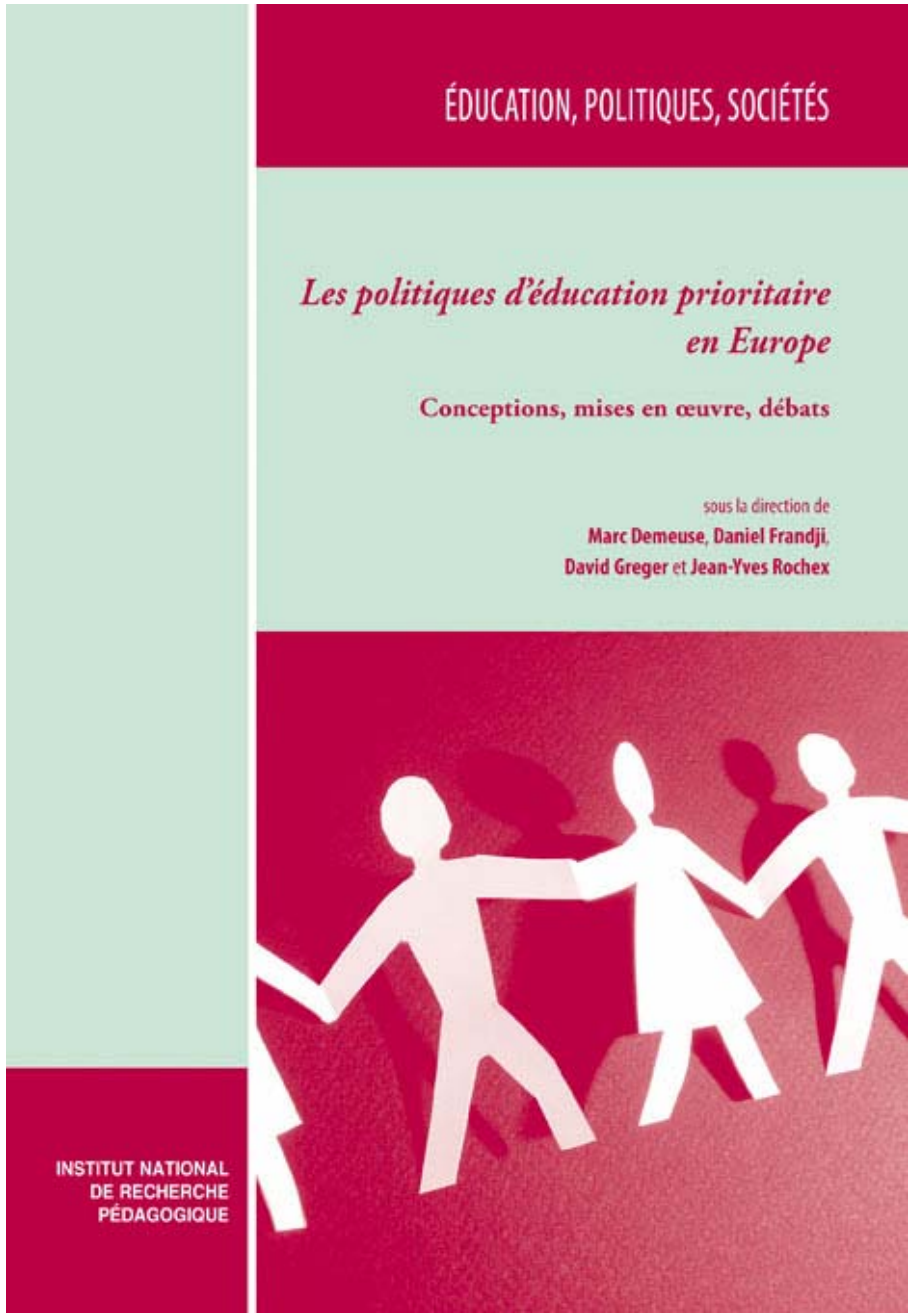
- The examination of the ***effectiveness*** of European educational systems should be accompanied by an examination of their ***efficiency***. The examination of effectiveness should include the evaluation of objectives defined within the context of the Lisbon programme and should be more ***criteria-based*** (linked to specific objectives in terms of well-being or actual options to continue training throughout life) than ***normative*** (in terms of comparison or percentages).
- There should be a clarification of terminology, both for ***effectiveness / efficiency*** and for ***equity***.
- The examination of the equity of European educational systems should include the notion of a ***threshold***, present in the Lisbon objectives, extended to other areas. Individual characteristics from which an individual cannot escape, such as sex or national origin, should be included in the examination of equity.

Recommendations?

- ***The data on which the communication is based*** (Cunha, Heckman, Lochner and Masterov, 2005) ***does not offer sufficiently robust elements***, in particular in the European context, to indicate with certainty, as the Commission appears to believe, that financial effort must be concentrated in pre-school education. More research on pre-school education is necessary on an EU level.

  !!! No evidence based policy !!!

- The recommendation to concentrate the available means on disadvantaged pupils seems better supported (by evidence), but programmes still need to be put in place which avoid ***negative labelling effects*** for selected children or their separation from other pupils, which further reinforces the ***effects of segregation*** (and ***segregation effects***).


ÉDUCATION, POLITIQUES, SOCIÉTÉS
Les politiques d'éducation prioritaire en Europe
Conceptions, mises en œuvre, débats
sous la direction de
Marc Demeuse, Daniel Frandji,
David Greger et Jean-Yves Rochex
INSTITUT NATIONAL
DE RECHERCHE
PÉDAGOGIQUE

Recommendations?

- From the ***pre-school level***, social diversity of classes and schools must be ensured in order to avoid a differentiation of curricula and expectations.
- Analysing education systems and the impact of one or other form of organisation is a difficult job that requires access to and processing of huge amounts of data. Most often, ***there is not one isolated parameter, but a set of parameters that must be identified***. To obtain a result, it is therefore generally necessary to work on several dimensions at once, otherwise the system runs a severe risk of adapting to the new situation with no notable improvement (e.g. prohibiting grade retention can accentuate selectivity in the most prestigious subjects or an increase of interest in "special education").

Recommendations?

- Factors affecting teaching efficiency, apart from those linked to school structures, are even less well understood and research focusing on classroom practices by means of direct observation should be supported and encouraged.
- The equity objectives must also be used to limit discrepancies between the weakest and the strongest in order to allow all pupils, including the weakest, to master basic skills considered essential to lead a worthwhile and active life as a citizen and not merely as a worker.
- With regard to compulsory education, the equality of results is therefore the aim, not merely equalisation of opportunities for children in the school system. Contrary to the implications of the Commission's Communication, ***it is therefore not sufficient to invest in the early years (pre-school) in order to place all young people on the same starting line and give them equal chances***.

Recommendations?

- The different levels of support from which each pupil may benefit at home, throughout his/her school career, and the sometimes very unequal nature of the education provided, during compulsory schooling, are clear evidence of the need to monitor all school careers, particularly at moments of choice or orientation, so that these do not become mechanisms of selection.
- As for pre-school education, the Commission's analysis seems generally acceptable with regard to the "diagnosis" element. Higher education, with its growth should benefit from greater financing than it currently receives. However, the favoured solution does not seem to present guarantees of success that one would expect from an in-depth reform of financing.

Recommendations?

- ***The central idea, to increase private financial participation*** (owing to, as mentioned right at the beginning of the Communication, a context of restriction of public spending), ***does not seem to offer any guarantee of equality of access*** for a certain number of reasons that the Commission itself mentions. One can therefore only raise questions at this part of the Communication and hope for a more solid document.

Recommendations?

- ***Both public and private partners should cooperate to define needs, develop and finance programmes, while preserving the final decisions on programme content and access for the public authorities***. This will avoid the emergence of “ad hoc” training, exclusively reflecting the short-term needs of companies. The speed of change in the labour market requires training to equip people with general and adaptable competences, allowing them to benefit from lifelong learning.
- To avoid the redundancy or under-valuing of competences acquired during working life, the recognition of experience gained on-the-job should also be improved. This is not to promote competition with qualifications earned through formal (usually initial) training, but to allow people to benefit from their real experiences in both working and non-working life.

Recommendations?

- Public investment should focus on the most disadvantaged target groups, as they are the ones who benefit least from continuing training, either because they lack the basic competences required to exploit the opportunities, or because they are unable to access training during their working life, being outside the world of work or confined to low-skill activity areas.

To go further…

- DEMEUSE, M., BAYE, A. (2007). La Commission européenne face à l'efficacité et à l'équité des systèmes éducatifs européens. *Education et Sociétés, volume 20(2),* 105-119.

  http://www.cairn.info/revue-education-et-societes-2007-2.htm

- BAYE, A., DEMEUSE, M. (in press). The European Commission Stepping up Both the Efficiency and Equity of Education and Training Systems. *Policy Futures in Education*, *Volume 6 Number 2.*

  http://www.wwwords.co.uk/pfie/content/pdfs/6/issue6_6.asp

- DEMEUSE, M., BAYE, A. (2008). Measuring and Comparing the Equity of Education Systems in Europe. In N.C. Soguel, P. Jaccard (eds.). *Governance and Performance of Education Systems*, Dordrecht: Springer, pp. 85-106.

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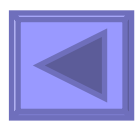
Glossary

- **Criterion-Referenced Approach.** A criterion-referenced approach in assessment is used to estimate how much of the content and skills covered have been acquired by the individuals assessed. Performance is judged against a set of criteria rather than in comparison to other individuals tested, as with norm-referenced tests.
- **Norm-Referenced Approach.** A norm-referenced approach in assessment is used to estimate how the individuals being assessed compare to other individuals in terms of performance on the test. Individual performance is judged in comparison to other individuals tested, rather than against a set of criteria, as with criterion-referenced tests.



http://pals.sri.com/guide/glossary.html

Session 4 :
Équité - efficacité - efficience : quelles comparaisons ?

- What we know and what we must know about (in)equity in Education
  presentation_louis-andre_Vallet
- Time trends in Value added performance in England : implications for Equity
  presentation_sally_Thomas
- Cross-national approaches to measuring disparities in educational resources and learning outcomes
  presentation_albert_Motivans
- Les différentes mesures en faveur de l'équité en France
  presentation_Dominique Barnichon

WHAT WE KNOW AND WHAT WE MUST KNOW

ABOUT (IN)EQUITY IN EDUCATION:

A SOCIOLOGICAL VIEW BASED ON INTERNATIONAL RESEARCH

Louis-André Vallet (CNRS)

Quantitative Sociology Laboratory

Centre for Research in Economics and Statistics (CREST)

Paris – France

Over the twentieth century, in European and, more generally, Western countries, it is well known that:

- dramatic increases in the supply of formal education have occurred for successive birth cohorts;

- and educational reforms have also been implemented to provide children from all social backgrounds with increased education and to promote equality of educational opportunity.

As a consequence, sociologists have for long tried to assess whether or not educational attainment has gradually become less dependent on ascriptive individual characteristics, especially social origins.

In this talk, I will therefore firstly review

HOW SOCIOLOGISTS HAVE PROGRESSIVELY CHANGED THEIR VIEWS

ABOUT TEMPORAL TRENDS IN INEQUALITY OF EDUCATIONAL OPPORTUNITY

1. In the late 1970s and the 1980s, researchers used to analyse inequality of educational attainment with linear regression models of years of education completed on a set of individual characteristics (including birth cohort and social origin).

They generally observed that the enlarged distribution of schooling in modern societies has resulted in a historical decline in the proportion of variance explained by background variables.

2. Even if the former result is fully valid, sociologists nonetheless became progressively aware of a shortcoming of studies following this methodology. Their results indeed conflate and confound two phenomena:

- ***change in the distribution of education*** that is caused by educational expansion;
- and ***change in the allocation of education between children of different social classes***.

Arguably, this is only the second phenomenon that should be taken into account to capture change in inequality of educational opportunity!

Let me clarify this key issue with ***the example of a fictitious society***:

- with only two social classes (so there are children of white-collar origin and children of blue-collar origin);
- and a very simple educational system with only one diploma.

Diploma / Origin	*Passed*	*Not Passed*	
White-collar	125	75	200
Blue-collar	125	675	800
	250	750	1000

Birth cohort I

Diploma / Origin	*Passed*	*Not Passed*	
White-collar	150	50	200
Blue-collar	200	600	800
	350	650	1000

Birth cohort II

35% of Cohort II passed the diploma as against 25% of Cohort I, so it is clear that educational expansion occurred.

As a consequence, for children of ***both*** social origins, the odds of passing rather than not passing the diploma have improved.

For instance, for the blue-collar origin, they increased from 0.19 (i.e. 125/675) to 0.33 (i.e. 200/600).

However, ***between Cohort I and Cohort II, the relative gap between children of white-collar origin and children of blue-collar origin*** for the odds of passing rather than not passing the diploma ***has remained totally unchanged*** because:

$$\frac{(125/75)}{(125/675)} = \frac{(150/50)}{(200/600)} = 9$$

In other words, the intrinsic association between social origin and education (measured with the odds ratio statistic) did not change at all.

So, we may conclude that ***our fictitious society has experienced educational expansion without any change in inequality of educational opportunity***.

3. From the mid-1980s, researchers have therefore examined whether, net of the educational expansion, any historical trend has occurred in the statistical association between social background and educational attainment.

A first comparative study was edited in 1993 by Shavit & Blossfeld (both professors at the European University Institute) with the participation of 13 countries and 25 sociologists (Czechoslovakia, Great Britain, Hungary, Israel, Italy, Japan, the Netherlands, Poland, Sweden, Switzerland, Taiwan, USA, West Germany).

The book was entitled ***"Persistent Inequality"*** because the editors concluded:

> ***"whereas the proportions of all social classes attending all educational levels have increased, the relative advantage associated with privileged origins persists in all but two of the thirteen societies"*** (p. 22)

Only Sweden and the Netherlands are characterized by some equalization in educational opportunity, but virtual stability prevails in all other countries over much of the twentieth century.

The title of a second book edited in 1996 ***"Can Education Be Equalized?"*** is also illustrative of the persistent inequality view that prevailed (Erikson & Jonsson, 1996).

4. However, more recently, ***by using considerably larger datasets and more powerful statistical models, researchers have challenged this conclusion***.

First, national studies have added new "exceptions". For instance, convincing series of empirical studies have demonstrated that France and Germany have also experienced a decline in inequality of educational opportunity.

Second, a paper entitled "Non-Persistent Inequality in Educational Attainment" will soon be published in the *American Journal of Sociology*. It demonstrates downward trend in the eight European countries studied (Britain, France, Germany, Ireland, Italy, the Netherlands, Poland, Sweden) (Breen, Luijkx, Müller & Pollak, 2009).

Third, a recent book investigated stratification in access to and completion of tertiary education in 15 countries with the participation of 34 sociologists (Australia, Czech Republic, France, Germany, Great Britain, Israel, Italy, Japan, the Netherlands, Russia, South Korea, Sweden, Switzerland, Taiwan, USA) (Shavit, Arum & Gamoran, 2007).

It generally concludes that all social classes have benefited from the expansion of higher education. Neither greater diversification nor privatisation in higher education has resulted in greater inequality.

WHAT ARE THE MAIN CHARACTERISTICS OF THE DECLINE IN IEO?

For many countries, the decline in inequality essentially appeared in birth cohorts born between the mid-1930s and the end of the 1950s.

Those cohorts got their education at a time of generally improving living conditions. In some countries (notably Sweden), there is also evidence of a positive effect of educational reforms (with the introduction of the comprehensive school).

The decline in inequality corresponds to better school trajectories for, primarily, children from the agricultural class and, secondarily, children from the working class. The decline in inequality has often been more pronounced among women than among men.

In several countries, the decline in inequality in the most basic educational transitions is accompanied by stability or increase in inequality in more advanced transitions. However, the total effect is a positive one because the former transitions are more consequential than the latter.

HOWEVER, EVEN IF "PERSISTENT INEQUALITY" IS FALSIFIED, INEQUALITY OF EDUCATIONAL OPPORTUNITY STILL EXISTS. WHY?

To explain educational inequalities, sociologists distinguish between 'primary effects' and 'secondary effects' of social origin (Boudon, 1974).

Primary effects are those effects that are expressed in the empirically observed association between children's social origins and their average level of academic ability.

- children of more advantaged backgrounds perform better, on average, than children of less advantaged backgrounds;

- such a difference appears early at school and is cumulative, i.e. the gap tends to increase along the educational career;

- for instance, a recent longitudinal French study demonstrates that only half of the difference measured at the end of elementary school was already present five years before (Caille & Rosenwald, 2006).

At a given level of academic ability, ***secondary effects*** are those effects that are expressed in the actual choices and decisions that families make in the course of the educational career.

- several factors affect these decisions: the perceived benefit, the perceived cost, and the perceived risk associated with continuing in education;

- and their assessment depends on the family position in the social structure;

- for instance, the so-called theory of 'Relative Risk Aversion' has been rather successfully tested; it states that families seek, above all, that their children avoid downward social mobility (more than get upward mobility);

- such a theory helps in explaining why youths with the same ability but different social backgrounds may stop at different stages of the educational system;

- it also suggests that a key aspect to equalize education would be to influence the family assessment of the decision factors (here, the high educational aspirations that immigrant families have for their children are quite suggestive in this respect).

SO, WHAT MUST WE KNOW TO BE BETTER EQUIPPED TO EQUALIZE EDUCATION WITHIN EUROPEAN COUNTRIES?

We certainly need to know more about the relative importance of primary and secondary effects, and there is ongoing research on this issue (*EQUALSOC EU NOE*).

We also need to understand the development of primary and secondary effects over the school careers more thoroughly.

To understand the development of educational inequalities and to become more able to provide evidence-based guidelines in educational policies, educational research needs longitudinal high-quality data that describe, not only achievement and attainment, but also family situation and school context broadly conceived.

Finally, I will argue that the comparative PISA OECD survey would become even more useful than it is today by adopting a longitudinal design, i.e. by assessing the achievement of pupils not only at the age of 15, but also at the age of, say, 10 or 11. By so doing, the PISA survey would become able to rigorously trace change in educational achievement of the same pupils and to properly identify the influence of national institutional arrangements over this development.

Time trends in Value Added performance in England: implications for Equity

French Presidency of the European Union
Nice Conference
13-14 Nov 2008

Dr Sally Thomas

Plan

- **Background**
- **Lancashire LEA Value Added Project – time trends over 14 years**
- **Summary**

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Background

- From early 1990's political attention and market driven reforms have sought to increase the accountability of schools in the UK.
- Since 1992 schools' raw examination performance has been published annually. These league tables have been widely criticised as unfair to schools with disadvantaged intakes.
- Other reforms in the last 15+ years include a new national inspection system (OFSTED), a national curriculum and national testing via standard assessment tasks and examinations.
- In this context school effectiveness and improvement research has been given a far greater emphasis than it enjoyed previously.
- For example, the government has now introduced contextualised value added measures of student progress. Also the idea of intelligent accountability has been introduced via 'A new Relationship with Schools' (DFES, 2004) and this has resulted in school self-evaluation becoming a key feature of the national inspection system (Ofsted, 2005).

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National Standards for Headteachers (DfES, 2004) provides guidelines on the core purpose of headteachers and states that:

The headteacher, working with others, is responsible for evaluating the school's performance to identify the priorities for ***continuous improvement*** *and raising standards*;

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The Lancashire Value Added Project
-Examining 14 year time trends-

Key Research Questions

1. What are the average trends in pupil performance?

2. Do individual school performance trends differ from the average trends in raw and value added performance?

Additional Research Questions

3. Has variability between schools in terms of raw and value added performance increased or decreased ?

4. Has the average gap in attainment between advantaged and disadvantaged pupils - in terms of free school meals a measure of low family income - increased or decreased?

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Sample

- Collected from schools in Lancashire Local Education Authority (LEA), one of the largest LEAs in North West England
- Data available for fourteen consecutive cohorts of KS4 (16-year-old) pupils from 1993 to 2006, a total of 214,159 pupils in 138 schools
- Outcome variables: General Certificate of Secondary Education (GCSE) examinations (eg total score, English, mathematics, science) and other qualifications (eg General Vocational Qualifications [GNVQ]) taken by pupils at age 16
- Explanatory variables: prior attainment taken by pupils at age 11 (cognitive abilities test [NFER CAT] with subtest scores in verbal, quantitative and non-verbal aspects) and other pupil background variables such as fsm, age, gender, ethnicity.

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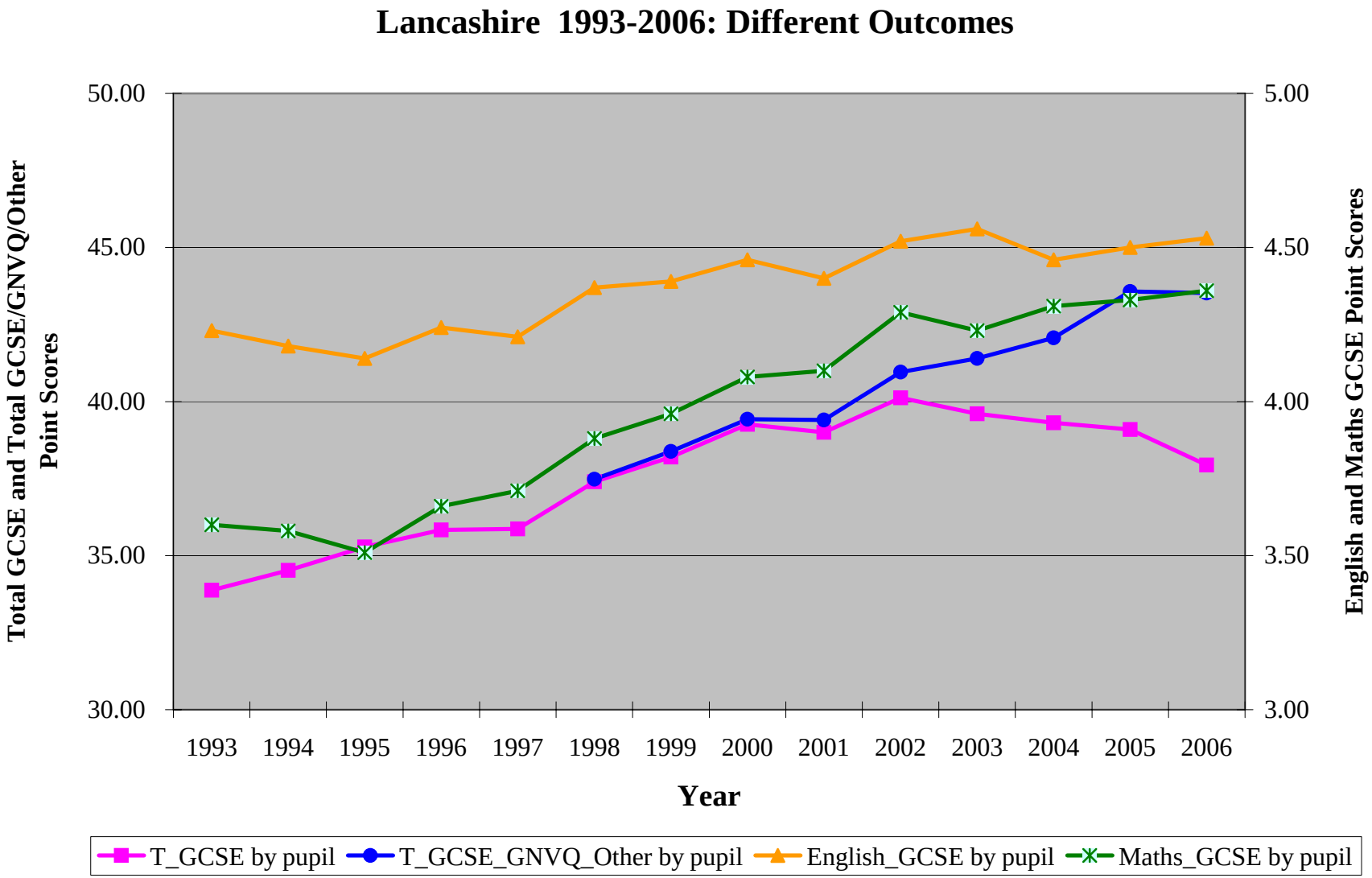

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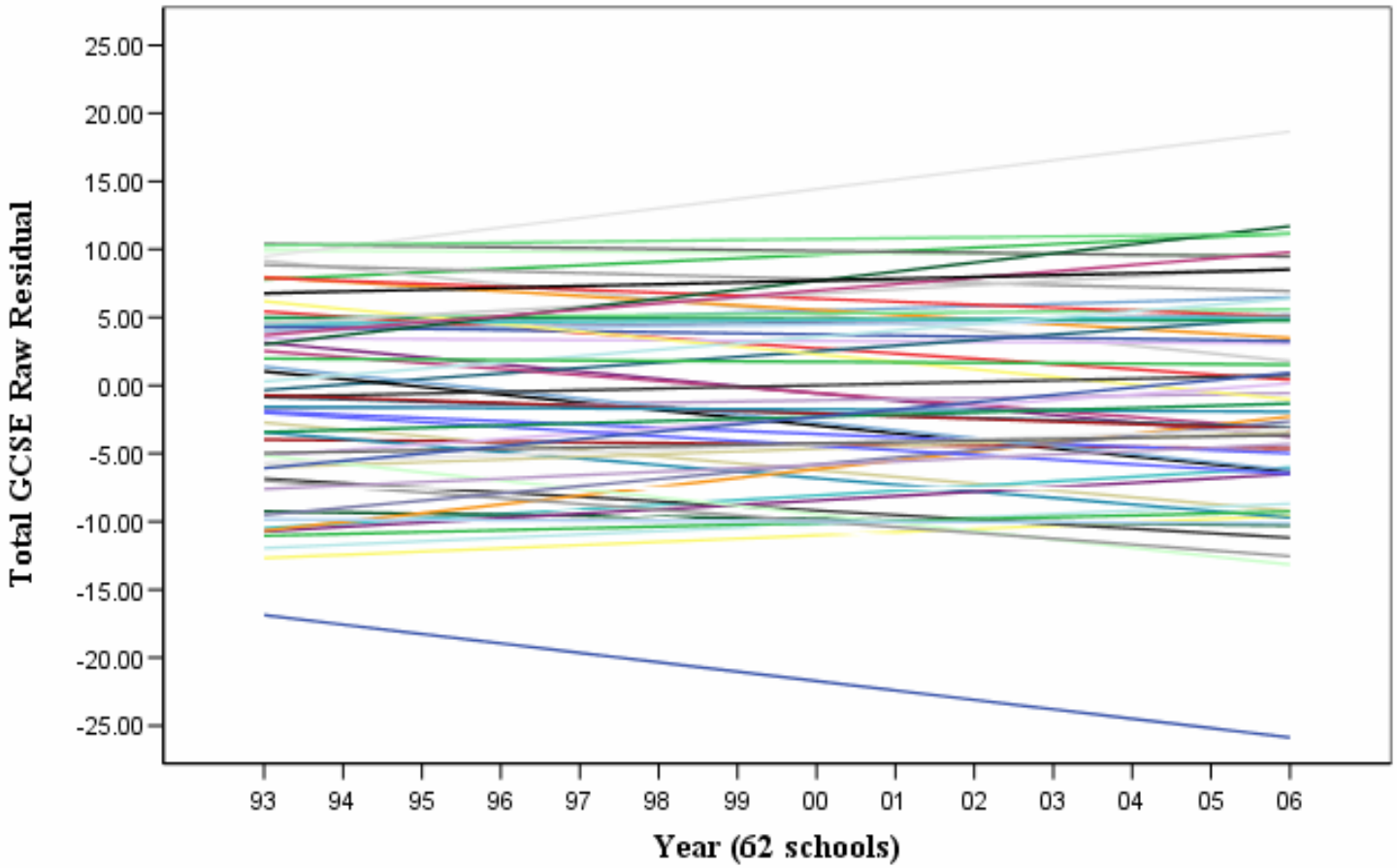
Raw Linear Trend Analysis 1993-2006: Total GCSE Score



Note: Model B

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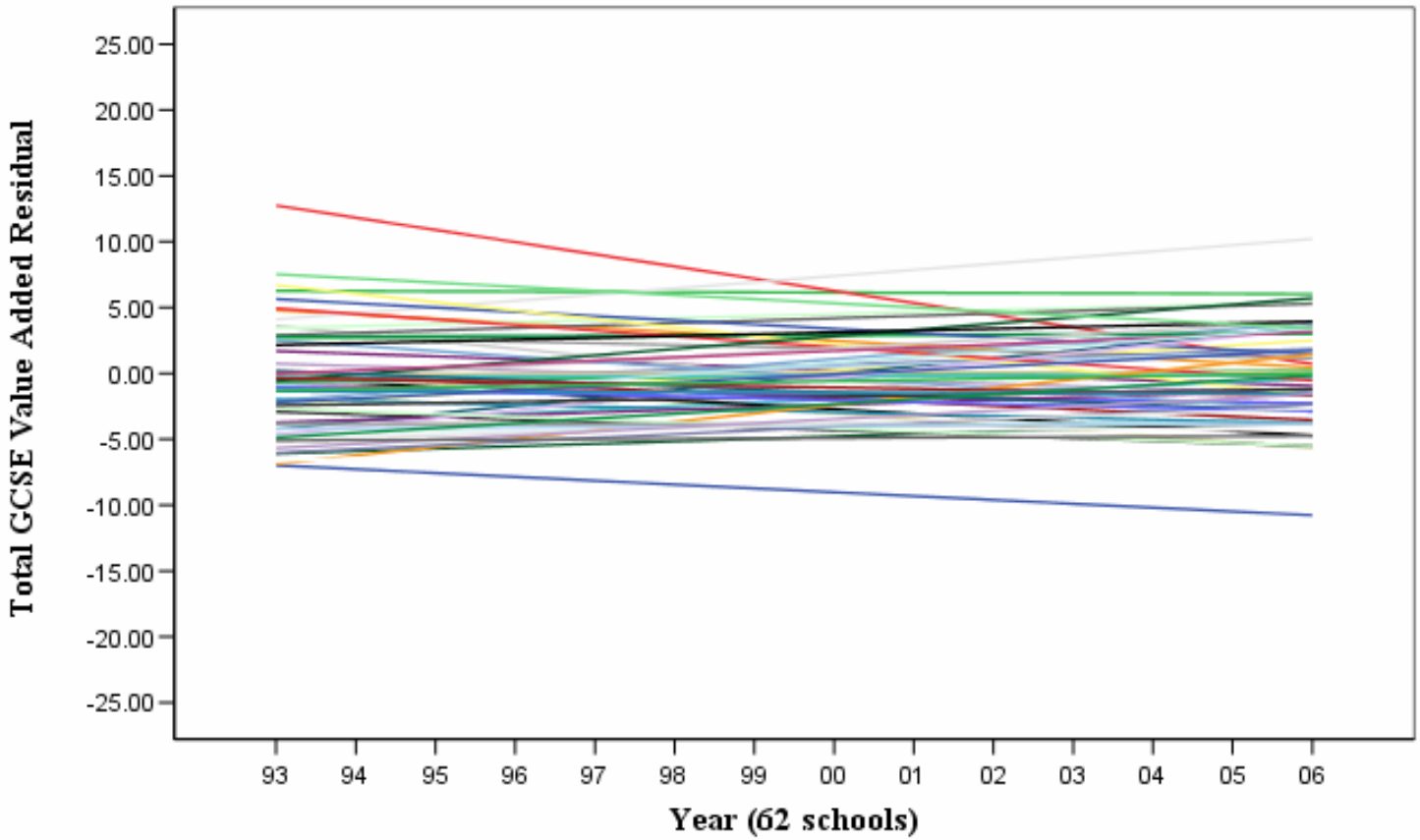
Value Added Linear Trend Analysis 1993-2006: Total GCSE Score



Note: Model A

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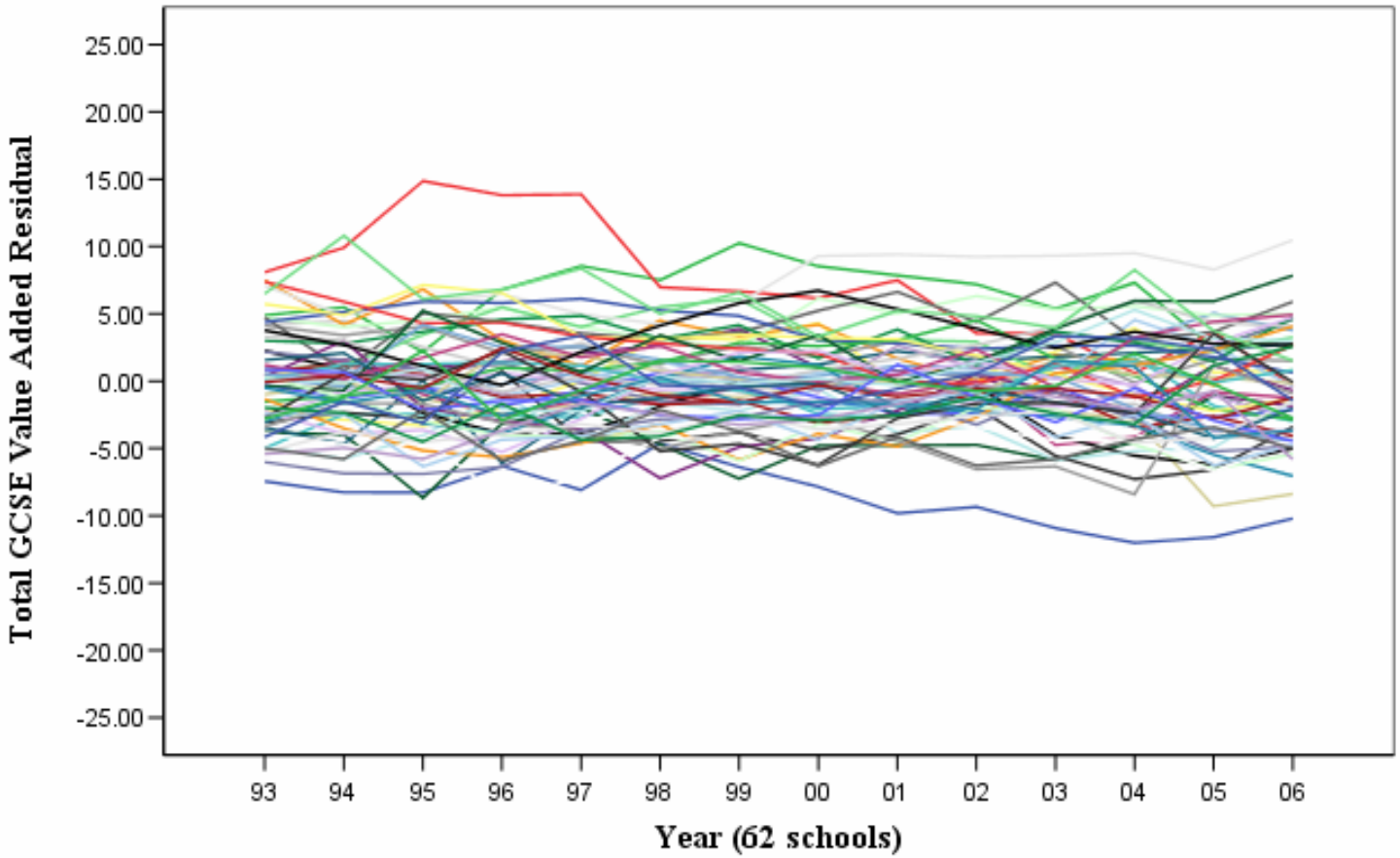
Value Added Non-Linear Trend Analysis 1993-2006: Total GCSE Score



Note: Model C

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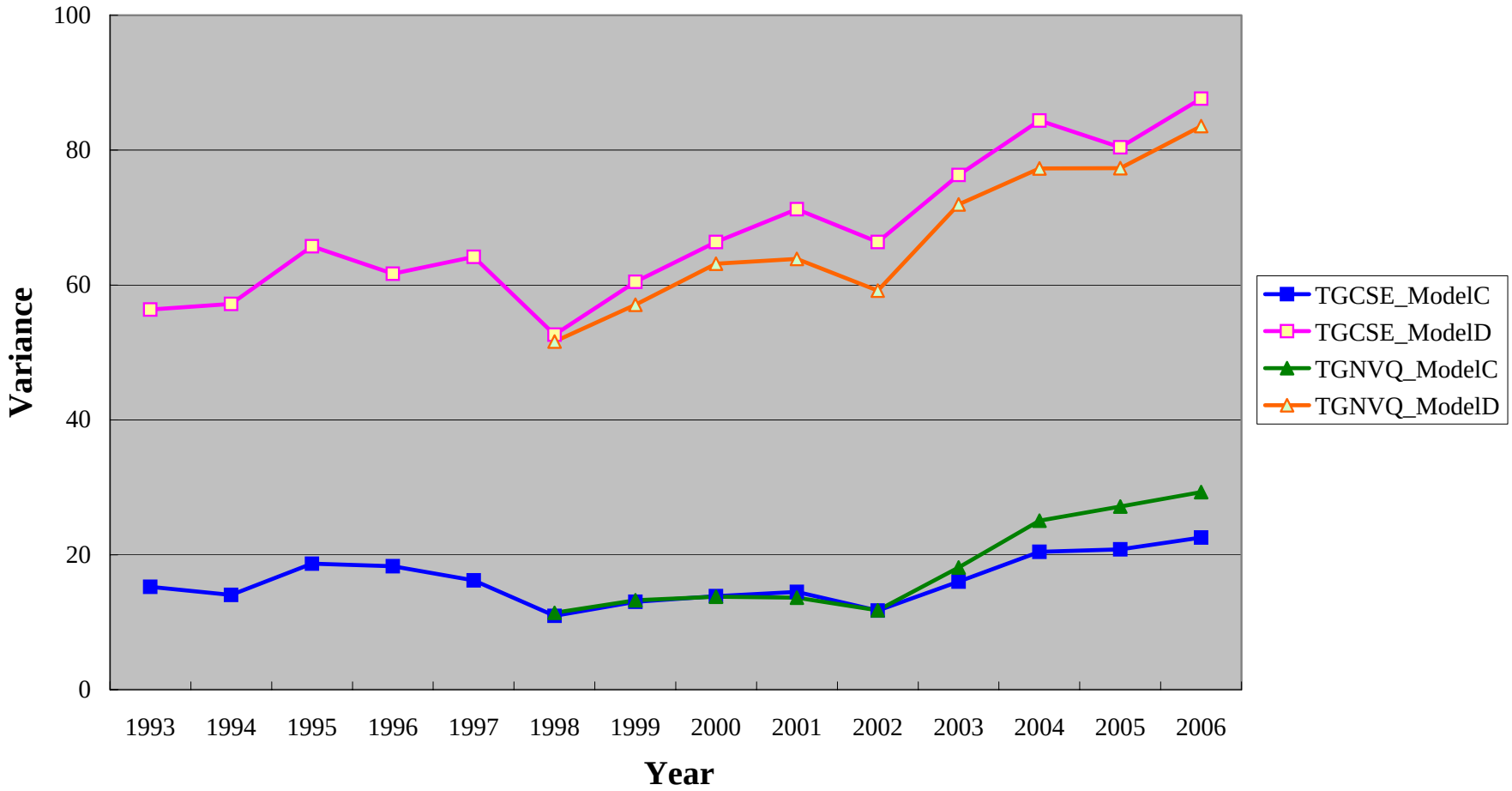
Changes in School Level Variance over time: Value Added (non-linear model C) and Raw (non-linear model D) outcome scores



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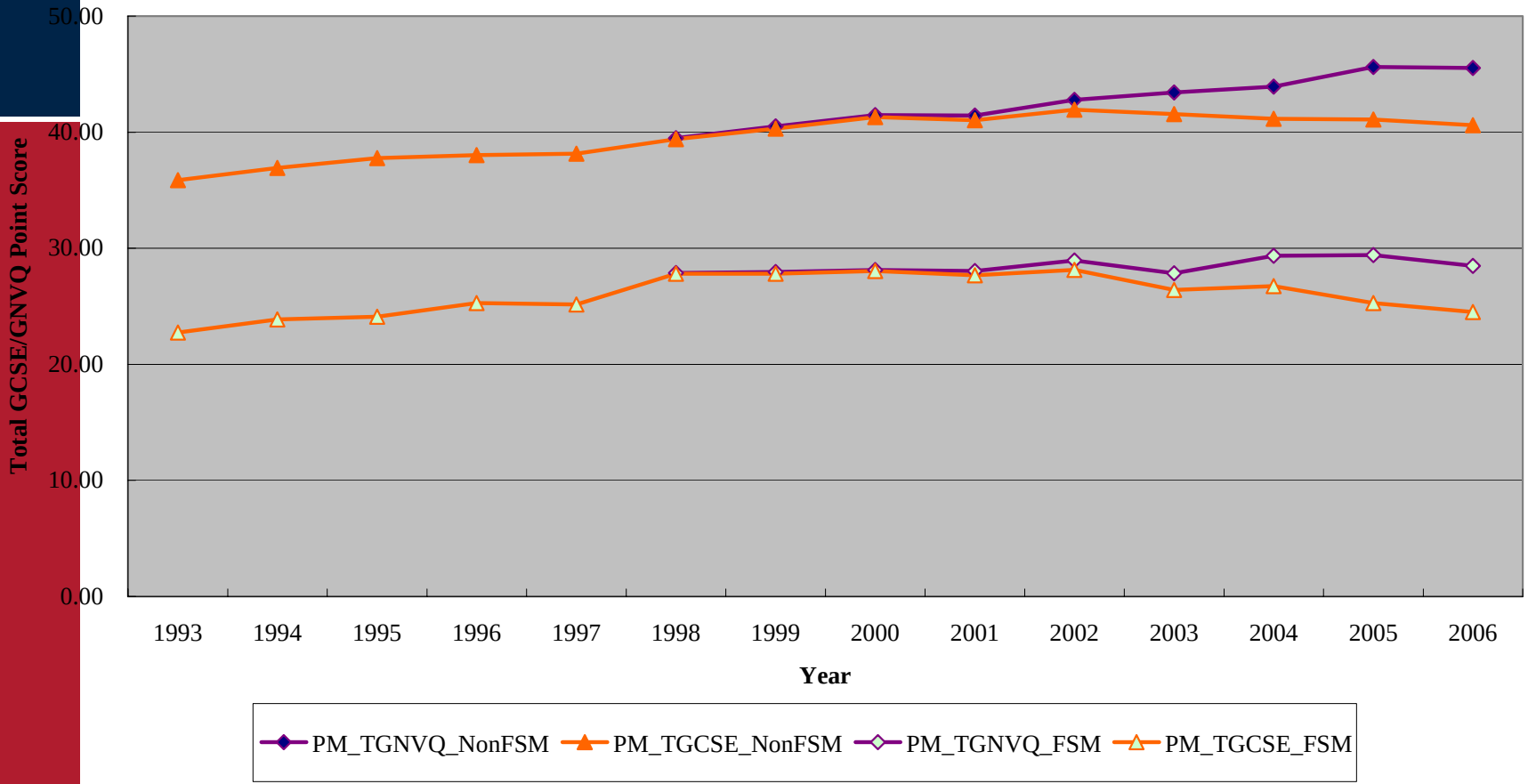
Total GCSE/GNVQ Point Score by Year by FSM



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Differing views - The Telegragh, 20 August 2008

"At GCSE the gap in achievement between children from poorer and more affluent backgrounds is narrowing and results for children on free school meals are rising faster than the average"

Lord Adonis, the schools minister

"…The Government has let down an entire generation of pupils who are not getting anything like the basic set of qualifications they need to continue studying or get the job they want. The problems with educational underachievement are concentrated in the poorest areas of the country.

Maria Miller, Conservative shadow families minister

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Summary

- The results indicate that on average across all schools there is a clear improvement trend in both value added and raw GCSE results over the fourteen-year period from 1993 to 2006.
- However, the overall linear trend for individual schools typically conceals a considerable amount of year-to-year variation and it appears that continuous improvement is difficult over more than 3 or 4 years.
- Over 14 years less than 15% of schools moved from 'performing below expectation' category to 'performing above expectation' category in terms of value added results – and no schools did so in terms of raw results.
- Differences between schools (variance) over time suggest that schools are becoming less similar in terms of both value added and raw performance – especially in the last 4 years – for total GCSE and total GCSE/GNVQ/Other.
- The average attainment gap for disadvantaged versus other pupils appears to fairly stable over time in terms of total GCSE score. However this is not the case when vocational qualifications are also included - where the difference appears to be increasing.

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Cross-national approaches to measuring disparities in educational resources and learning outcomes

Albert Motivans

UNESCO Institute for Statistics

International comparisons
Paris, France
14 November 2008

Educational inequality: back on the global policy agenda

- Convergence of rights-based and economic arguments for education
- Changing development discourse on inequality
  - Education For All Global Monitoring report
  - World Dev Report, Human Dev Report
  - Other sectors (health equity)
- Changing monitoring frameworks
  - Millennium Development Goals
  - European indicator sets

What can cross-national approaches tell us about education inequality?

Comparisons and benchmarking at the core of distributional issues across and within countries

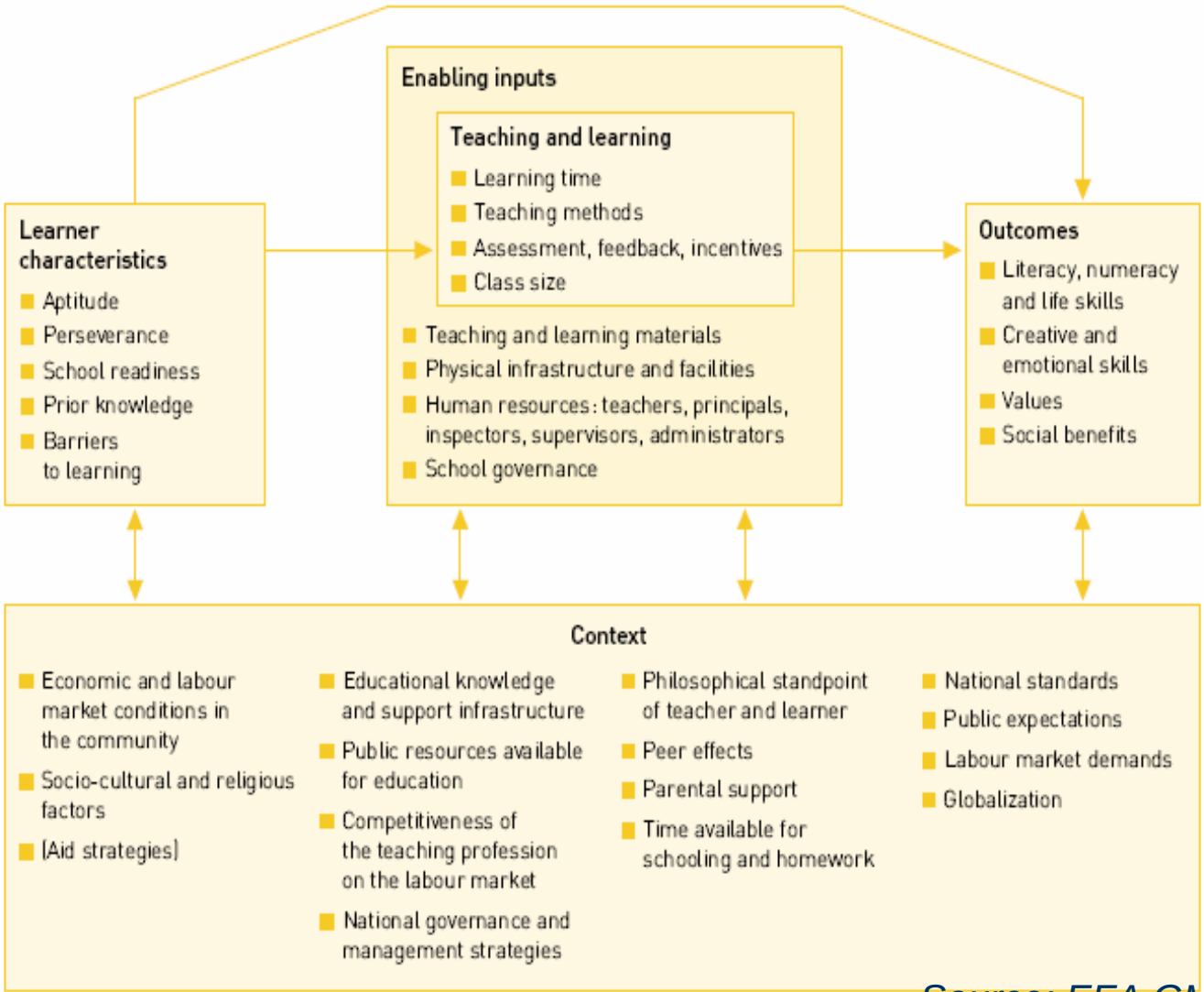
- Monitoring rights (absolute benchmarks) and progress towards expansion of educational opportunities
- Assessing resource allocation to schools, districts, regions
- Contexts and/or policies help to minimise differences in the impact of socioeconomic status
- Differences in the organisation of schools and classrooms

UIS perspectives on cross-national measures of education inequalities

Authors	Sherman, Poirier	Willms	Grisay, Zhang, Postlethwaite
Targets of equity	States/districts	4th or 8th grade pupils and SES	4th grade pupils
Objects of equity	Access (NER) Resources (PTR, per pupil expenditure)	Reading and mathematics achievement	Classroom resources, Teacher satisfaction, Student motivation, Teaching practices, OTL
Countries	16 federal countries	PIRLS, TIMSS, PISA	12 middle-income countries
Concept	Horizontal, EEO	Horizontal, EEO	Horizontal, EEO

EEO=Equal educational opportunity

Education frameworks and objects of education inequality



Source: EFA GMR, 2005

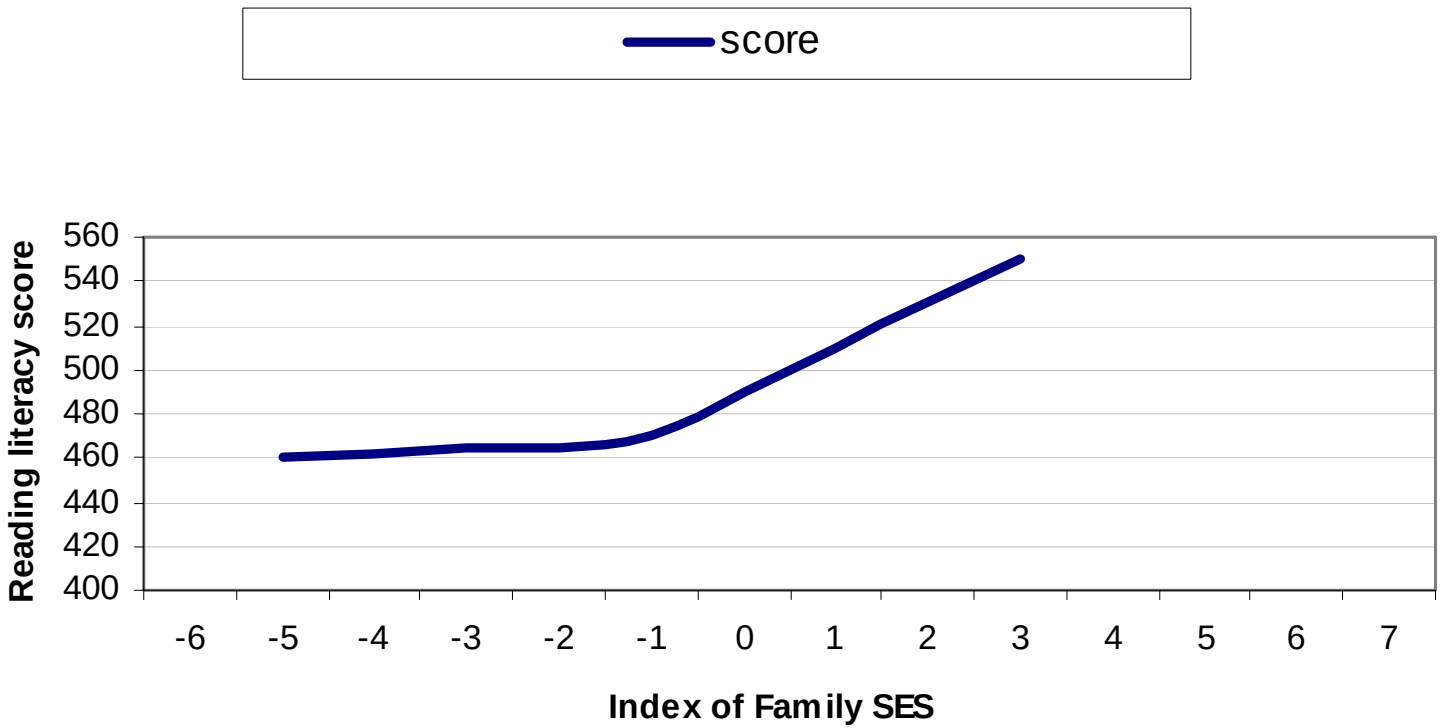
What types of policy options help to improve learning outcomes?

-- Performance or SES-targeted

-- Compensatory policies

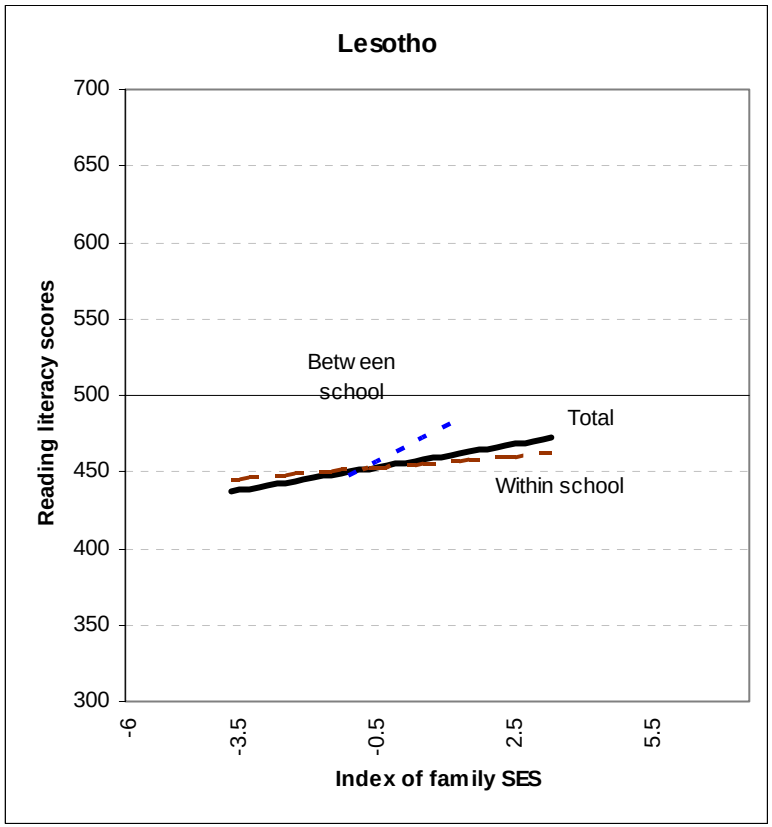
-- Universal

-- Inclusive

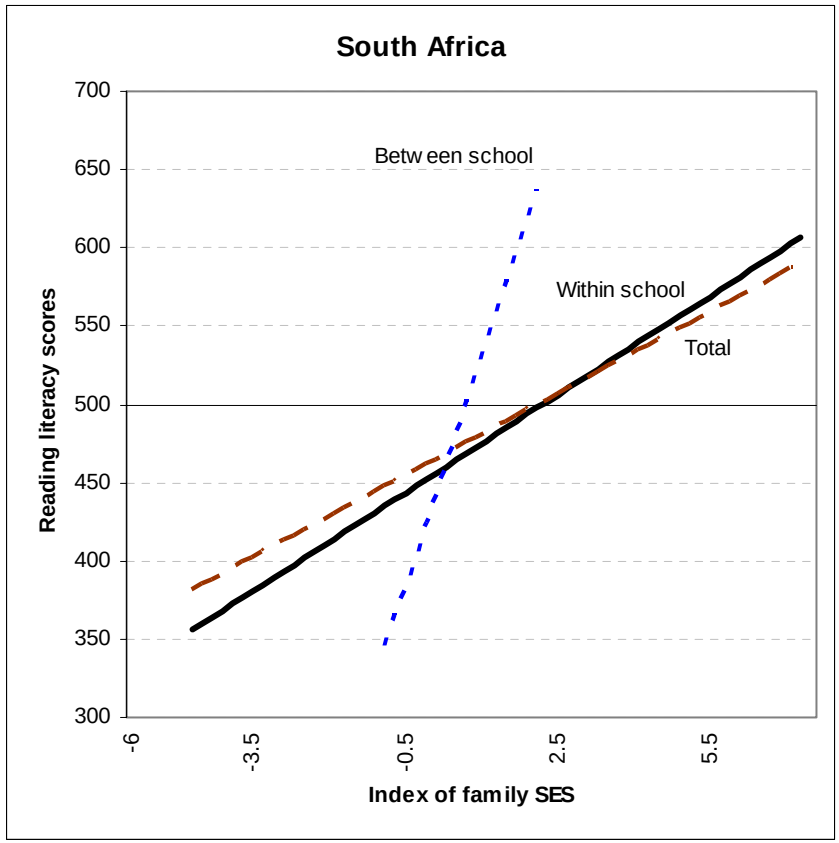


Source: Willms, 2006

Between and within-school differences



Universal, compensatory policies



Performance-targeted, socio-economically targeted, compensatory, inclusive

Source: Zhang, 2008

Drawing together the perspectives: which way for Europe?

- These approaches present useful perspectives for systematic monitoring of inequality in Europe
- Value-added provided by wider application across other regions – more robust methodologies
- More holistic approach which links across different objects of inequality will strengthen explanatory power
- Better understanding of role of context matters for policy interventions – disadvantaged classrooms change the way teachers organise their classrooms, how they teach and how they view their pupils

Working papers are available on the UIS website

Educational Equity and Public Policy: Comparing Results from 16 Countries

http://www.uis.unesco.org/ev.php?ID=6919_201&ID2=DO_TOPIC

Learning Divides: Ten Policy Questions about the Performance and Equity of Schools and Schooling Systems

http://www.uis.unesco.org/ev.php?ID=6832_201&ID2=DO_TOPIC

A View Inside Primary Schools

http://www.uis.unesco.org/ev_en.php?ID=7333_201&ID2=DO_TOPIC

Les différentes mesures en faveur de l'équité en France

Dominique
BARNICHON

Conférence de Paris
Vendredi 14 Novembre 2008

1. Équité en France

(problématique française)

Deux principes

fondamentaux

1er principe fondamental

Liberté, **Egalité**, Fraternité …

1er principe fondamental

Liberté, **Egalité**, Fraternité …

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

1er principe fondamental

Liberté, **Egalité**, Fraternité …

- **Constitution (1958), article 1er :**

  « La France est une république indivisible, laïque, démocratique et sociale. **Elle assure l'égalité devant la loi de tous les citoyens sans distinction d'origine, de race ou de religion. »**

- Existence **d'organismes publics nationaux** pour la garantir.

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

2ème principe fondamental :

Intégration à la française

- ni ethnique,
- ni communautariste,
- ni liée à la religion.

Au-delà de l'immigration, l'intégration inclut toutes les formes de mixité, tous les publics défavorisés et dits « à besoins spécifiques » …

Égalité et … équité

Déclaration des droits de l'homme de 1789 :

« *les hommes naissent et demeurent libres et égaux en droits …* »

Égalité et … équité

Déclaration des droits de l'homme de 1789 :

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1) Égalité devant la loi

Égalité et … équité

Déclaration des droits de l'homme de 1789 :

« *les hommes naissent et demeurent libres et égaux en droits …* »

1) Égalité devant la loi

2) Égalité sociale

Égalité et … équité

Déclaration des droits de l'homme de 1789 :

« *les hommes naissent et demeurent libres et égaux en droits …* »

1) Égalité devant la loi
2) Égalité sociale
3) Égalité des chances

Apparaît alors la notion d'équité …

« Un système est équitable si les résultats de l'éducation et de la formation sont indépendants du milieu socio-économique et d'autres facteurs conduisant à un handicap éducatif et que le traitement reflète les besoins spécifiques des individus en matière d'apprentissage »

(« *Efficacité et équité des systèmes européens d'éducation et de formation* » , Communication de la Commission au Conseil et au Parlement Européen, doc. 12677/06)

Résumé d’un pilotage simpliste de l’équité

$$\begin{cases} \overline{x} \text{ ne baisse pas} \\ \sigma \quad \text{diminue} \end{cases}$$

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Évolutions du système éducatif *et* **Équité**

(rupture des années 60)

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Évolutions du système éducatif *et* **Équité**

(rupture des années 60)

La loi pour l'égalité des chances (mars 2006)

50 – 80 – 100

Le socle commun ...

pour la 1ère fois,

– des compétences fixées par le législateur,

(compétences = connaissances + capacités + attitudes)

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Le socle commun ...

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- des compétences fixées par le législateur,

(compétences = connaissances + capacités + attitudes)

- des objectifs énoncés non comme un catalogue de disciplines, mais en termes de performances des élèves,
- une obligation de résultats.

Les 7 « piliers » *(du socle)*

- Maîtrise de la langue française
- Pratique d'une LV étrangère
- Mathématiques et culture scientifique et technologique
- Maîtrise des TIC usuelles
- Culture humaniste
- Compétences sociales et civiques
- Autonomie et esprit d'initiative

Repérage de la réussite *(ou de l'échec)* **scolaire**

Repérage de la réussite *(ou de l'échec)* **scolaire**

a) <u>Mesure directe :</u>

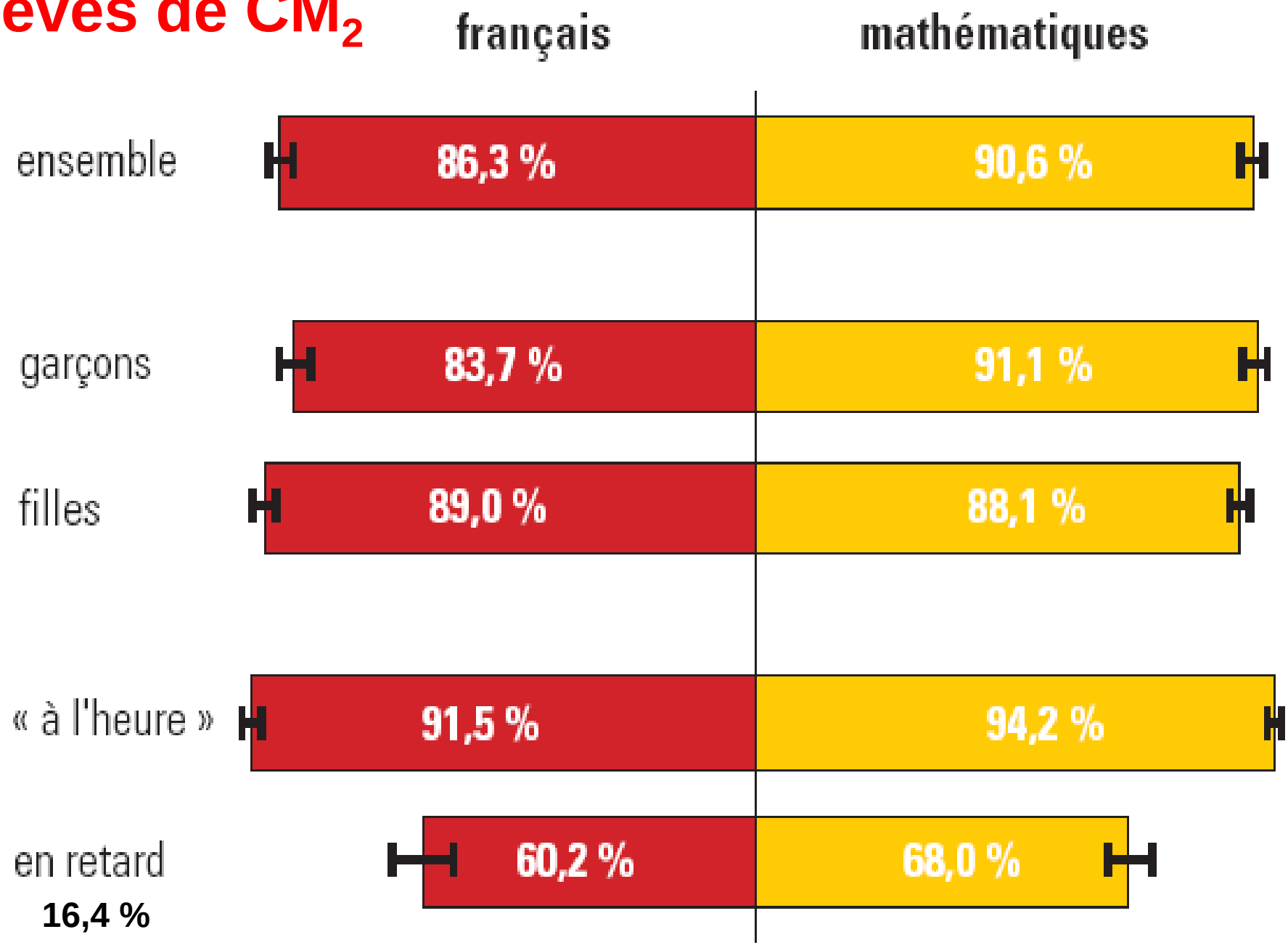
- Indicateurs de validation du socle

  (en cours de déploiement)

- Tests de maîtrise des compétences

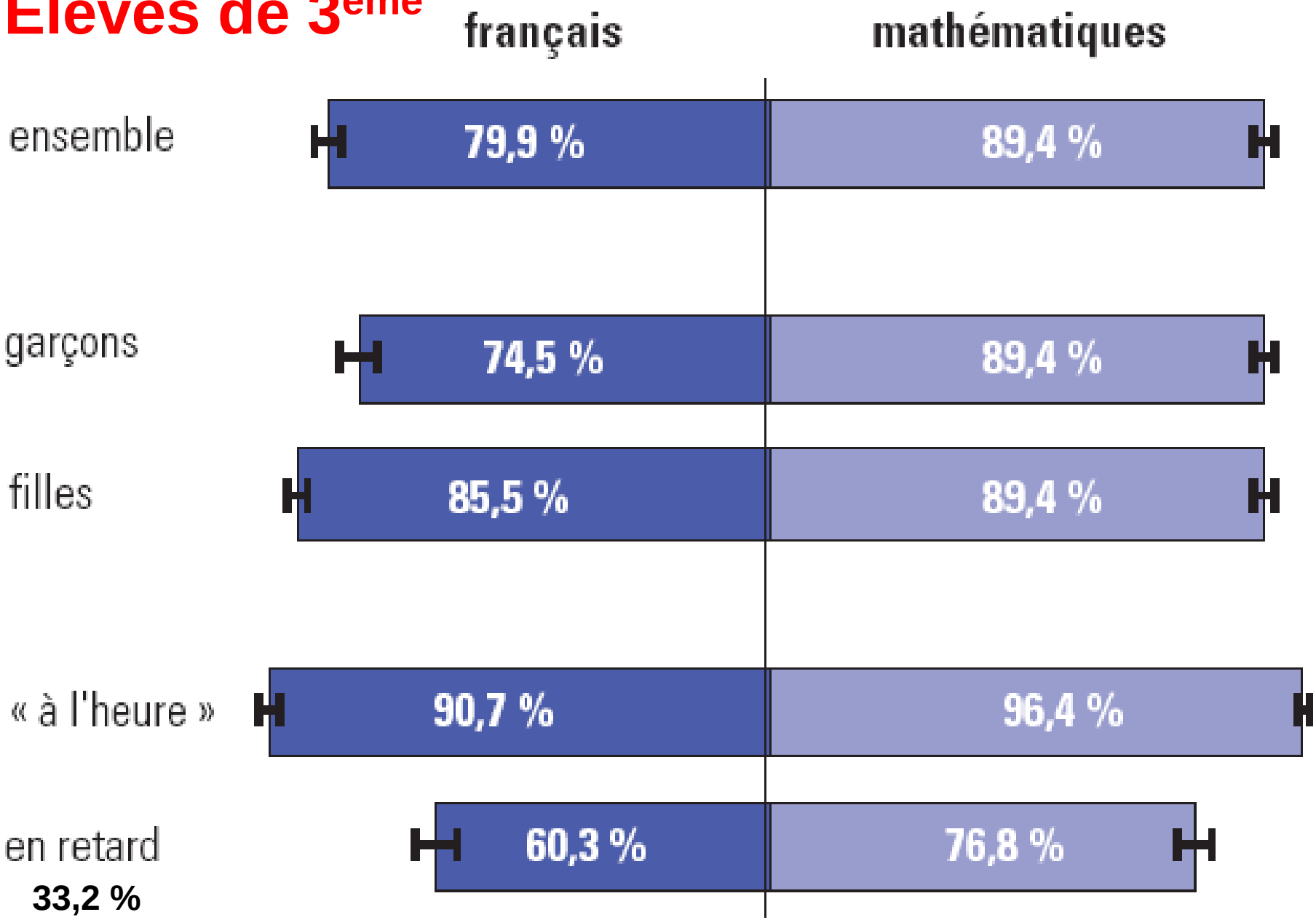
  2007 *(sur échantillon)*

Élèves de CM_2



16,4 %

Élèves de 3ème



33,2 %

b) Mesure indirecte :

b) Mesure indirecte :

- Retards scolaires (15,2 % des élèves des zones défavorisées ont **2 ans** de retard à l'entrée en 6ème),
- Redoublements (jusqu'à 20% chaque année pour les zones très défavorisées en collège),
- Sorties précoces ou sans diplôme,
- Grandes difficultés de lecture (15% en 6ème),
- Démotivation, absentéisme, problèmes de comportement …

2. Quelles mesures en faveur de l’équité ?

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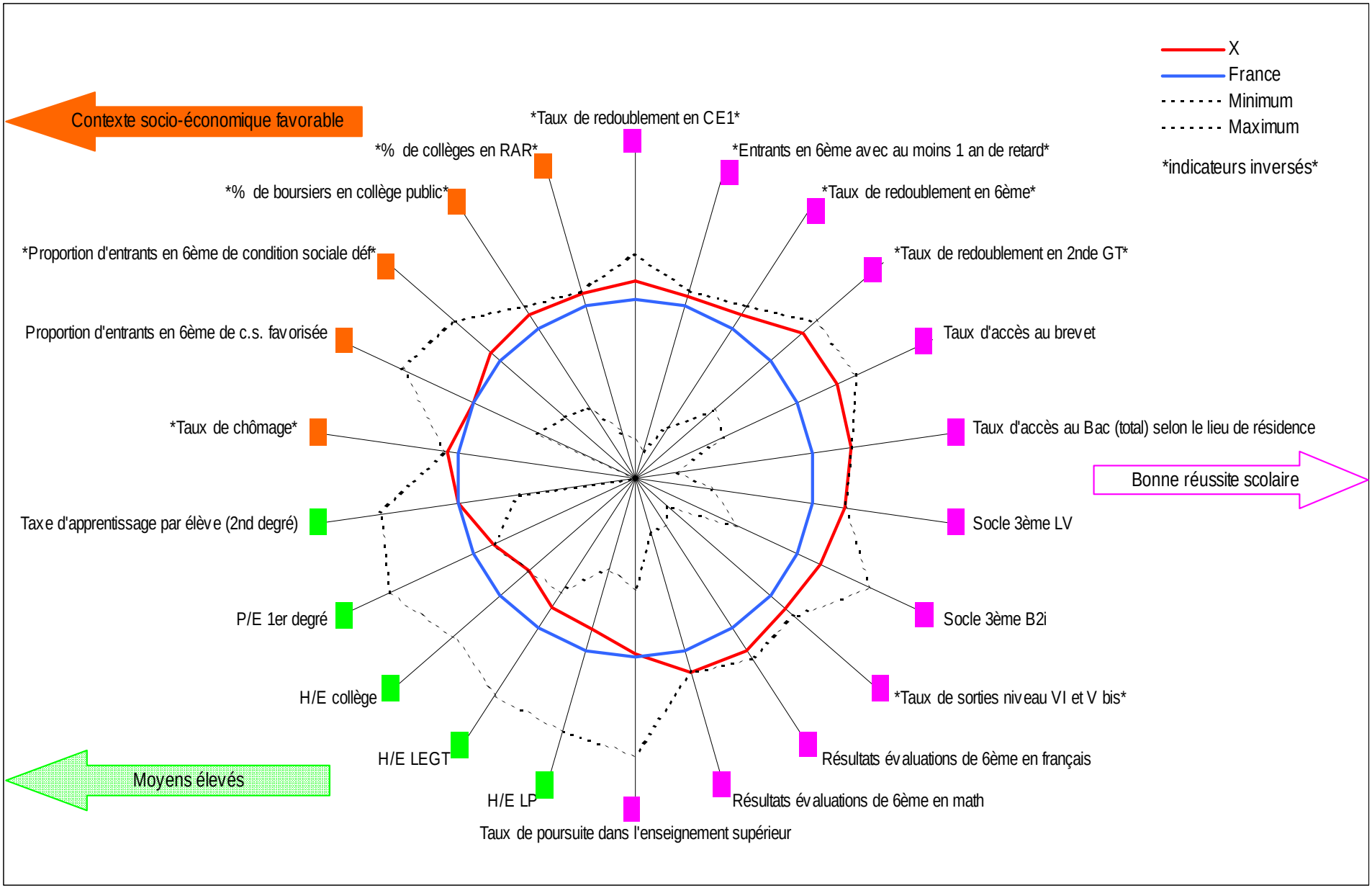
a) Étude de la relation

– moyens

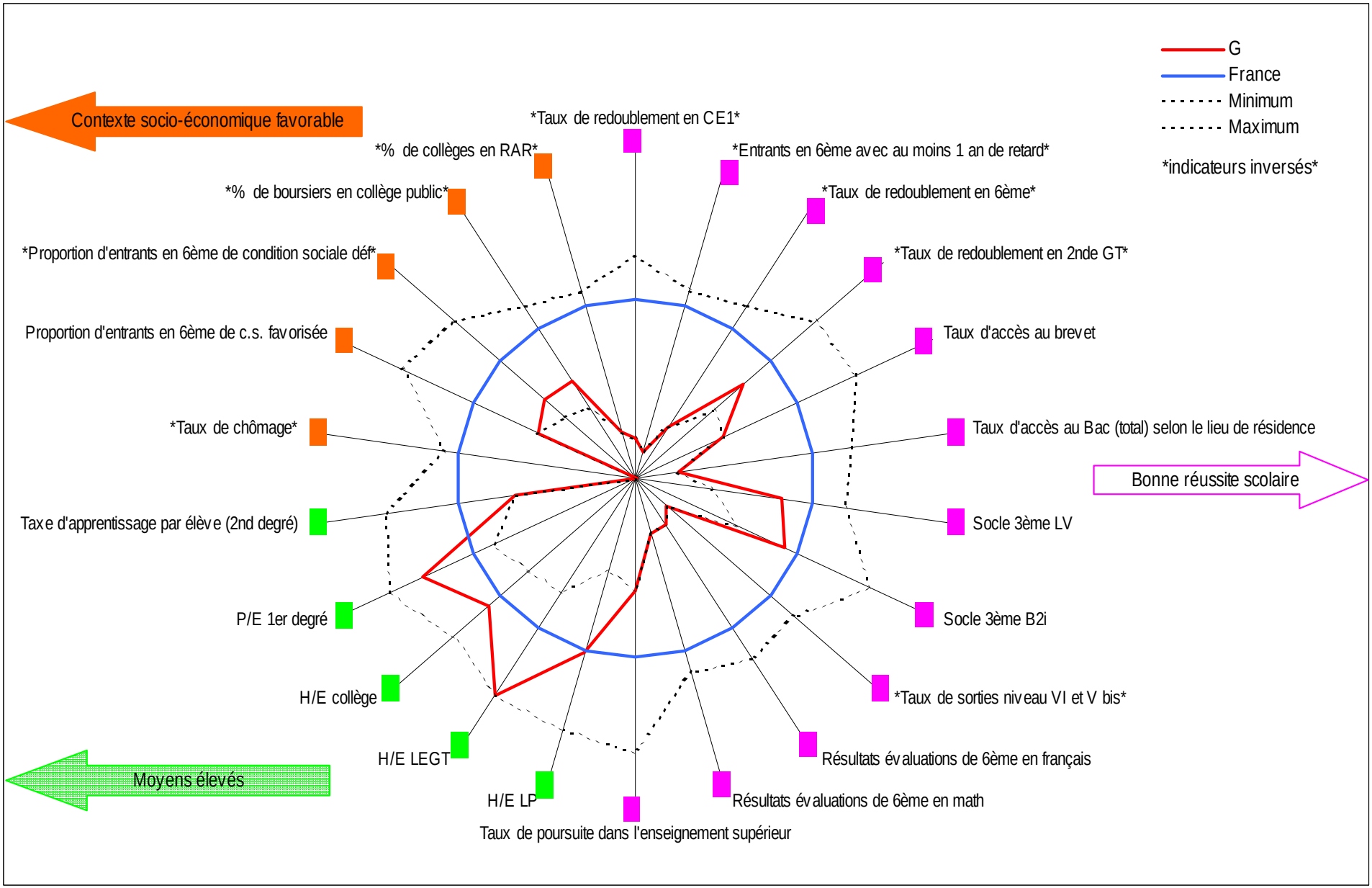
– contexte

– résultats

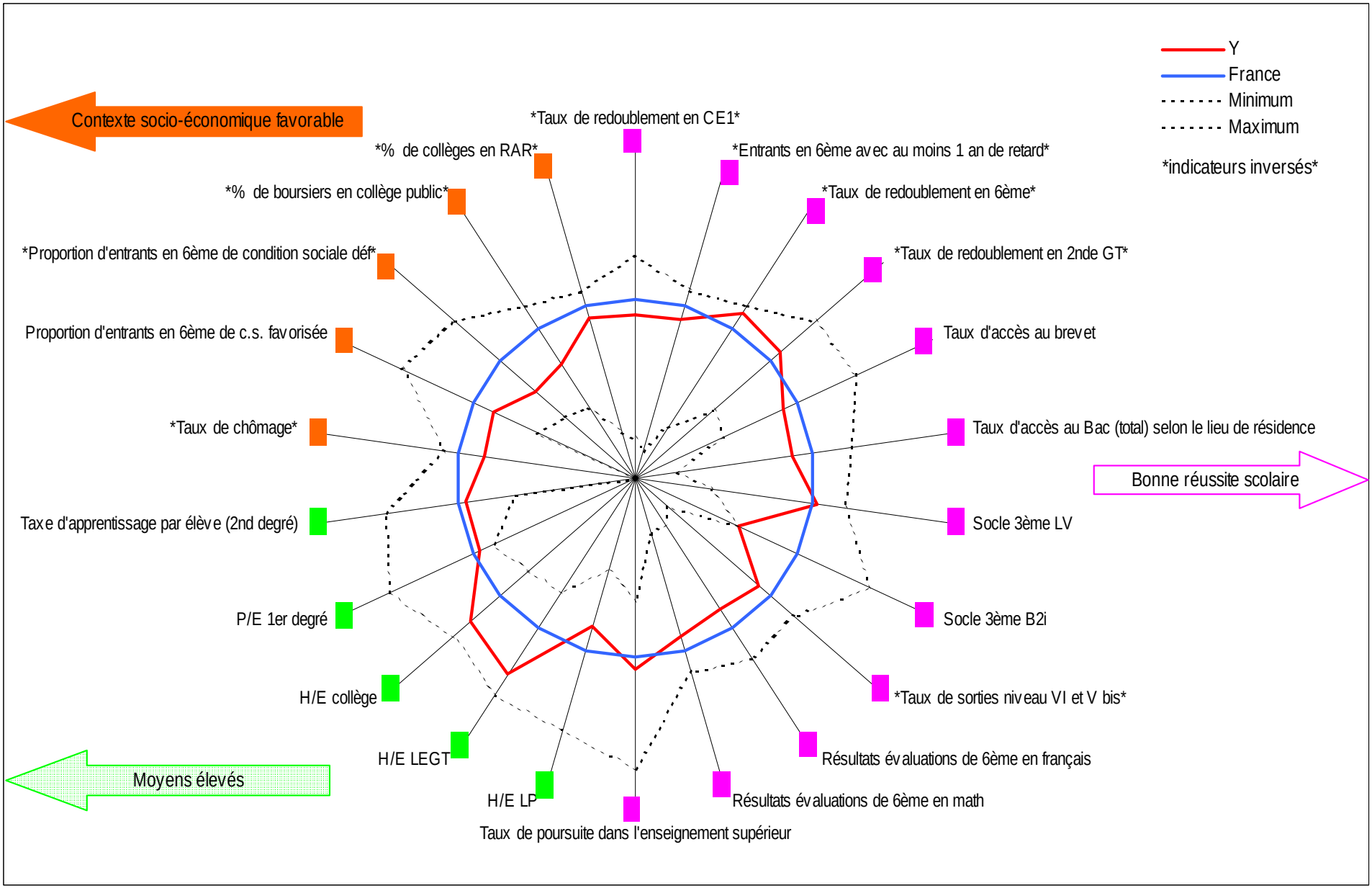
1er exemple


X
France
Minimum
Maximum
indicateurs inversés
Contexte socio-économique favorable
Bonne réussite scolaire
Moyens élevés
Taux de redoublement en CE1
Entrants en 6ème avec au moins 1 an de retard
Taux de redoublement en 6ème
Taux de redoublement en 2nde GT
Taux d'accès au brevet
Taux d'accès au Bac (total) selon le lieu de résidence
Socle 3ème LV
Socle 3ème B2i
Taux de sorties niveau VI et V bis
Résultats évaluations de 6ème en français
Résultats évaluations de 6ème en math
Taux de poursuite dans l'enseignement supérieur
H/E LP
H/E LEGT
H/E collège
P/E 1er degré
Taxe d'apprentissage par élève (2nd degré)
Taux de chômage
Proportion d'entrants en 6ème de c.s. favorisée
Proportion d'entrants en 6ème de condition sociale déf
% de boursiers en collège public
% de collèges en RAR

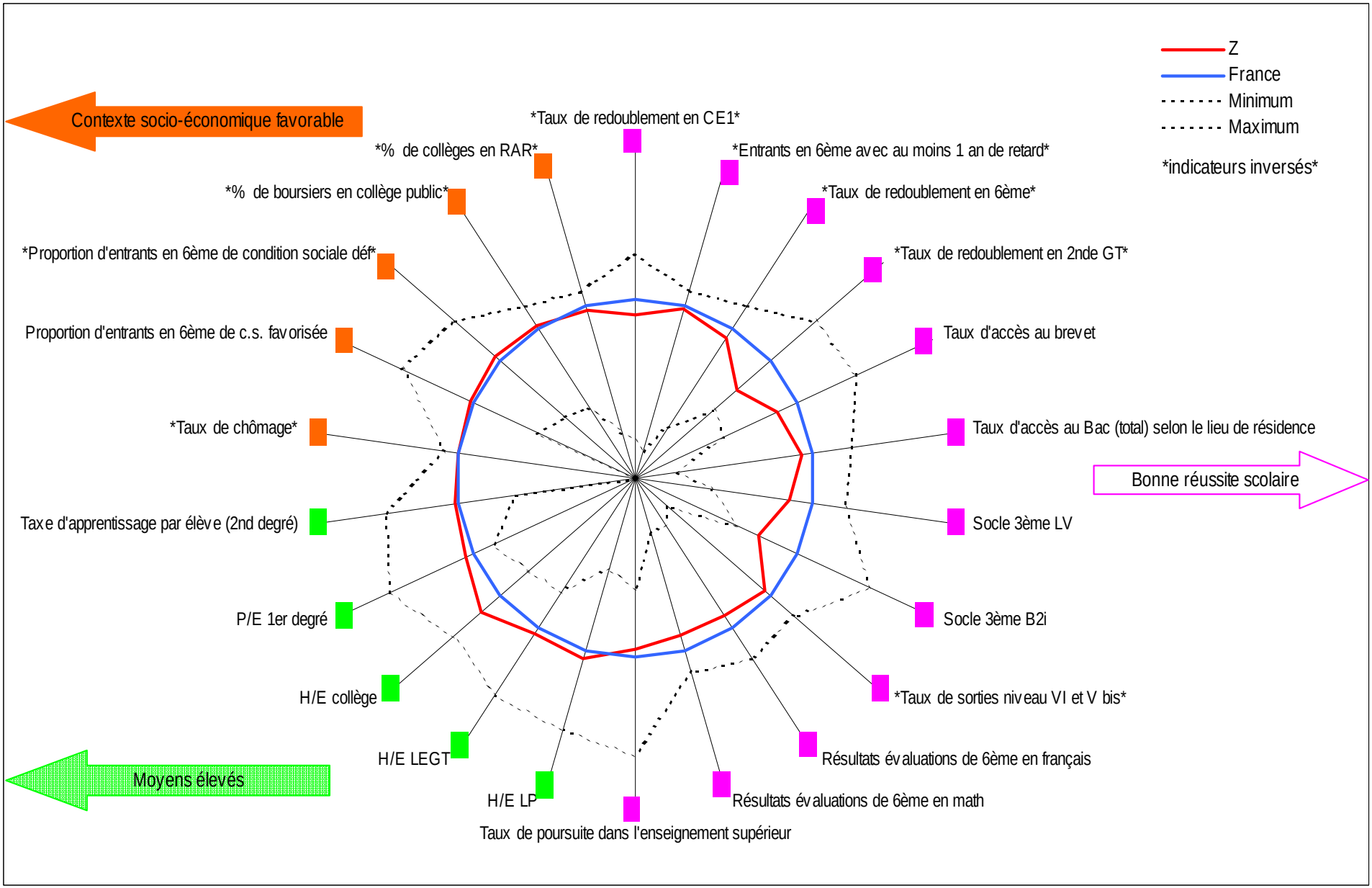
2ème exemple



3ème exemple



4ème exemple



Éléments de réponses :

→ faut-il renforcer les moyens ?

→ quelles dotations pour les académies ?

b) Zones d'éducation

- RAR *(réseaux ambition-réussite)*
- RRS *(réseaux de réussite scolaire)*
- hors EP *(hors éducation prioritaire)*

INDICATEUR 2.2 : Rapports des proportions d'élèves maîtrisant, en fin de collège, les compétences de base en français et en mathématiques, en RAR / hors EP et en RRS / hors EP

	2007 Réalisation
rapport RAR / hors EP en français	0,68 (± 0,05)
rapport RAR / hors EP en mathématiques	0,78 (± 0,04)
rapport RRS / hors EP en français	0,88 (± 0,06)
rapport RRS / hors EP en mathématiques	0,90 (± 0,04)

INDICATEUR 2.3 : Rapport des taux de réussite au brevet, en RAR / hors EP et en RRS / hors EP

	2006 Réalisation	2007 Réalisation	2011 Cible
rapport RAR / hors EP	0,76	0,81	0,85
rapport RRS / hors EP	0,87	0,89	0,95

c) Aide aux élèves

- PPRE,
- Accompagnement éducatif,
- 200 lycées d'excellence,
- École ouverte …

d) Mixité

- Primo arrivants,
- Handicapés,
- Garçons, filles.

Conclusion