Building a High-Quality Teaching Profession
Lessons from around the world

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Head of the Indicators and Analysis Division, EDU
High student performance
(PISA average reading, mathematics and science)

High average performance
Large socio-economic disparities

Low equity

Low average performance
Large socio-economic disparities

Low student performance

High average performance
High social equity

High equity
Building a High-Quality Teaching Profession

International Summit on the Teaching Profession
New York, 16-17 March 2011

Andres Schleicher

Student learning
Practices
Instruction
Intervention
Support systems

People
Teachers
Principals
Support personnel
Families

Processes
Selection
Preparation
Recruitment/induction
Work organisation
Development
Supervision
Retention

Tools
Standards
Curricula
Technology
Assessments
Data systems
Policies and alignment
Some students learn at high levels  

The past

The most effective systems

All students learn at high levels

Routine cognitive skills for lifetime jobs

Curriculum, instruction and assessment

Learning to learn, complex ways of thinking, ways of working

Taught to teach established content

Teacher quality

High-level professional knowledge workers

'Tayloristic', hierarchical

Work organisation

Flat, collegial, differentiated and diverse careers

Primarily to authorities

Teacher evaluation and accountability

Also to peers and stakeholders

Student inclusion
How teachers are recruited into the profession and educated

Great systems attract great teachers
Last year Finland had over 6000 applicants for 600 jobs.

Great systems prioritize the quality of teachers...
...over the size of classes.

Salaries matter...
...but career prospects, career diversity and giving teachers responsibility as professionals and leaders of reform are equally important.
Teacher salaries relative to workers with college degrees

Ratio of salary after 15 years of experience/minimum training to earnings for full-time full-year workers with tertiary education aged 25 to 64

Source: OECD, Education at a Glance 2010, Table 3.1 (Fig 1.1 Building a High-Quality Teaching Profession)
High performing systems often prioritize the quality of teachers over the size of classes

Contribution of various factors to upper secondary teacher compensation costs per student as a percentage of GDP per capita (2004)

- Salary as % of GDP/capita
- Instruction time
- 1/teaching time
- 1/class size

Percentage points

Difference with OECD average

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Percentage points

Difference with OECD average
Percentage of OECD countries in which the following factors shape teacher pay

- Years of experience as a teacher: 100%
- Additional management responsibilities: 84%
- Teaching in a disadvantaged, remote or high cost area: 72%
- Special tasks (career guidance, counselling): 66%
- Teaching courses in a particular field: 31%
- A higher initial educational qualification: 66%
- A higher certification or training obtained during professional life: 69%
- Outstanding performance in teaching: 44%

Source: OECD, Education at a Glance 2010. (Fig 3.6 Building a High-Quality Teaching Profession)
How teachers are recruited into the profession and educated

The status of teaching is not a static attribute of culture...
...but has, in some countries, changed significantly.

Top-down initiatives alone were often insufficient to achieve deep and lasting changes
(You can mandate compliance but you need to unleash excellence).
School autonomy, accountability and student performance

Impact of school autonomy on performance in systems with and without accountability arrangements

PISA score in reading

Systems with more accountability

Systems with less accountability

Schools with more autonomy

Schools with less autonomy

School autonomy in resource allocation
Interesting practices to bring in a wider background of teachers

Opening the teaching profession to individuals with relevant experience outside education
...not just in vocational programs.

Recognizing the skills and experience gained outside education...
...and reflecting those in starting salaries.

Enabling appropriately qualified entrants, including mature student teacher trainees...
...to start working and earning a salary before acquiring teacher education qualifications.

Offering more flexible approaches to teacher education...
...that provide opportunities for part-time study and distance learning, and that give credits for relevant qualifications and experience.
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How teachers are developed in service and supported

No matter how good the pre-service education for teachers is...
...it cannot prepare teachers for rapidly changing challenges throughout their careers.

High-performing systems rely on ongoing professional to...
...update individuals' knowledge of a subject in light of recent advances
...update skills and approaches in light of new teaching techniques, new circumstances, and new research
...enable teachers to apply changes made to curricula or teaching practice
...enable schools to develop and apply new strategies concerning the curriculum and teaching practice
...exchange information and expertise among teachers and others
...help weaker teachers become more effective.

Effective professional development is on-going...
...includes training, practice and feedback, and adequate time and follow-up support
Percentage of teachers without mentoring and induction

Source: OECD, TALIS Table 3.6 (Fig 2.1 Building a High-Quality Teaching Profession)
### Figure 3.15

Relatively few teachers participate in the kinds of professional development which they find has the largest impact on their work.

Comparison of teachers participating in professional development activities and teachers reporting moderate or high level impact by types of activity.

<table>
<thead>
<tr>
<th>Professional Development Activity</th>
<th>Impact</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual and collaborative research</td>
<td></td>
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<td>Qualification programmes</td>
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</tbody>
</table>

**TALIS Average**

- Impact range: 0% to 100%
- Participation range: 0% to 100%

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**Notes:**

- Impact: The level of impact that the activity has on the teacher's work.
- Participation: The percentage of teachers participating in the activity.
Relatively few teachers participate in the kinds of professional development which they find has the largest impact on their work.

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TALIS Average

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<td>Individual and collaborative research</td>
<td>95%</td>
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<tr>
<td>Qualification programmes</td>
<td>70%</td>
</tr>
<tr>
<td>Informal dialogue to improve teaching</td>
<td>50%</td>
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<tr>
<td>Reading professional literature</td>
<td>30%</td>
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<tr>
<td>Courses and workshops</td>
<td>20%</td>
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Teacher demand for professional development is often not met, sometimes for lack of time, sometimes for lack of opportunity.

Among those teachers who wanted more development than they received (TALIS averages)

- Conflict with work schedule: 45%
- No suitable professional development: 40%
- Family responsibilities: 30%
- Too expensive: 25%
- Lack of employer support: 15%
- Did not have the pre-requisites: 5%

Source: OECD, TALIS Table 3.7 (Fig 2.3 Building a High-Quality Teaching Profession)
It's not just about more of the same
For what type of professional development do teachers report a high level of need?

Areas are ranked in descending order of the international average where teachers report a high level of need for development.

Source: OECD. Table 3.2
Employment conditions

The predominant employment model remains 'career-based'...
...but some countries have introduced position-based systems...
...many countries have probationary periods...
...and an increasing number require periodic renewal of licenses.

Limited but increasing career diversity...
...both horizontally and vertically.

Some efforts to improve mobility...
...between schools and with other occupations.

Countries struggle with transparency in teacher labour market...
...but some have all vacancies posted, and provide websites where the information is centralized or establish a network of agencies to co-ordinate and foster recruitment activities.

Schools have become more involved in personnel management.
Percentage of public and private schools that have considerable autonomy over

- Selecting teachers for hire
- Dismissing teachers

Source: OECD, PISA 2009 Database, Table IV.3.5 (Fig 2.7 Building a High-Quality Teaching Profession)
Some teachers are left alone

Teachers who received no appraisal or feedback and teachers in schools that had no school evaluation in the previous five years

Countries are ranked in descending order of the percentage of teachers who have received no appraisal or feedback.

Source: OECD. Table 5.1 and 5.3
How teachers are evaluated and compensated

Criteria used to evaluate teachers include...

...teacher qualifications, including teacher credentials, years of service, degrees, certifications and relevant professional development

...how teachers operate in the classroom setting, including attitudes, expectations and personal characteristics, as well as strategies, methods and actions employed in their interaction with students; and

...measures of teacher effectiveness, based on assessment of how teachers contribute to students’ learning outcomes as well as their knowledge of their field and pedagogical practice

In most countries, teachers value appraisal and feedback highly...

...and report that it improves their job satisfaction and personal development, widens their repertoire of pedagogical practices and improves their effectiveness.

In many countries, appraisal and feedback have limited impact...

...on public recognition, professional development, careers and pay.
Does appraisal and feedback make a difference for the job?

- Opportunities for professional development activities
- A change in the likelihood of career advancement
- Public recognition from the principal and/or colleagues
- Changes in work responsibilities that make the job more attractive

Countries are ranked in descending order of changes in teachers' opportunities for professional development activities.
Source: OECD. Table 5.5.
Teachers’ report on impact of appraisal and feedback in their school

- Increased monetary or non-monetary rewards for improving quality of teaching
- Increased monetary or non-monetary rewards for more innovative teaching
- School principal alters monetary rewards of persistently underperforming teacher
- Teachers will be dismissed because of sustained poor performance

Source: OECD. Table 5.9.
How much autonomy public and private schools have over salaries

- Establishing teachers' starting salaries
- Determining teachers' salaries increases

Source: OECD, PISA 2009 Database, Table IV.3.5 (Fig 2.7 Building a High-Quality Teaching Profession)
Coherence of policy and practice

Alignment of policies across all aspects of the system

Coherence of policies over sustained periods of time

Consistency of implementation

Fidelity of implementation
Find out more about our work at...

- www.oecd.org/education
- www.pisa.oecd.org
- U.S. White House www.data.gov
- Email: Andreas.Schleicher@OECD.org

... and remember:
Without data, you are just another person with an opinion
Backup slides
Students' views of teacher-student relations

Most of my teachers are interested in my well-being

Source: OECD, PISA 2009 Database, Table IV.4.1 (Fig 2.6 Building a High-Quality Teaching Profession)
Students’ views of teacher-student relations

If I need extra help, I will receive it from my teachers

Source: OECD, PISA 2009 Database, Table IV.4.1 (Fig 2.6 Building a High-Quality Teaching Profession)
How much autonomy individual schools have over resource allocation

Only “principals and/or teachers” have considerable responsibility to:

- Determining course content
- Deciding which courses are offered

Source: OECD, PISA 2009 Database, Table I V.3.5 (Fig 2.7 Building a High-Quality Teaching Profession)
Parental support at the beginning of primary school

Score point difference between students whose parents often do (weekly or daily) and those who do not:

"talk about what they had done"

Score point difference

-10 0 10 20 30 40 50 60

Lithuania Germany Denmark Croatia Hong Kong-China Korea Macao-China Portugal Hungary New Zealand Chile Italy Panama Qatar
Beyond schooling

Performance difference between students who had attended pre-primary school for more than one year and those who did not

Score point difference

Observed performance advantage

Performance advantage after accounting for socio-economic factors
A world of change in baseline qualifications
Approximated by percentage of persons with high school or equivalent qualifications in the age groups 55-64, 45-55, 45-44 und 25-34 years

1. Excluding ISCED 3C short programmes
2. Year of reference 2004
3. Including some ISCED 3C short programmes
Relationship between test performance and economic outcomes

Annual improved GDP from raising performance by 25 PISA points

Percent addition to GDP

Percent addition to GDP from raising performance by 25 PISA points per year.

Year: 2010 to 2110
Increase average performance by 25 PISA points (Total 115 trillion $)

Potential increase in economic output (bn $)

- United States
- Japan
- Germany
- France
- Italy
- Mexico
- Spain
- Korea
- Canada
- Turkey
- Australia
- Poland
- Netherlands
- Belgium
- Sweden
- Greece
- Czech Republic
- Austria
- Norway
- Switzerland
- Portugal
- Hungary
- Denmark
- Finland
- Ireland
- New Zealand
- Slovak Republic
- Luxembourg
- Iceland
High science performance

Average performance of 15-year-olds in science - extrapolate and apply
Raise everyone to minimum of 400 PISA points

Potential increase in economic output (bn $)

- United States
- Mexico
- Turkey
- Germany
- Italy
- Japan
- France
- Spain
- United Kingdom
- Poland
- Canada
- Greece
- Korea
- Australia
- Portugal
- Belgium
- Netherlands
- Norway
- Sweden
- Austria
- Czech Republic
- Switzerland
- Hungary
- Denmark
- Ireland
- Slovak Republic
- New Zealand
- Luxembourg
- Finland
- Iceland
Raise everyone to minimum of 400 PISA points

% current GDP