How do we foster innovation that has a positive impact on student learning

2015 International Summit of the Teaching Profession

Andreas Schleicher Banff, 30 March 2015



(C))OECD



Changes in the demand for skills

Trends in different tasks in occupations (United States)

Mean task input in percentiles of 1960 task distribution



Source: Autor, David H. and Brendan M. Price. 2013. "The Changing Task Composition of the US Labor Market: An Update of Autor, Levy, and Murnane (2003)." MIT Mimeograph, June.

2

Innovating to create 21st-century learning environments

Regrouping

educators

- To gain the benefits of collaborative planning, work, and shared professional development strategies
- To open up pedagogical options
- To give extra attention to groups of learners
- To give learners a sense of belonging
 - & engage Inquiry, authentic learning, collaboration,
- To mix stud and formative assessment
- To mix die A prominent place for student voice & agency
- To widen pedagogical options,
 - uding peer teaching
- To allow for deeper learning
- To create flexibility for more individual choices
- To accelerate learning
- To use out-of-school learning in effective & innovative ways

Rescheduling earning 4

Percentage of lower secondary teachers (2008)



Teacher skills and graduate skills (numeracy)

Japan Finland Flanders (Belgium) Germany Norway Netherlands Austria Czech Republic Sweden Australia France Slovak Republic Northern Ireland (UK) Denmark England/N. Ireland (UK) England (UK) Korea Ireland Canada **United States** Estonia Poland Italy 230 250 350

Middle half of the numeracy skill distribution of graduates (16-65 years)

PIAAC test scores (numeracy)

Teacher skills and graduate skills (numeracy)



Most teachers value 21st century pedagogies...

Percentage of lower secondary teachers who "agree" or "strongly agree" that:



My role as a teacher is to facilitate students' own inquiry

Students should be allowed to think of solutions to practical problems themselves before the teacher shows them how they are solved

Thinking and reasoning processes are more important than specific curriculum content

Students learn best by finding solutions to problems on their own

Percentage of lower secondary teachers who report using the following teaching practices "frequently" or "in all or nearly all lessons"



Teachers Self-Efficacy and Professional Collaboration



Teacher co-operation

Percentage of lower secondary teachers who report doing the following activities at least once per month



Feedback and change in behavior 11 condition openion review cause fact reason idea sign reedback result nswer situation repl lance record mean response DURDO'SE SUMMARL

Teachers and feedback

On average across TALIS countries,



Teachers feedback : direct classroom observations



Consequences of feedback

Percentage of lower secondary teachers who "agree" or "strongly agree" that:

Alberta (Canada) Average

A development or training plan is established to improve their work as a teacher A mentor is appointed to help teachers improve his/her teaching Teacher appraisal and feedback have little impact upon the way teachers teach in the classroom The best performing teachers in this school receive the greatest recognition If a teacher is consistently underperforming, he/she would be dismissed 20 40 60 0 80

Impact of professional development

Regardless of the content, *over 3/4 of teachers* report that...

15



...the *professional development* in which they have participated has had a *positive impact on their teaching*. 16

Percentage of lower secondary teachers indicating they have a high level of need for professional development in the following areas



Alberta (Canada) Average

Changes in instructional practice – PISA 2006-9

Increase percentage OECD Japan 6.5 Japan 1.7 1.7 0.8 Japan OECD DFC 0

> Multiple-choice - reproducing knowledge

Open-ended - constructing knowledge (21st century skills) Thank you

18

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and remember: Without data, you are just another person with an opinion