Innovative Teaching and Learning
MOVING FROM THEORY TO ACTION

October 2014

Microsoft

ITL RESEARCH

Education System Change

School Leadership and Culture

Innovative Teaching Practices

Individuals with skills for life and work today

SKILLS FOR LIFE AND WORK TODAY

- Knowledge building
- Self-regulation & assessment
- Problem solving & innovation
- ICT use
- Collaboration
- Global awareness
- Skilled communication
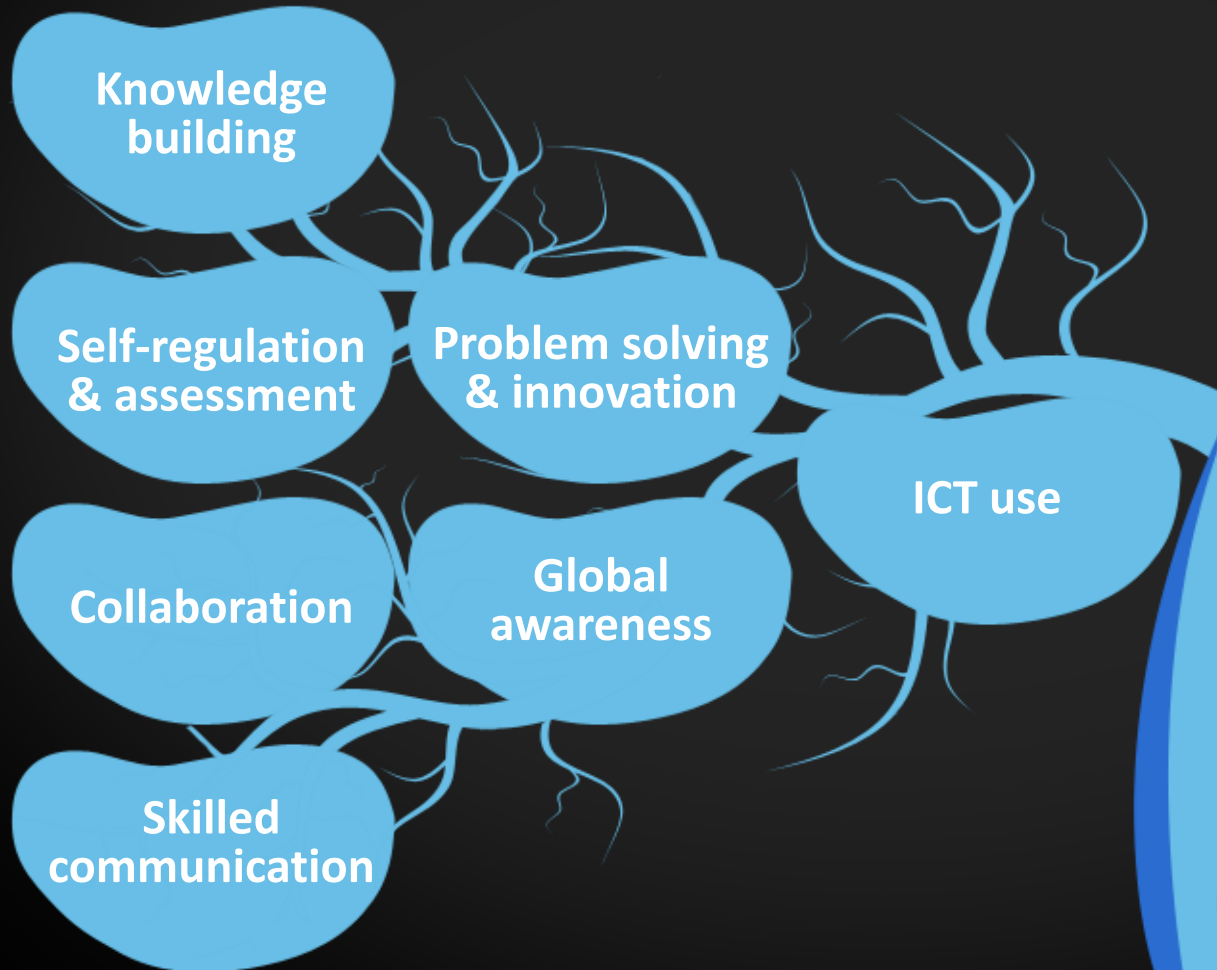
WHAT ARE INNOVATIVE TEACHING PRACTICES?

Student Centered Pedagogies

Personalized

Collaborative

Knowledge building

Self-regulation
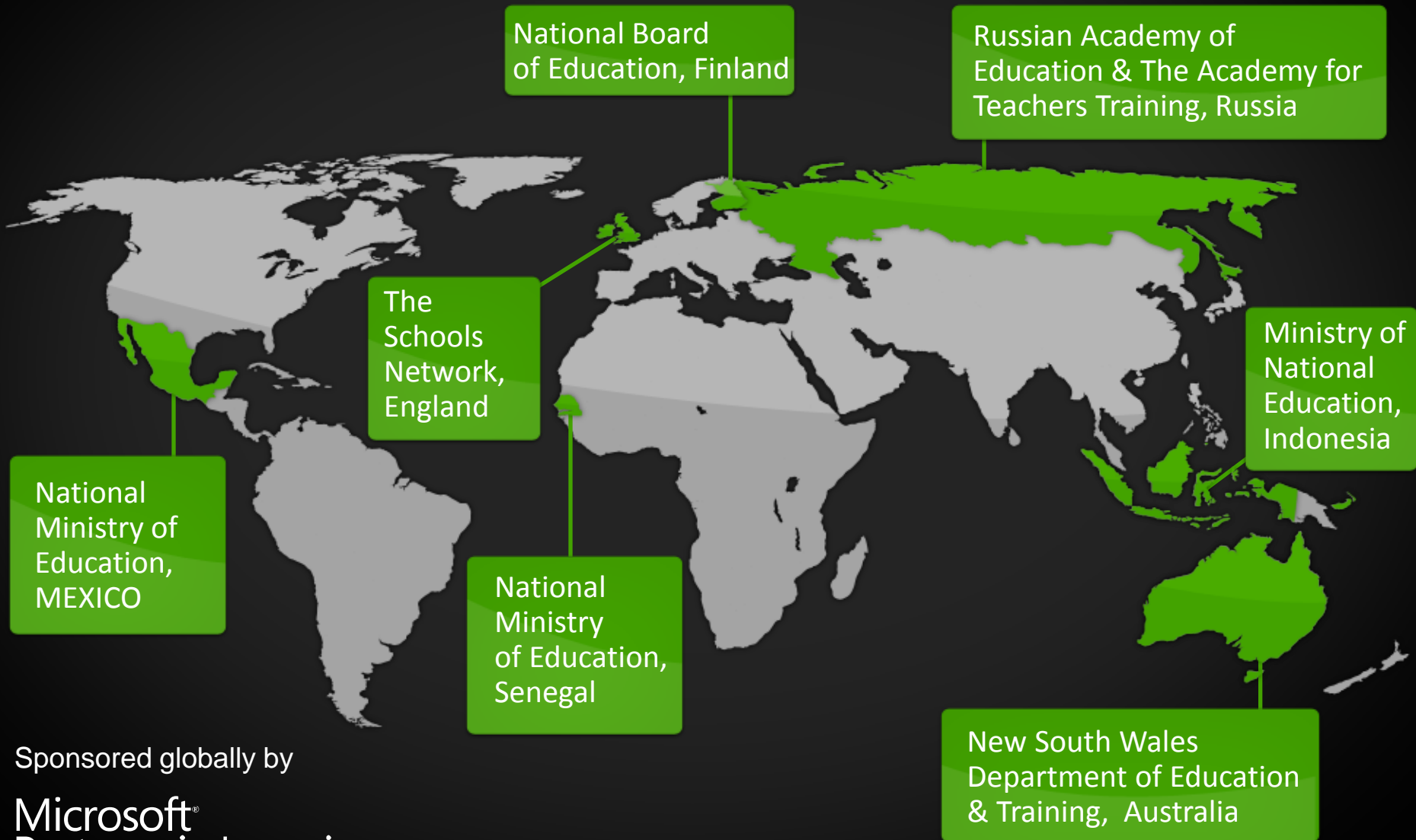
Extending Learning

Problem Solving

24/7 learning opportunities

Global and cultural understanding

ICT Integration

By educators

By students

Basic usage vs.

Higher-level usage (for knowledge building and creativity)

7 COUNTRIES PARTICIPATING IN ITL

45+ COUNTRIES USING METHODS

National Board of Education, Finland

Russian Academy of Education & The Academy for Teachers Training, Russia

The Schools Network, England

Ministry of National Education, Indonesia

National Ministry of Education, MEXICO

National Ministry of Education, Senegal

New South Wales Department of Education & Training, Australia

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ITL RESEARCH
MIXED METHODS USED

Education System Change

School Leadership and Culture

Innovative Teaching Practices

Across

159 survey schools
24 site visit schools

Teacher & School Leader Interviews	**86** teachers **18** school leaders
Teacher & School Leader Surveys	**4,038** teachers **159** school leaders
Classroom Observations	**81** classrooms
Learning Activity Analysis	**967** learning activities
Student Work Analysis	**3,367** student work
Student Focus Groups	**33** focus groups

Methods Published at: www.itlresearch.com

LEARNING ACTIVITY SCORES

Category	Score
Knowledge building	2.0
ICT	2.0
Collaboration	1.9
Self regulation	1.8
Problem solving	1.6

WHY NOT

Student Centered Pedagogies

Extending Learning
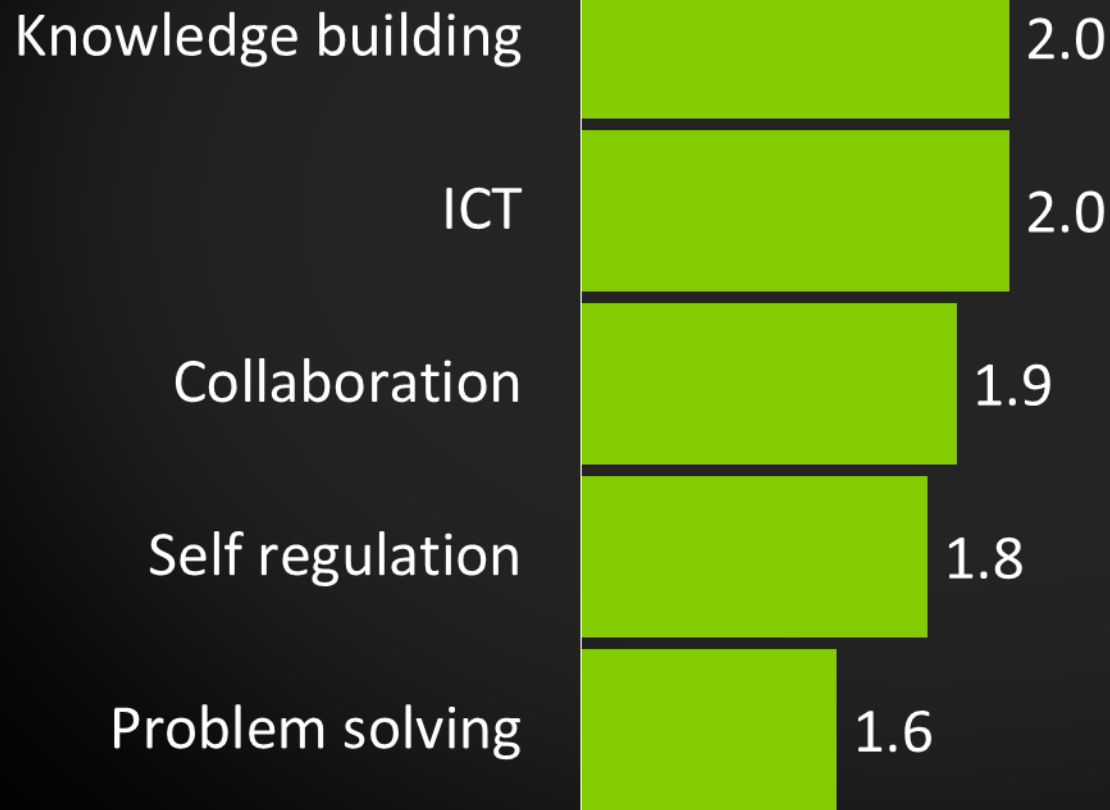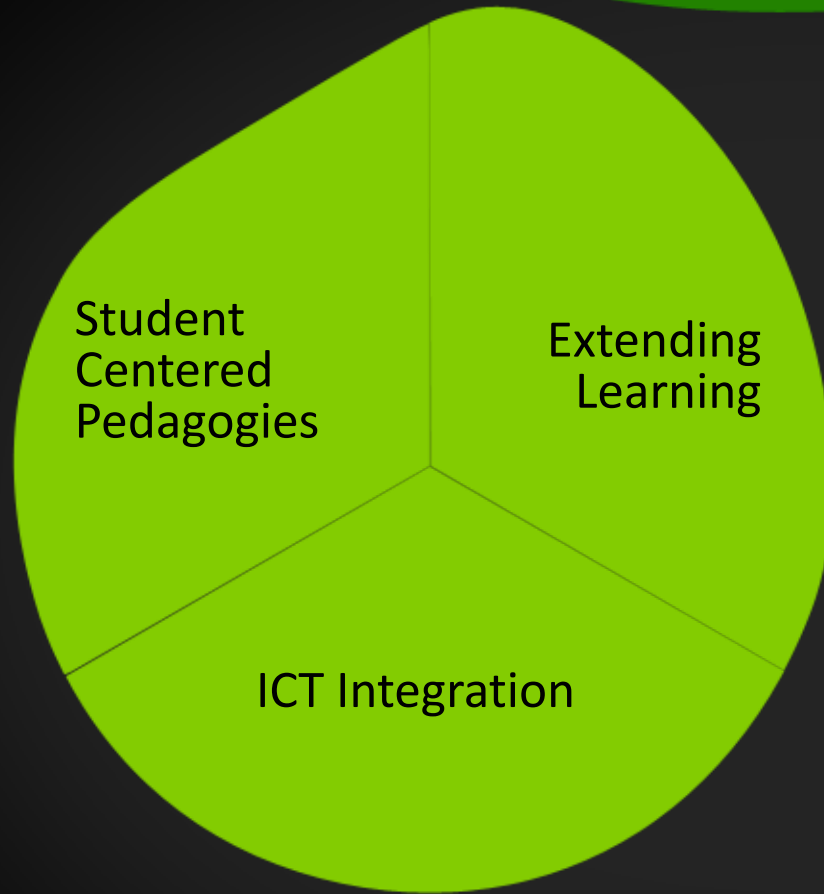
ICT Integration

WHY IS ICT INTEGRATION HARD?
Teachers say …

Lack computers for students	25%
Insufficient time to prepare	14%
Not enough professional devel	12%
Lack computers for teachers	10%
Internet not reliable	8%
Outdated technology	7%
Difficult to access computers	7%
Lack ICT-supported resources	6%
Weak ICT infrastructure	5%
Not enough technical support	4%
Computers vandalized	3%
ICT not supported by leadership	2%
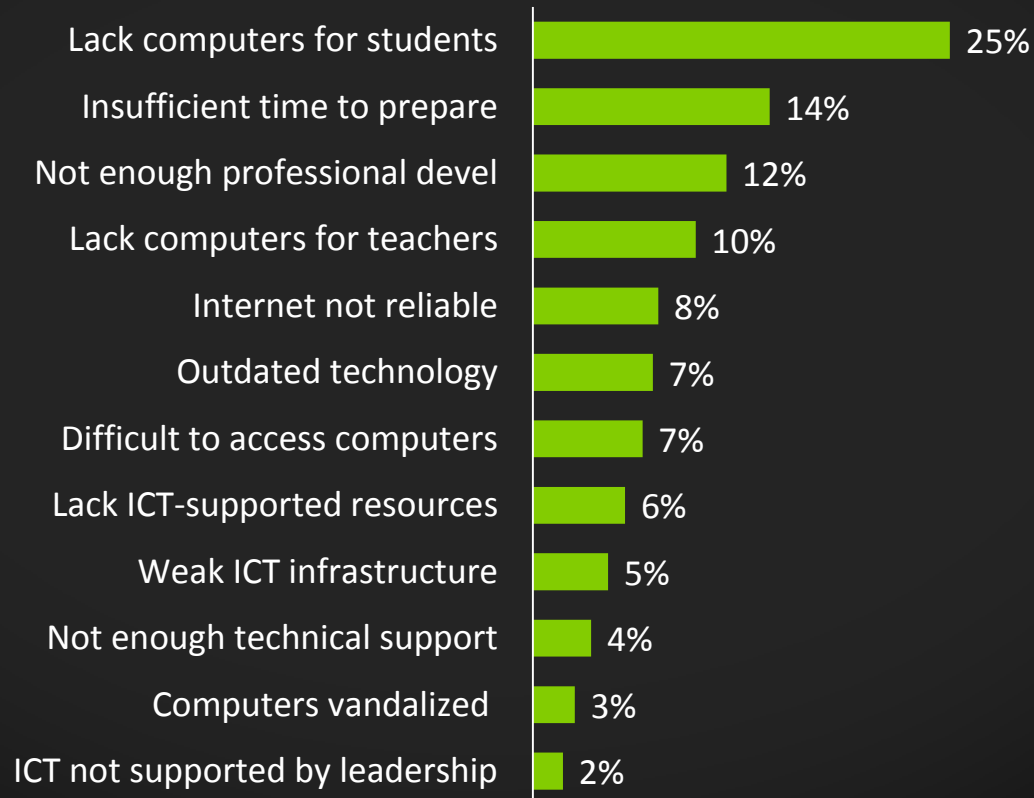
Percent Teachers Citing Most Significant Barrier

AND STUDENTS USE ICT...

Develop simulations or animations — 3%

Work with others from outside class — 5%

Use simulations or animations — 5%

Create multimedia presentations — 6%

Collaborate with peers on learning... — 9%

Access class resources or online... — 12%

Analyze data or information — 15%

Write or edit stories, reports, or essays — 15%

Take tests or turn in homework — 17%

Practice routine skills and procedures — 26%

Find information on the Internet — 36%

High level uses of ICT

Basic uses of ICT

Based on analysis by SRI International

Student Centered Pedagogies

Extending Learning

Innovative Teaching Practices

ICT Integration

Missing pedagogical elements of innovation
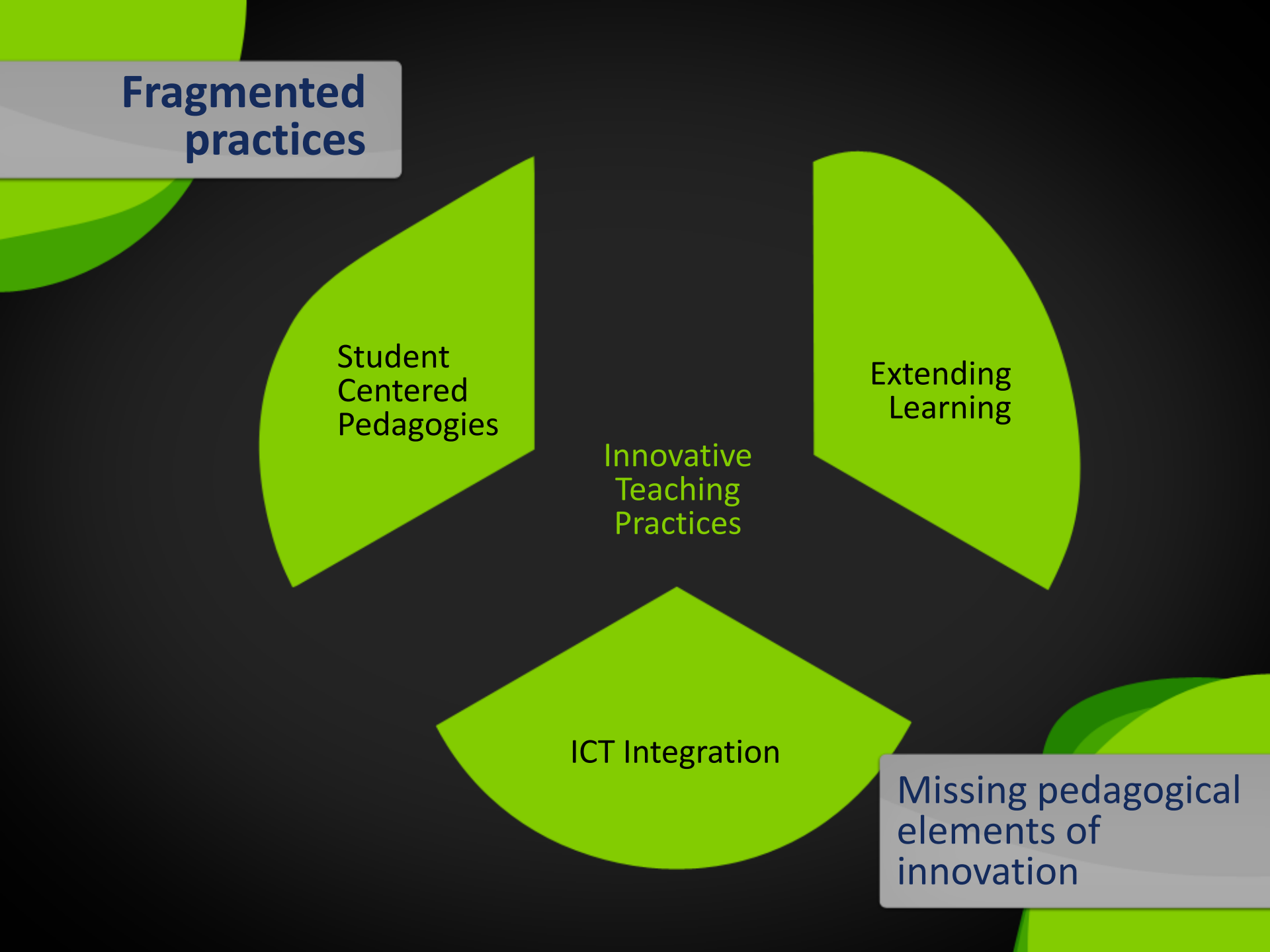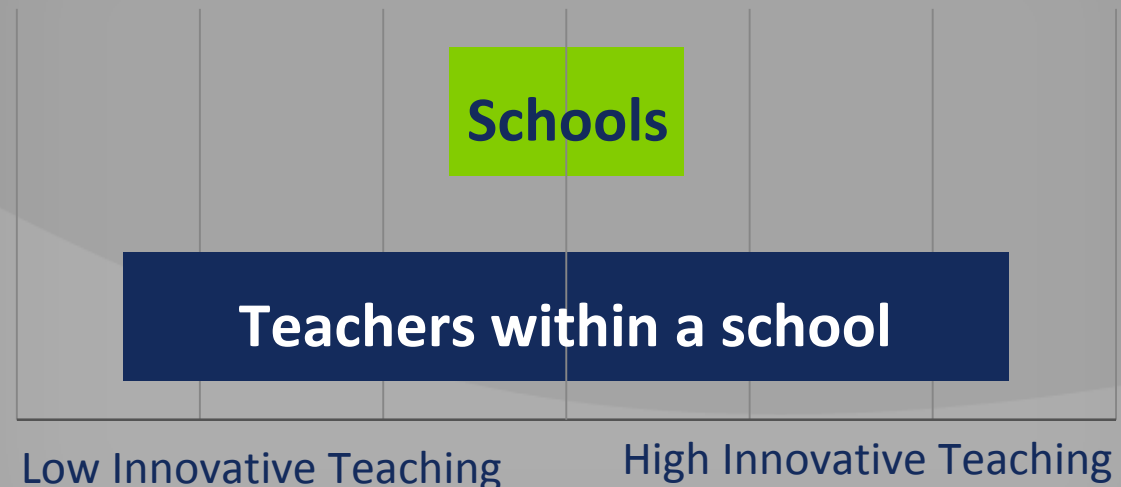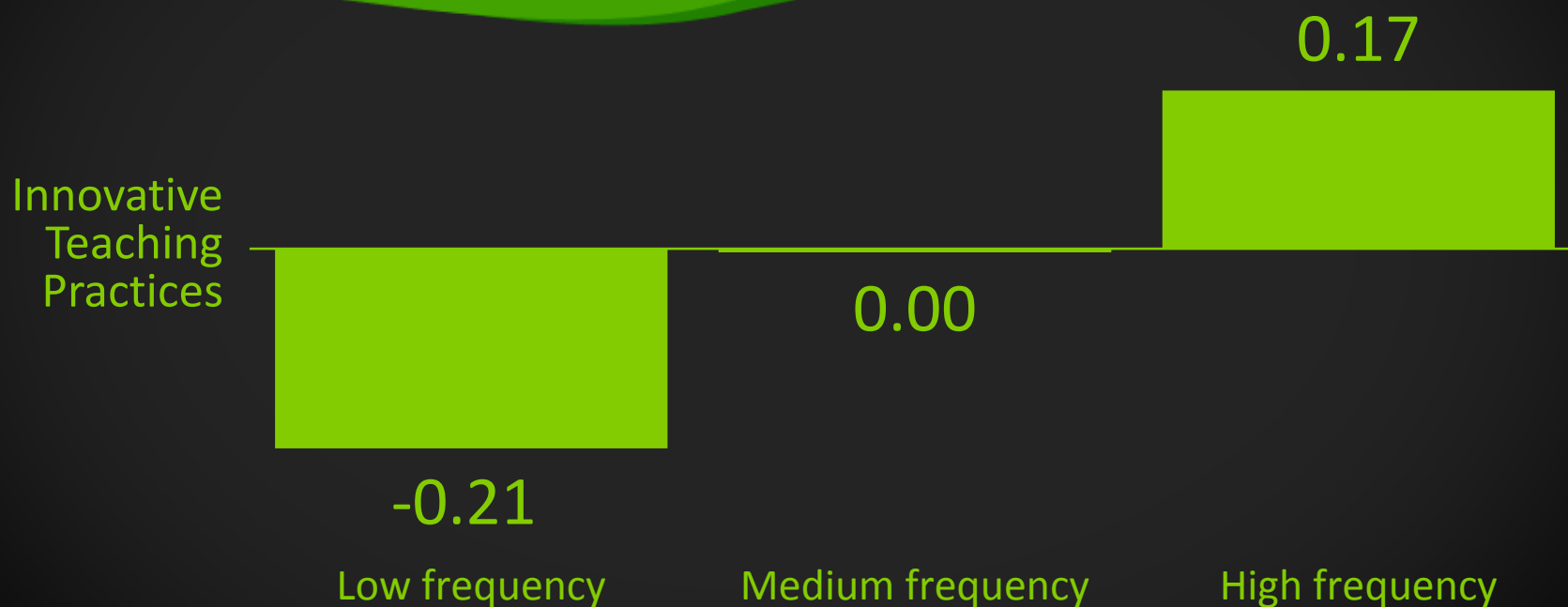
PROFESSIONAL DEVELOPMENT
AND INNOVATIVE TEACHING PRACTICES

Practice	Value
Practice a new teaching method	0.28
Conducted individual or collaborative research on a particular topic	0.25
Planned or practiced using ICT in teaching	0.23
Reviewed and discussed student work	0.23
Observed a demonstration of ICT use	0.18
Developed or reviewed curriculum materials	0.18
Received or delivered one-on-one coaching or mentoring	0.17
Planned a lesson or a unit	0.15
Observed a demonstration of a lesson	0.15
Listened to a lecture	0.03

Source: ITL teacher survey, 2011

Based on analysis by SRI International

SYSTEM DISCONNECTED
FROM INNOVATIVE TEACHING PRACTICES

"**Innovative practices** remain individual initiatives of motivated teachers. Being an innovative teacher has no direct and explicit impact on one's career."
Senegal ITL Report

"My **success** is judged by examiners, by Ofsted, by parental choice… and what parents want, what children want is not necessarily what I would judge as innovation."
School leader, England

Student Assessments

School and Teacher Performance

Professional Development

Connect Systems: Assessments and appraisals aligned with innovative teaching and learning goals

Cultivate innovation: Leaders who develop integrated and shared visions of innovation

Nurture adoption: Professional development that provides teachers collaborative opportunities to design and research innovative teaching

Enrich learning: Ubiquitous student ICT access

MOVING FROM RESEARCH TO ACTION

Aligned assessments: **ATC21S**

Shared visions of school innovation:
Partners in Learning School Research (PILSR)

Teacher Professional development: **ITL LEAP21**

Ubiquitous student ICT access:
Shape the Future Program

MEASURE INNOVATIVE TEACHING USING PARTNERS IN LEARNING SCHOOL RESEARCH

www.pilsr.com

Microsoft
Partners in Learning
School Research
Measuring 21st Century teaching and learning in your school

Home | About The Research | Training Materials | How It Works | Sign In | First Time Sign In

Start the Research at Your School Now!

What is this research?

Free surveys of teachers and school leaders that will measure 21st Century teaching and learning skills in your school.

People all over the world are talking about the need to transform education to align with the realities of life and work in the 21st Century. This is not just about the effective use of technology. It's about developing kids who are deeply engaged in the learning process and taking the initiative to learn.

How It Works

- The surveys are self-assessment tools for schools that measure innovative teaching practices.
- Survey responses are confidential and anonymous.
- The survey tools and school reports are free.
- Schools can use the surveys each year to track progress.
- Microsoft's Partners in Learning provides these survey tools as part of its commitment to advance innovative

Partners in Learning School Research is based on surveys developed for Innovative Teaching and

- Research Tool for Schools
- Based on ITL Research Surveys
- Measures Innovative Teaching Practices
- No costs
- Basis for Common Vision
- International 34 languages

PARTNERS IN LEARNING SCHOOL RESEARCH

1. School **Signs Up**

2. Distribute **Surveys**

3. Use the **Report**

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Partners in Learning
School Research
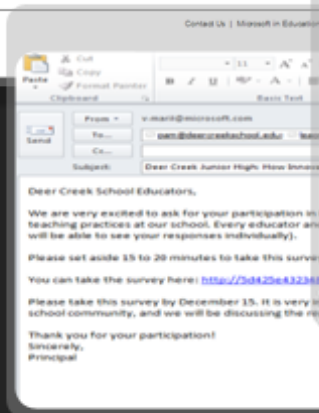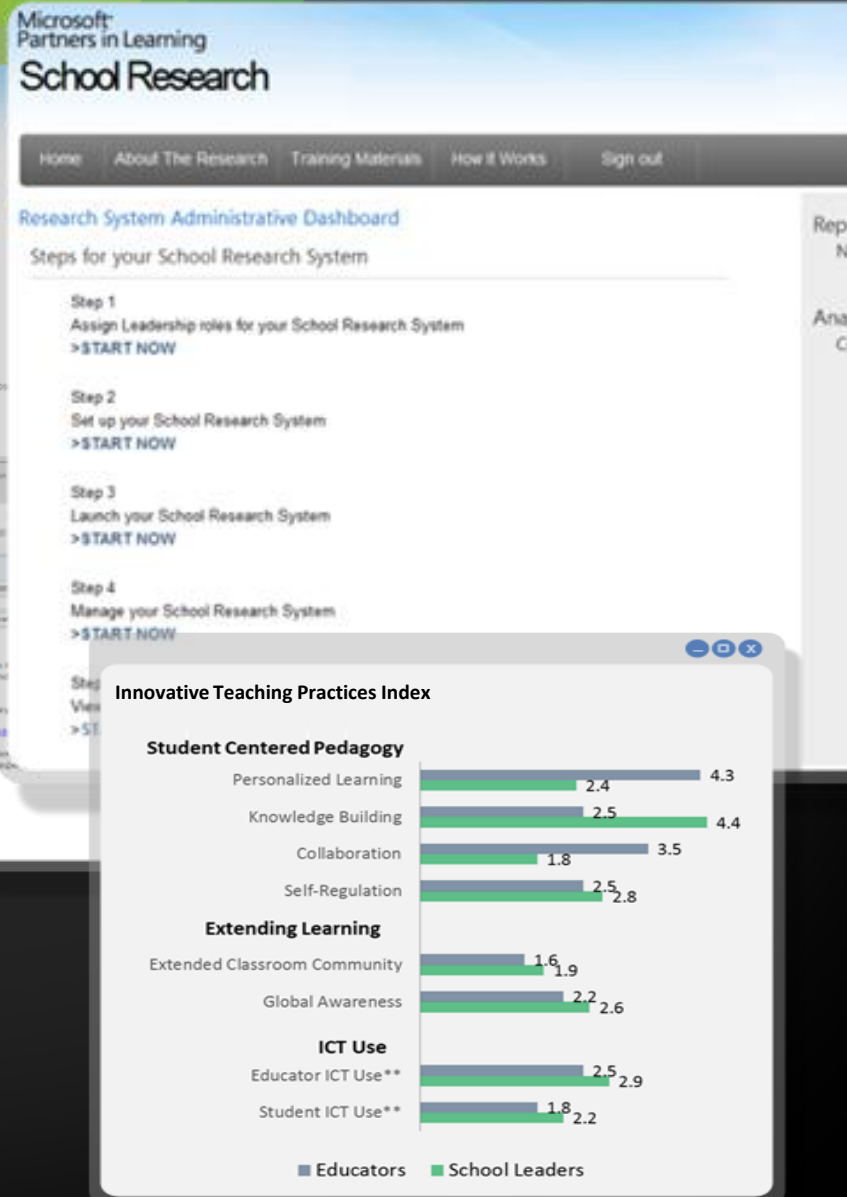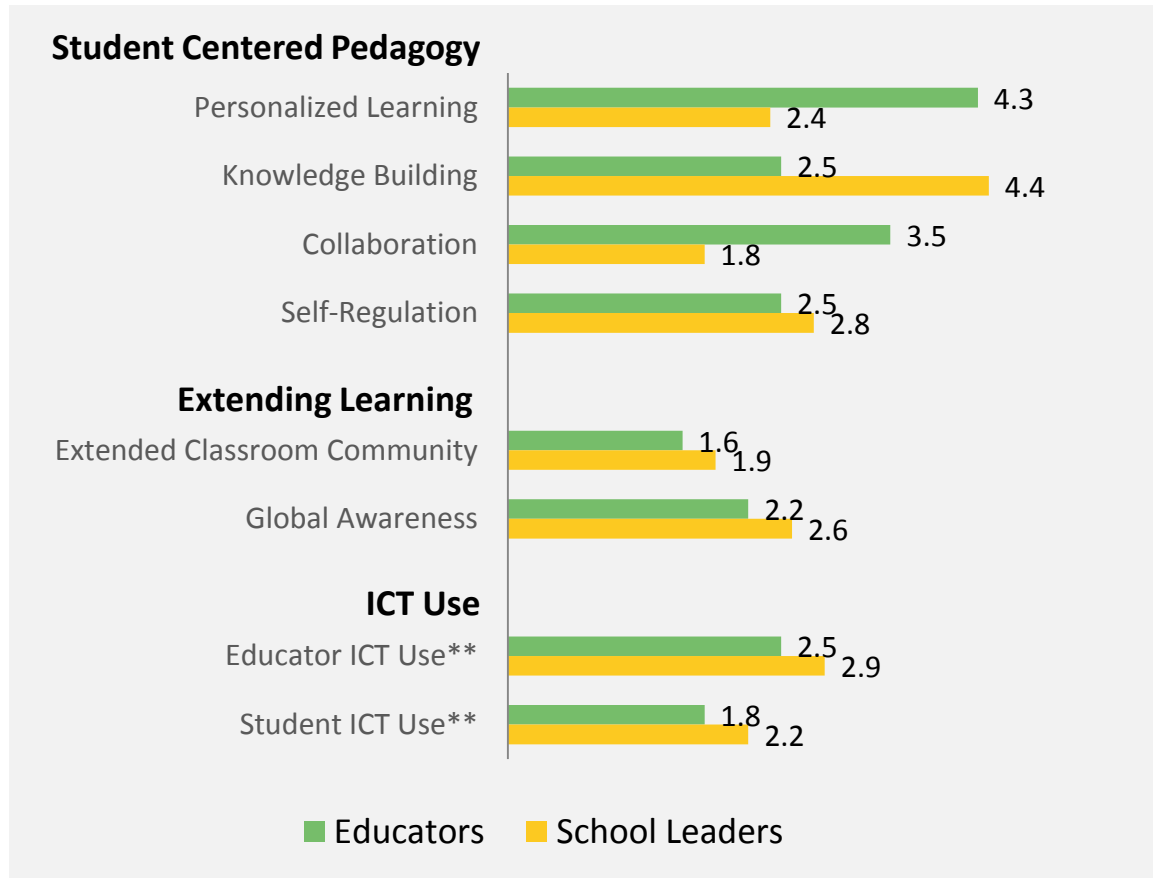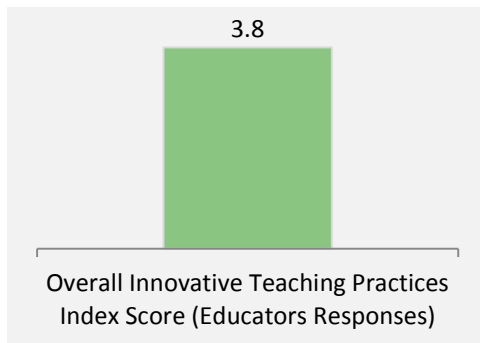
Innovative Teaching Practices Index*

The chart on the right shows how educators at [School Name] report their use of the different elements of innovative teaching practices, and how school leaders estimate the use of these practices among educators in the school. These practices are described in more detail on the following pages.

Other related research demonstrates that innovative teaching practices are strongly associated with students' development of 21st Century skills (see www.itlresearch.com).

Student Centered Pedagogy

	Educators	School Leaders
Personalized Learning	4.3	2.4
Knowledge Building	2.5	4.4
Collaboration	3.5	1.8
Self-Regulation	2.5	2.8

Extending Learning

	Educators	School Leaders
Extended Classroom Community	1.6	1.9
Global Awareness	2.2	2.6

ICT Use

	Educators	School Leaders
Educator ICT Use**	2.5	2.9
Student ICT Use**	1.8	2.2

■ **Educators** ■ **School Leaders**

3.8

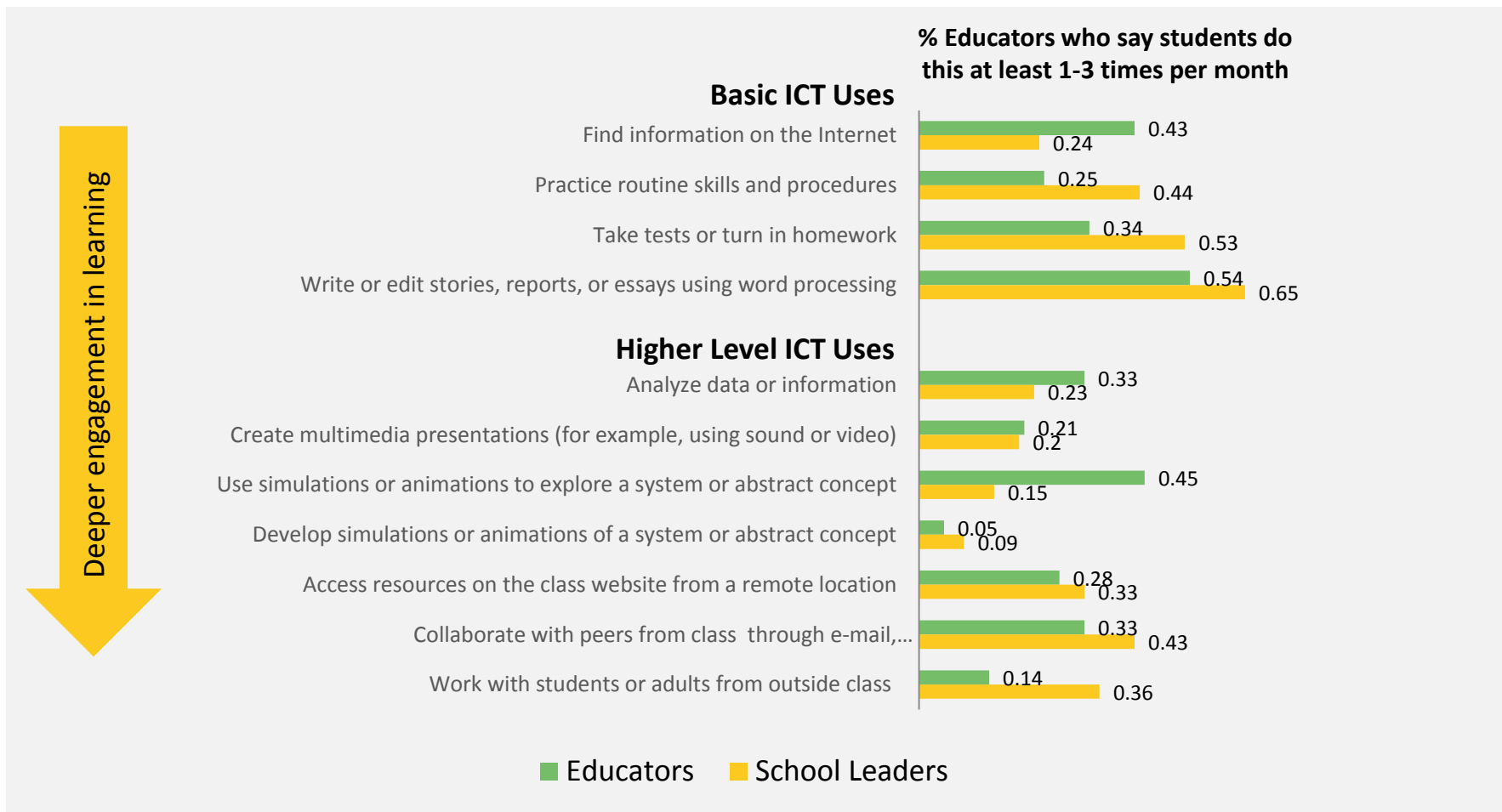Overall Innovative Teaching Practices Index Score (Educators Responses)

*All items are measured based on educators' reported frequency of a practice on a 5 point scale. Higher scores indicate a higher reported frequency of a practice. All items show averages across all responses from the school for each group (educators and school leaders). Data has been adjusted to account for the number of times a class meets per week.
**Student and Teacher ICT Use has been calculated taking the average of basic and high level technology use (see pages 10-11).
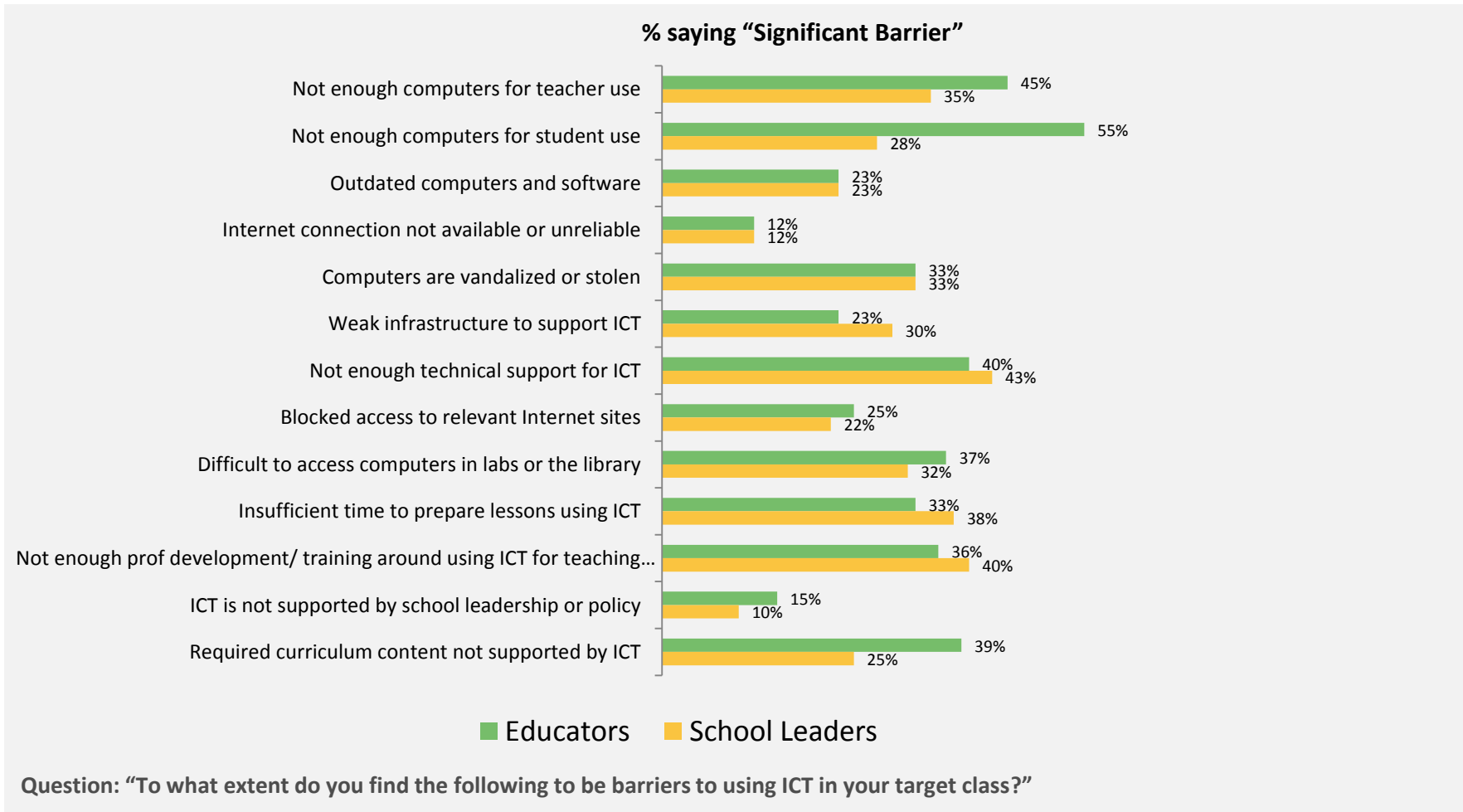
Microsoft
Partners in Learning
School Research

ICT Used for Teaching and Learning by **Students**

These charts show how educators and school leaders report on <u>students</u>' use of technology for learning. Higher-level uses of ICT integrate more deeply with learning objectives and are more strongly associated with innovative teaching methods than basic uses of ICT.

% Educators who say students do this at least 1-3 times per month

Basic ICT Uses

	Educators	School Leaders
Find information on the Internet	0.43	0.24
Practice routine skills and procedures	0.25	0.44
Take tests or turn in homework	0.34	0.53
Write or edit stories, reports, or essays using word processing	0.54	0.65

Higher Level ICT Uses

	Educators	School Leaders
Analyze data or information	0.33	0.23
Create multimedia presentations (for example, using sound or video)	0.21	0.2
Use simulations or animations to explore a system or abstract concept	0.45	0.15
Develop simulations or animations of a system or abstract concept	0.05	0.09
Access resources on the class website from a remote location	0.28	0.33
Collaborate with peers from class through e-mail,…	0.33	0.43
Work with students or adults from outside class	0.14	0.36

Deeper engagement in learning

■ Educators ■ School Leaders

Barriers to technology use

This chart shows percentage of educators and school leaders who say the item is a "significant barrier" to ICT use in teaching and learning.

% saying "Significant Barrier"

Barrier	Educators	School Leaders
Not enough computers for teacher use	45%	35%
Not enough computers for student use	55%	28%
Outdated computers and software	23%	23%
Internet connection not available or unreliable	12%	12%
Computers are vandalized or stolen	33%	33%
Weak infrastructure to support ICT	23%	30%
Not enough technical support for ICT	40%	43%
Blocked access to relevant Internet sites	25%	22%
Difficult to access computers in labs or the library	37%	32%
Insufficient time to prepare lessons using ICT	33%	38%
Not enough prof development/ training around using ICT for teaching…	36%	40%
ICT is not supported by school leadership or policy	15%	10%
Required curriculum content not supported by ICT	39%	25%

■ Educators   ■ School Leaders

Question: "To what extent do you find the following to be barriers to using ICT in your target class?"

SCHOOLS USE PILSR REPORTS

To build a common understanding

and measure progress

Innovative Teaching Practices Index

Student Centered Pedagogy

- Personalized Learning — 2.4 / 4.3
- Knowledge Building — 2.5 / 4.4
- Collaboration — 1.8 / 3.5
- Self-Regulation — 2.5 / 2.8

Extending Learning

- Extended Classroom Community — 1.6 / 1.9
- Global Awareness — 2.2 / 2.6

ICT Use

- Educator ICT Use** — 2.5 / 2.9
- Student ICT Use** — 1.8 / 2.2

■ Educators   ■ School Leaders

School Leaders

Educators

Students

Parents

Community

Measure and build innovative teaching capacity

Measure:
PILSR.com

Support:
ITL LEAP21
Partners in Learning
Network

Measure progress:
PILSR.com

ITL LEAP21

bridge between theory and practice of 21st century skills

framework for teacher collaboration

lens for the collective analysis of learning activities and student work
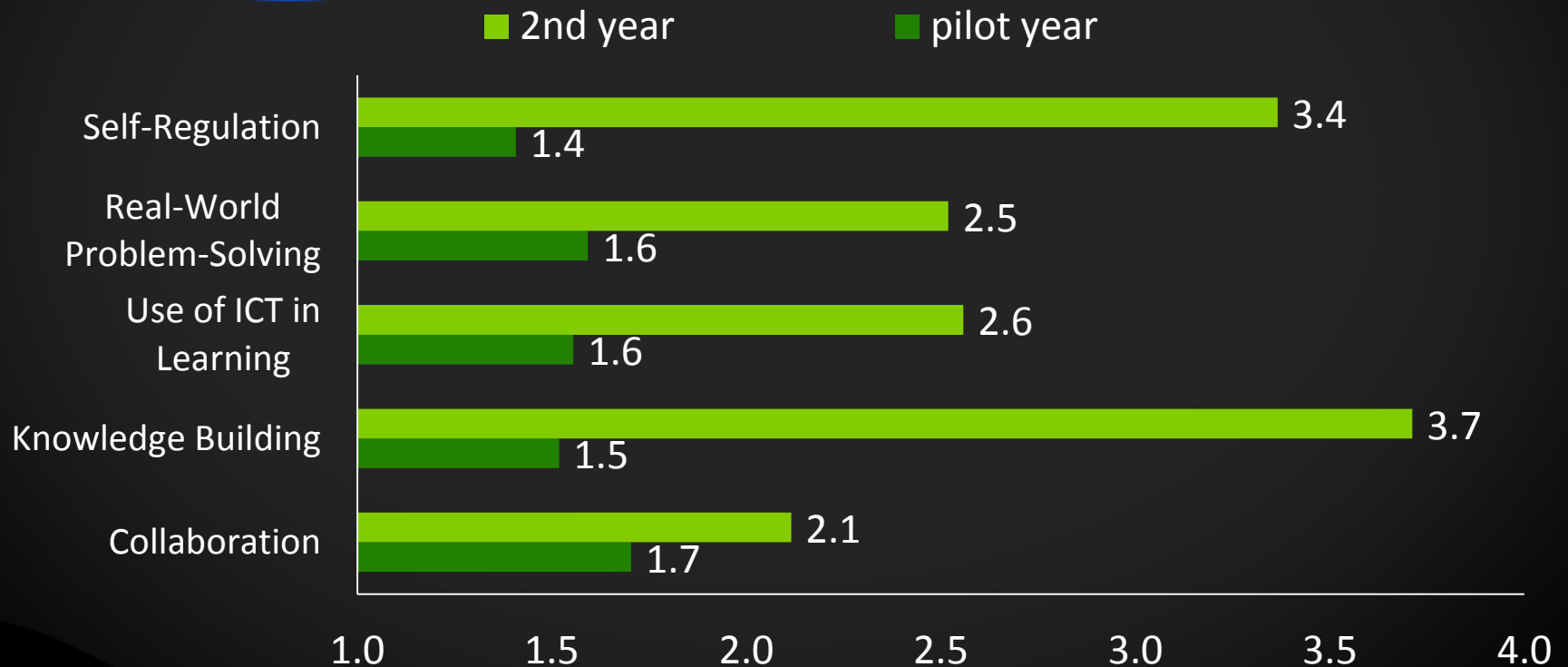
PARTNERS IN LEARNING NETWORK
Providing examples of innovative Learning Activities
www.pil-network.com

Measure and build innovative teaching capacity

Individuals with skills for life and work today