South Asia Regional Symposium on ICT for Education

Smart Partnerships for Quality Education at Scale

Brajesh Panth
Chief of Education Sector Group
Asian Development Bank
Outline

• Challenges and constraints
• Disruptions and opportunities
• Quality at scale and reasonable costs
• Disruptions and inevitability of partnerships
Challenges and constraints

Inadequate teacher quality and motivation to keep pace with change
Weak school leadership
Rote learning

Weak tracking of learning outcomes

One quarter to one third of primary school graduates in South Asia lack basic numeracy and literacy skills that are required for further education. (World Bank, 2014)

The adult literacy rate for South and West Asia is below the global average, where over 30% of adults there cannot read and write. (UNESCO, 2014)

65% of children in elementary school today will have jobs that do not exist, yet. (U.S. Department of Labor report)

Many jobs with routine skills will be replaced by machines.

Right to Education or Right to Learning

#NOLOSTGENERATION
Attention to quality has large payoffs

Source: ADB, A Smarter Future: Skills, Jobs and Growth in Asia, 2015

Average years of schooling to OECD average
Share of students with test scores of over 400 level to OECD level
Share of students with test scores of over 400 and 600 level to OECD level

Source: ADB, A Smarter Future: Skills, Jobs and Growth in Asia, 2015
21st Century Skills = foundational + soft + digital skills
More than 3Rs (reading, writing and arithmetic)

Top 10 skills

in 2020
1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

in 2015
1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity

Source: sackvillesschools2020.com

Source: Future of Jobs Report, World Economic Forum
Examples of Major Global Disruptions Due to IT

**Dramatic Drop in Nokia’s Market Share**

Source: researchgate.net

**Dramatic Rise of Airbnb’s Market Value**

Source: cbinsights.com

**Uber’s Growth**

Source: bruegel.org

Source: wearesocial.com
Are education systems responding to disruptions

Dan McCabe @danielmccabe - Jul 17
We must prepare learners for their future, not our past. #edchat

Old School VS. New School
20th Century | 21st Century
---|---
Time-Based | Outcome-Based
Textbook-Driven | Research-Driven
Passive Learning | Active Learning
Teacher-Centered | Student-Centered
Fragmented Curriculum | Integrated Curriculum
Printed Assessments | Multiple Forms of Assess
Print | Multimedia
Isolation | Collaboration
Facts & Memorization | Higher-Order Thinking

Source: simplex12.com

Finnish classrooms are being transformed.

Source: straitstimes.com

Source: ADB.org
Vision, reforms and implementation

System management and institutional arrangements

Teachers
Curriculum and learning materials
Assessment
School Leadership

Learning Outcomes

School Based Management

Effective M&E and feedback system/Accountability

Policy reforms and related political economy

What can we learn from world’s best school systems: Finland, South Korea and Singapore
Understanding How People Learn

**Multiple Intelligences**

- **Musical Smart**
- **Bodily-Kinesthetic**
- **Logical-Mathematical**
- **Spatial**
- **Interpersonal**
- **Self-Smart**
- **Linguistic**
- **Picture Smart**

**Schema**

1. **Fix up strategies**
2. **Making connections**
3. **Visualizing**
4. **Asking questions**
5. **Inferring**
6. **Determining importance**
7. **Synthesizing**

**Metacognition**

Does it make sense?
What do I do if it doesn’t make sense?

Do I understand what I am reading?
What do I do if I don’t understand it?

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"I cannot teach anybody anything, I can only make them think."
—Socrates

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"I believe in a future where the point of education is not to prepare you for another useless job, but for a life well lived."
—Rutger Bregman

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Source: classroomcho

Source: moziru.com
Figure 1: A Global Framework of Learning Domains

Note: This framework is intended for the purpose of the Learning Metrics Task Force to identify areas in which to measure learning outcomes. It is not intended to be used as a framework for policymaking, curriculum or instruction.

Source: Center for Global Education at Brookings and Education International, Feb 2018
ICT is leading to personalized learning

10 Trends to Personalize Learning

1. Belief System
2. Competency-based System
3. Sustainable PL System
4. Flexible Learning Spaces
5. Multi-age Co-teaching
6. Inquiry-based PBL
7. Play-based Learning
8. Assessment AS Learning
9. Teacher and Learner Partnership
10. Advisories

Are you prepared to make 2015 the year of the “Learner”?

How To Personalize Learning

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<tbody>
<tr>
<td>Multiple Options</td>
<td>Multiple Content</td>
<td>Multiple Time</td>
<td>Multiple Location</td>
<td>Multiple Perspectives</td>
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<td>Create curriculum with lots of ways to learn the same content.</td>
<td>Create curriculum with lots of levels to allow learners to go deeper at their own pace.</td>
<td>Create curriculum that can be consumed at anytime.</td>
<td>Create curriculum that can be consumed anywhere.</td>
<td>Create curriculum with lots of perspectives to address needs of different learners.</td>
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Anytime, anywhere, anyone: lifelong learning

Source: edtechreview.in
Source: blog.stcloudstate.edu
Pushing the boundary: edtechnology and design thinking

Robot programs for 9-16 year old students
Source: stratfordschool.wordpress.com

Design Thinking
Source: Adapted from Paul Kim’s Presentation at ADB

Source: learningportals.iiep.unesco.org

10 Reasons to Teach Coding
By Brian Aspinall @mraspinal

Source: brianaspinall.com
Transforming teaching and learning with education technology: why smart partnership is essential?

Self-paced learning
Remedial practice
Self assessment

Curriculum
Foundational skills
Digital skills
Soft skills

Assessment
Continuous assessment
Adaptable learning

Regular progress report of children to seek support

Parents

Reporting
Central
District
Municipality
Sub-district
Towns
School
Individual
Learner

learning Management System
Online/Off-line

Teachers

Multi-media

Interface with technical resources & partners

Multi-media

Server
Promoting Education Market and Partnerships