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New Technologies & Education

From bridging the gap to transformative change

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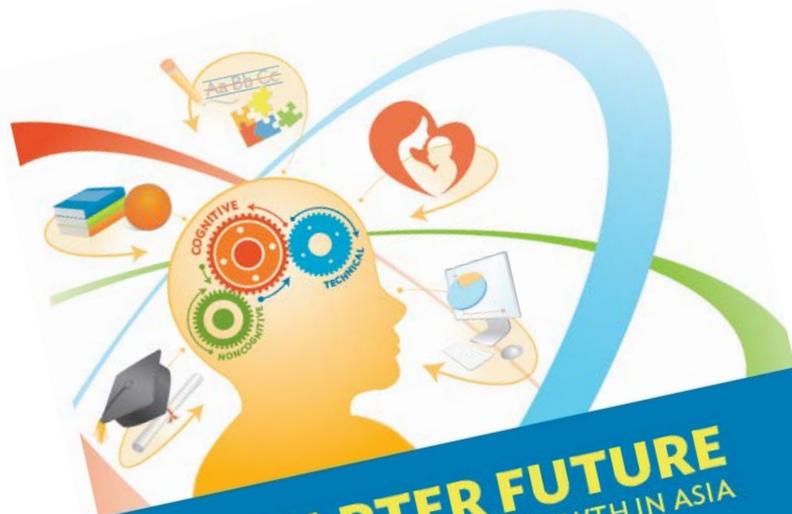
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New technologies hold great potential

- Broadening access to education
E.g. distance learning
- Expanding resources for teaching & learning
E.g. open online resources, repositories
- Ushering in new pedagogical approaches
E.g. blended learning
- Changing the way education institutions are run
E.g. new tools for management and governance

Yet...

Evidence of new technologies' impact on learning outcomes is mixed



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Programme for International Student Assessment (PISA)



Students, Computers & Learning

Making the connection

On average, in the past 10 years there has been no appreciable improvement in student achievement in reading, mathematics or science in the countries that have invested heavily in information and communication technologies for education.

 In Australia, New Zealand and the United Kingdom, every 15-year-old has individual access to a computer at school.

 In Germany, Italy and Japan, there is only one school computer available for every four 15-year-old students.

On average, **72%** of 15-year-olds  in OECD countries use computers at school; but in Korea, which is **among the top 3 performers** in both the PISA computer-based assessment of mathematics and the PISA digital reading test, **only 42%** of students reported using computers at school.



While programs such as One Laptop per Child failed....



*Central Visayan Institute Foundation-
Dynamic Learning Program*



... others achieving tremendous results without relying on new technologies

The use of new technologies in education
spans a wide range of realities

Scripted lessons



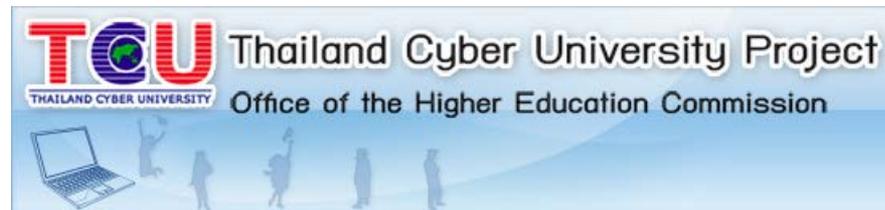
Bridge Academy
in Nairobi, Kenya

Videoed lectures

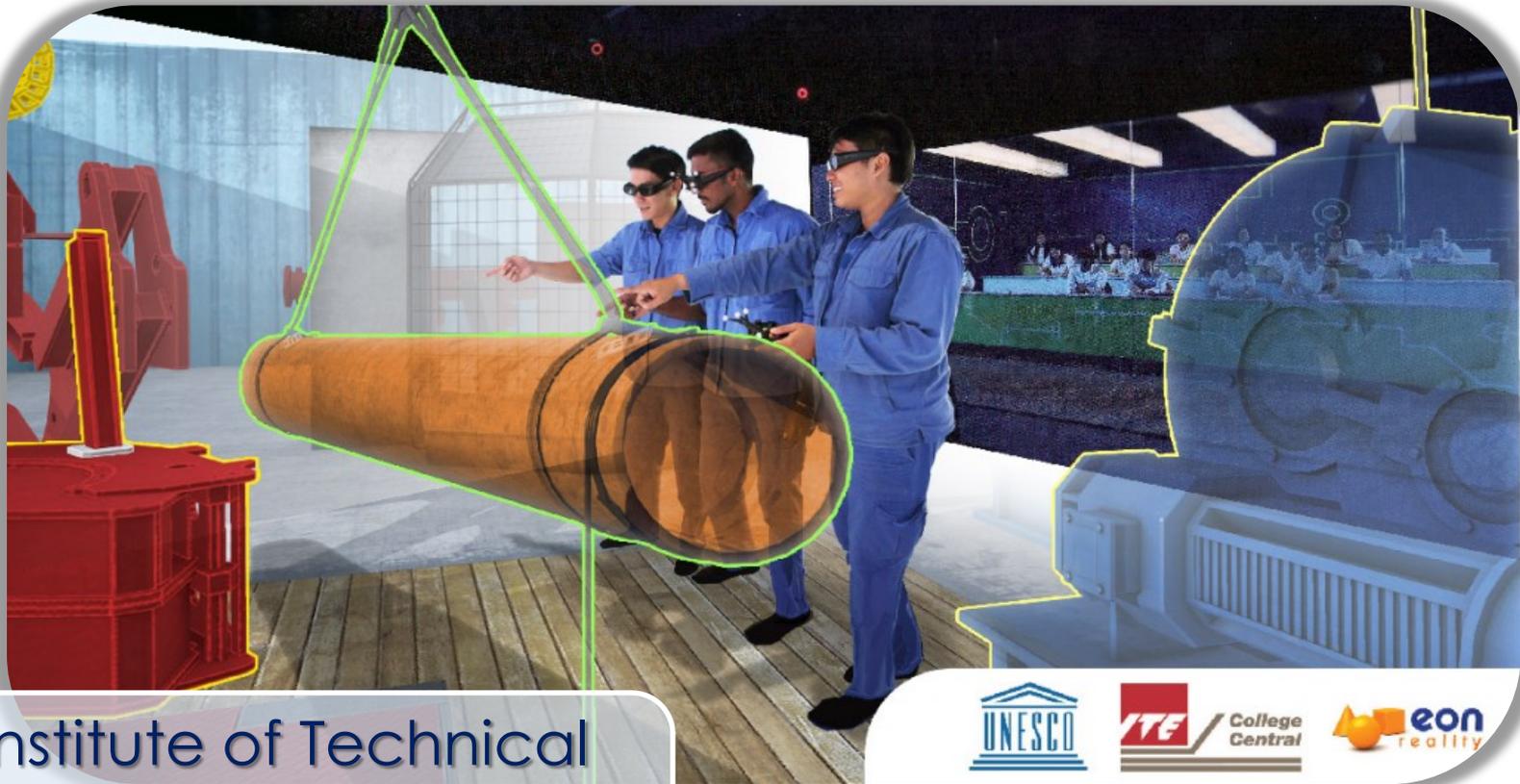


Upper secondary students from rural China listening in on a lesson given in Beijing

Digital resources for teaching and learning



Virtual reality



Institute of Technical
Education, Singapore
3D simulation

Adaptive learning



New software for customized learning pathways

Virtual universities



Minerva university

New technologies as a means to bridge gaps



Scripted lessons to address weak teaching capacity



Videoed lectures to address the lack of specialized teachers



Digital resources to address limited availability of teaching material



New technologies as a leveler



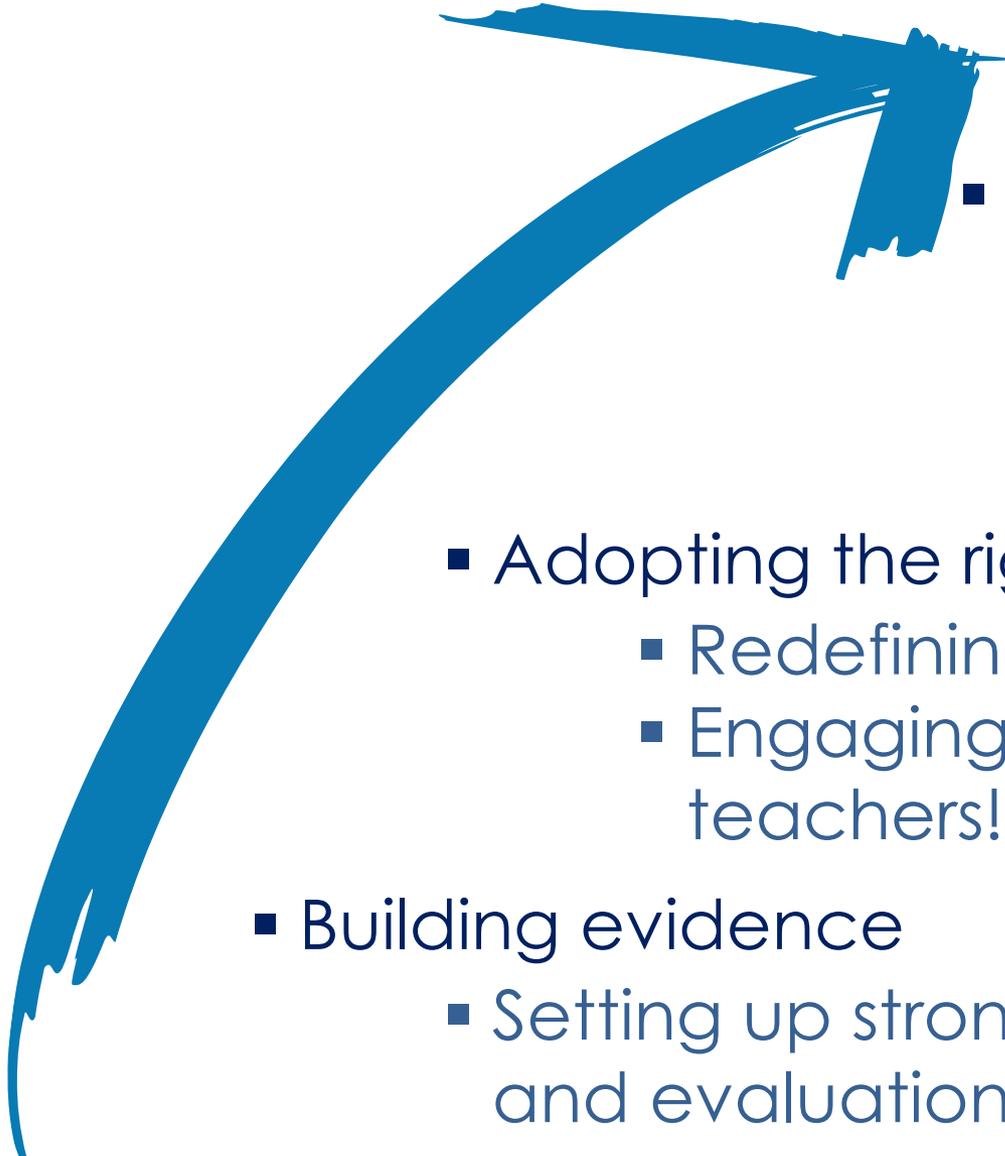
New technologies as a catalyst for improvement...



... still burgeoning though
Impact evaluation are needed

New technologies are a tool

Moving forward, a few guiding principles

- 
- Stepping up successful interventions
 - Scaling up vs.
 - Upgrading
 - Adopting the right technological solution
 - Redefining “best”
 - Engaging end users (including teachers!)
 - Building evidence
 - Setting up strong monitoring and evaluation systems