



From ROI to ROE

Important success factors for ICT in Education

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HP Education Vision



ICT in Education projects should have short term a positive Return on Investment (ROI) in the Quality of Learning in order to get long term a positive Return on Education (ROE) in the Economy.



Get there by end-to-end education solutions

Avoid policies/tenders that are just about devices or PC penetration rate. You want cheap devices only – you will get cheap devices only.



Define Outcomes & Stakeholders in the Policy

Set Goals

Ensure rigorous, but achievable goals are set. Ensure alignment with national strategic and economic plans. Gain consensus on what are the most important measures.

Identify Stakeholders

Ensure that all stakeholders have a voice: students, parents, teachers, administrators, employers and the community.

Management of Change

It is of vital importance that all stakeholders – especially teachers – understand the strategy and buy into the goals so they are willing to change. You need to manage this!

Management of Change

Successful integration of ICT in Education requires a major cultural change

for all stakeholders involved especially for Principals, Teachers, Students and Parents!

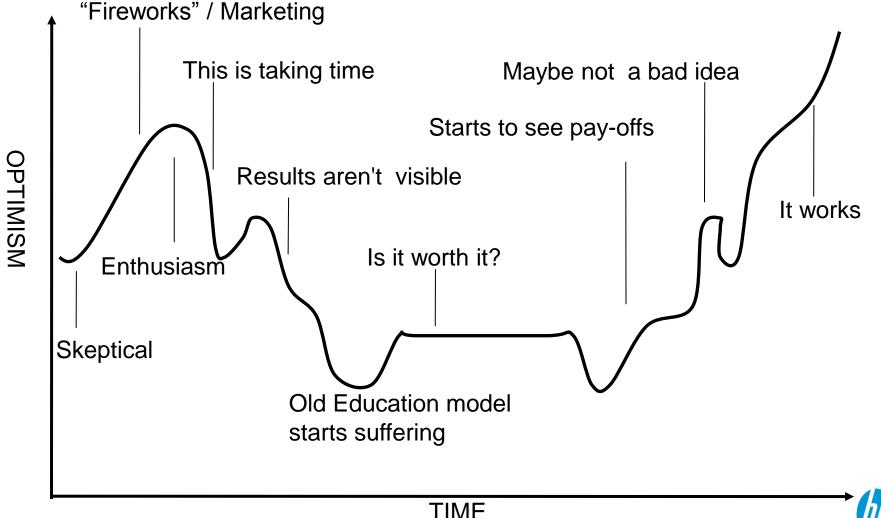
It is not only about using technology in the school. It is more about delivering an enhanced educational experience!

Starts i.e. with preparation of the lessons, using LMS content and interactive material, continues with a more interactive delivery of the teaching session in the class, and ends by interacting with teachers, students and parents outside of classes.

Change is difficult and won't happen overnight. It will happen over time.



Emotional Stages of Change



Execute your policy and prove the impact

MOEs need to analyze learning, economic and social **Assessment** indicators to make sure their investments pay off this semester - and for the future of their students and society.

Learning & **Communications**

Student testing performance: Local

- Student testing performance: PISA
- · Grades and traditional assessment
- Time on content
- Time on academic material
- Teacher readiness
- Student engagement:
- Interest in academic pursuits (student)
- MOE EOY Summative in Math
- MOE EOY Summative in Science
- MOE EOY Summative in Literature
- Time series formative teacher spec Math
- Time series formative teacher spec Science
- Time series formative teacher spec Literature
- Student ICT for academic use
- · Teacher ICT for academic use
- Teacher Comfort with Technology score
- STDEV Analysis on all continua

Social

- Age
- Gender
- Grade Level
- Location + Rural, Metro, Urban (RMU)
- Access to PC device at school
- Access to PC at home
- Access to Mobile Phone device at school
- Access to Mobile Phone at home
- · Access to broadband at home
- Access to broadband at school
- Student Attitudes toward education
- Student Attitudes toward social mobility
- Student Attitudes toward careers
- Gross intake ratio of year 1 students
- · Gross graduate rate of primary students
- School enrollment % of total youth
- Student social media presence
- Teacher social media presence

Economic

- Government expediture per student
- GDP per capita PPP
- Productivity per capita
- · Domestic Skilled labor force, gross
- Intellectual property score (WB)
- Labor force, total (WB)
- Student-teacher ratio, primary (WB)
- Literacy rate, ages 15-24
- Foreign direct investment rate
- Foreign direct investment PPP
- Employer curriculum score
- · Employer skills score
- Economic diversification index
- · Press and public relations (several
- HP Economic Diversification Index
- Student Attitudes toward careers



Drawing on the work of the *Learning Metrics Task Force*, HP has designed the Learning Outcomes metrics to accurately and effectively measure learning as defined by Ministers of Education and researchers from over 150 countries.

Sample Indicators

Once you have the results - Tell the Story!

Assessment is a complex issue

...but it is key to communicating success to the public as statistics are very powerful!

... and **good results usually lead to higher budgets** and continuation of the work done so far.

Communication Plan

Create detailed communication plan, including schedules and deliverables, in order to keep citizens informed of progress.

Define the right datasets for the right audience: designating 5-10 "top" indicators for the public while designating up to 300 for statistical analysis and process improvement.



