eLeadership Professional Development & Change Strategies

The building of national information infrastructures and IT policy in education

A global concern & phenomenon

The context

- Global changes and emerging patterns
- Changing expectations of education
- Changes in the education system: curriculum reform, changing assessment formats, etc
- Increasing monitoring and appraisal mechanism put onto the teaching force: benchmarks, teaching license renewal, etc.
- Changing models, changing practices, new opportunities with learning technologies

Leadership

- **Which should lead?**

  Putting 'technology' into education or re-engineering education? Or what?

- **Who should lead?**

  Technicians? Technologists? Teachers? Administrators?

- **How should educational innovation be led?**

  Top-down? Bottom-up? Systems approach?

ICT and eLeadership

- System (national) Level

- School Level

- Individual Level

    Education for the future: policy recommendations for Information Technology in Education. Chapter 3.
    http://www.curs.hku.hk/~itepolicy/

Education for the future

A SYSTEMS MODEL OF IT IN EDUCATION

1. In the previous chapter, we have established a vision of IT in Education that involves the establishment of new goals in education. The achievement of this vision clearly requires not only the development and provision of appropriate technical infrastructures and expertise for schools, but also a comprehensive reform that involves changes in curriculum, assessment, the role of the teaching profession as well as demands on new leadership roles at various levels.

2. To develop effective strategies for achieving this vision, it is important that we establish a systemic view of IT in Education that situates it in relation to the various factors and stake holders that will affect its implementation.

3. There are three levels of factors contributing to the quality of the learning outcomes achieved by a student. At the education system level are the policies that guide developments in curriculum and assessment, school level implementation and the roles of various stake holders and community partners. School level implementation is influenced by leadership factors at both the education system and school levels as well as the physical and human resources available in specific schools. Besides education system and school level factors, a student's learning outcomes are also dependent on his/her own family background and personal characteristics.

Leadership and management of innovation

4. The realization of our vision involves innovative reforms at all three levels of operations and leadership is the key to ensure that the desired innovations take place. *There are five dimensions to total leadership for change*:
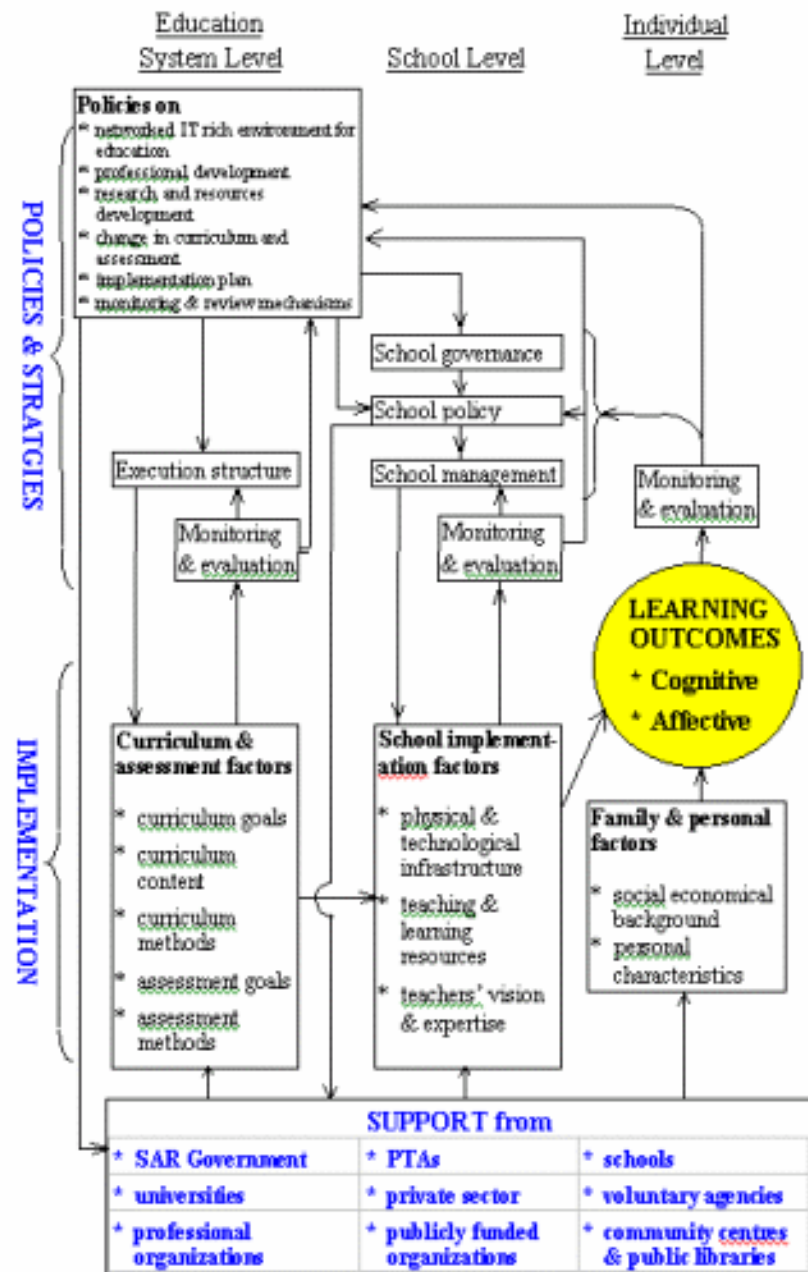
eLeadership

POLICIES & STRATGIES

Policies on
* networked IT rich environment for education
* professional development
* research and resources development
* change in curriculum and assessment
* implementation plan
* monitoring & review mechanisms

School governance

School policy

Execution structure

School management

Monitoring & evaluation

Monitoring & evaluation

Monitoring & evaluation

IMPLEMENTATION

LEARNING OUTCOMES
* Cognitive
* Affective

Curriculum & assessment factors
* curriculum goals
* curriculum content
* curriculum methods
* assessment goals
* assessment methods

School implementation factors
* physical & technological infrastructure
* teaching & learning resources
* teachers' vision & expertise

Family & personal factors
* social economical background
* personal characteristics

SUPPORT from

* SAR Government	* PTAs	* schools
* universities	* private sector	* voluntary agencies
* professional organizations	* publicly funded organizations	* community centres & public libraries

Fig. 3.1 A systems model of leadership for IT in Education

Human capacity building
– developing leadership at policy and implementation levels

School level

Partnerships in *e*Leadership

Professional development

Managing change

ICT
- infrastructure
- technical support

Educational Policy (country/regional level)

Community Support

Educational Policy (country/regional level)

Research Interests in ICT eLeadership & PD

What does long term research tell us about using ICT in schools? Eg

- ACOT   http://www.apple.com/education/k12/leadership/acot/library.html

- CBTL: Evolving Uses and Expectations http://www.ncrel.org/tplan/cbtl/toc.htm

- REITEd - http://www.ited.ed.gov.hk/Documents/ITEd_Report/FinalReport_v3.0_web.htm

- SITES – International Study http://sites.cite.hku.hk/

Key role of leadership at various levels, appropriate PD and planning for change

- Galileo Project http://www.galileo.org

SITES Pedagogic Practice
Some research questions

- What impact has ICT made on classroom practices?
- What changes, if any, has ICT made on the roles of teachers and students and the interactions between them?

- Can we discern distinctly different models of pedagogic practices when ICT is used? If so, what are the respective observable characteristics?

- Are there any effective models of ICT implementation in schools? If so, what are their characteristics?

- Does the model of change for ICT Implementation at school level affect pedagogical practices at classroom level?

Some more questions

- Is ICT improving teaching & learning?
- What is the pedagogic value of ICT?
- What are the constraints to teacher ICT adoption?
- What does a whole school look like using ICT?
- What is changing in the classroom?
- How can we encourage appropriate change in teacher practices?
- What models may work in schools/classrooms?
- Does ICT act as a catalyst for pedagogical change and innovation?
- What are the strategies for change?

Change as Culture Transmission (Mead, 1978)

- To do old work in old ways
- To do old work in new ways
- To do new work in old ways
- To do new work in new ways

The Delta Principle (Schwartz & Beichner, 1999)
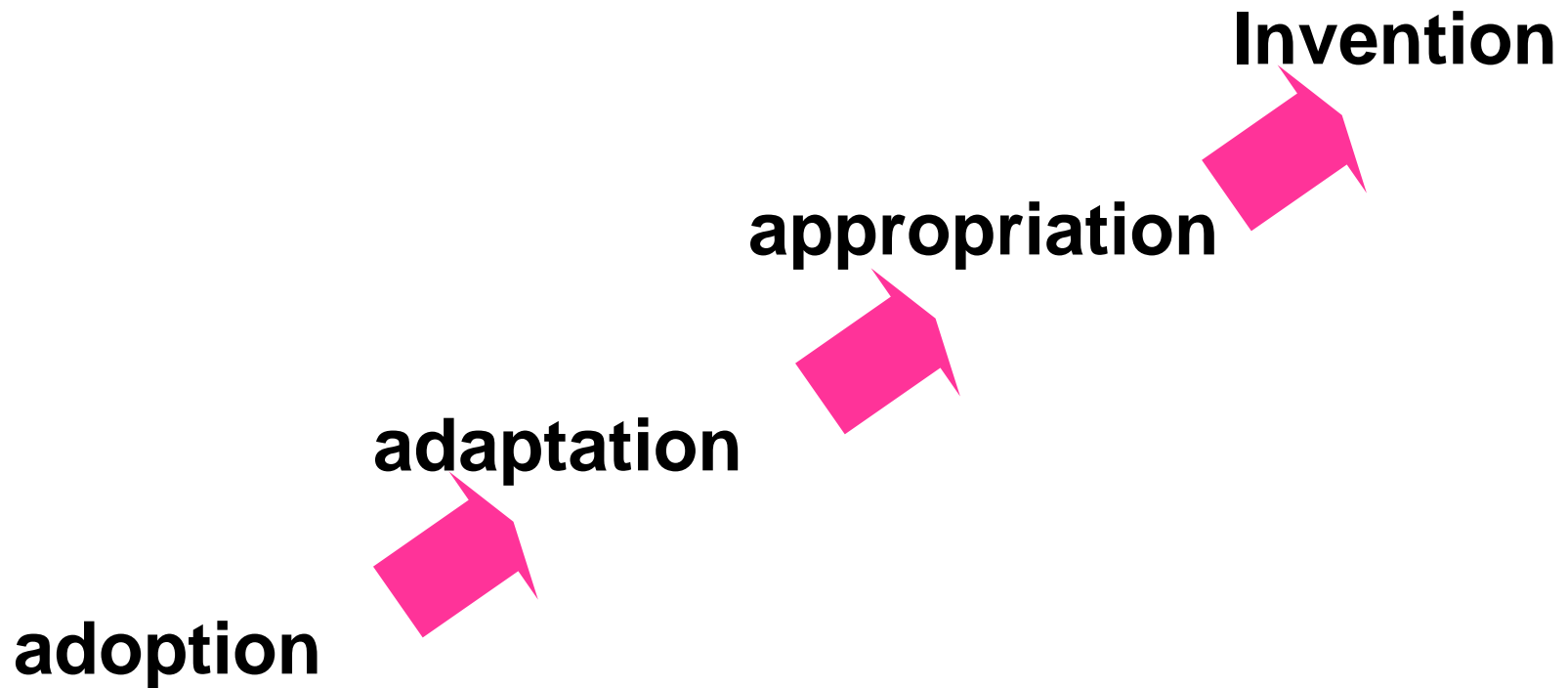
- Level I
  - Technology used as originally intended
- Level II
  - Technology applied in new ways
- Level III
  - Application would not exist without the technology

Teachers' Attitudinal Change towards using technology in teaching and learning

Invention

appropriation

adaptation

adoption

A New **Mindset** for Educational Change (Fullan, 1993)

A fundamental change of mind

- to make the educational system a learning organization as opposed to a teaching organization

- change is non-linear, full of surprises

- to become expert in the dynamics of change – to become skilled …

agents of change

Strategies for Change
Multi-layered Approaches

Sofweb http://www.sofweb.vic.edu.au/pd/index.htm

Computers as tools for teaching and
learning http://www.ecpd.tased.edu.au/toolsTL/tools.html l

ACOT
http://www.apple.com/education/professionaldevelopment/research.
html

Technology 2000
http://www.eddept.wa.edu.au/T2000/index.htm

EdNA http://www.edna.edu.au/edna/publish/tefa/html/

Bridging the Digital Divide
e-Educational Leadership in ICT

APEC CYBER EDUCATION COOPERATION PROJECT
Funded by the APEC Education Foundation

CITE is a member of APEC Cyber Education Cooperation (ACEC) with specific responsibilities to develop and provide e-Educational Leadership in ICT program for the APEC community

Enquiries about the e-Educational Leadership program
Please email your enquiries to: Dr. Bob Fox, email : bobfox@hku.hk

http://acec.cite.hku.hk

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