Process and Service Innovation in Learning

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Teacher ICT competencies

• ICT policies centred around system led push models for developing teacher competencies
• These included
  ▶ Teacher Standards
  ▶ Teacher Registration
  ▶ teacher Education
  ▶ Teacher Pre-service
  ▶ Teacher Professional Learning courses
• There are student pull models which are complementary to the system push models
Pull models – student driven change

- Online educational game
- 25,000 student participants
- 1300 teams in 1150 schools
- Cross curricular approach
- Innovative learning designs
- Flexibility of delivery

Even the teacher doesn’t know the answer as the game unfolds!!
Student pull

- Mobility,
- Connectivity
- Co-creation of content

providing greater impetus to teacher ICT skills
A survey of teachers identified the extent of staffing difficulties in rural and remote schools:

A high turn-over of teachers in

- provincial areas (twice that for city schools)
- remote areas (six times that for city schools).

Difficulties filling secondary science, ICT and mathematics positions:

- twice as hard in provincial Australia
- four times more difficult in remote areas.

Intuitive interfaces .......hiding complexity
What teachers want from ICT?

- easy login
- access through mobile devices
- powerful education search functionality
- clear navigation and intuitive design
- contemporary functions and features
- social media tools
- able to be personalised
- engage with other teachers
- access great ideas and research

(extract from a 2011 survey)
Lessons in Service Innovation

• **Digital Content** – Form and type is changing. Think Apps like experience. Think learning design and UX design .....not just subject knowledge. Interactional content is more valued now than pre-packaged content.

• **Digital Content** – developing content is **not** your first option....in fact it’s the last resort. Think sourcing content, OER, creative commons, global repositories.....adapt them appropriately. Example: Intel skool.com

• **Digital Infrastructure** – hard and soft. Hard infrastructure is necessary but not sufficient.....think *metadata* and *vocabularies*...*search* and *discovery* depend on them.
Lessons in Process Innovation

• **Digital publishing** – web design, programming, tagging, storing, archiving, incorporating user generated content…..workflows and technical QA can be automated but content QA cannot be automated.

• **Portals** – Stand alone resource portals are not sufficient………single sign on, seamless navigation to social media and collaboration tools is needed.

• **Self evaluation tools** - for teacher competencies – allows reflection on teaching practice. Show good practice as clips.

• **Big data** – not enough to use after the event data, there is much more to be gained in real time data – learning analytics is going to be huge importance.
Thank you

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