



Positioning Tasmania as a Leader in ICT Enabled Education and Training

Stephen Downes

Hobart, Tasmania

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Questioning Assumptions

- Are ‘education and training’ the future?
- Is it possible to be a ‘leader’ in this field?
- What is implied when we say ‘positioning’?

Hobart?



Part One:
The Role of Government

The Role of Government

- Vision
- Infrastructure
- Exemplar
- Networking

Vision

- Vision: Together we will make Tasmania an icon for the rest of the world by creating a proud and confident society where our people live in harmony and prosperity.
 - <http://www.tasmaniatogether.tas.gov.au/>

Educational Goals

- Create a culture that encourages people to learn and develop new skills, including life skills, throughout their lives.
- Ensure education and training provides our workforce with the skills to support our business and industry.
 - Skills?

My Vision...

- ...a system of society and learning where each person is able to rise to his or her fullest potential without social or financial encumbrance, where they may express themselves fully and without reservation through art, writing, athletics, invention, or even through their avocations or lifestyle

More Vision...

- Tasmania will have a world-class education, training and information system which matches the best anywhere.
- All people have a fair go and are able to access high-quality services...
- We recognise that a truly democratic and civil society has its roots in the education we can provide.

<http://www.education.tas.gov.au/learningtogether/vision.htm>

Infrastructure

- The analogy between the road network and the information highway is well taken
- Canada...
 - Backbone – CA*Net <http://www.canarie.ca/canet4/>
 - Local Access – Community Access Program
<http://cap.ic.gc.ca/> <http://www.tco.asn.au/>
 - Services – Service New Brunswick
<http://www.snb.ca/> <http://www.service.tas.gov.au/>

Some Issues...

- Is infrastructure access only? Probably not...
- What constitutes an educational infrastructure?
 - Access to learning materials
 - Access to software and services
 - Access to instruction, mentoring and coaching

Government as Exemplar

- The idea: government as a model consumer of the services it wishes to promote...
 - Government offices fully networked
 - Access to learning opportunities for government employees
 - Fostering a learning culture within the ranks of the civil service

Networking

- The main idea – having a seat at the table...
- Examples:
 - EduSpecs – Canada’s representative at IMS
<http://eduspecs.ic.gc.ca/>
 - Department of National Defense – our voice at SCORM http://www.forces.gc.ca/hr/dln-rad/engraph/home_e.asp
 - CanCore – our presence at ISO <http://www.cancore.ca>

Discussion...

Part Two:
The Role of Industry

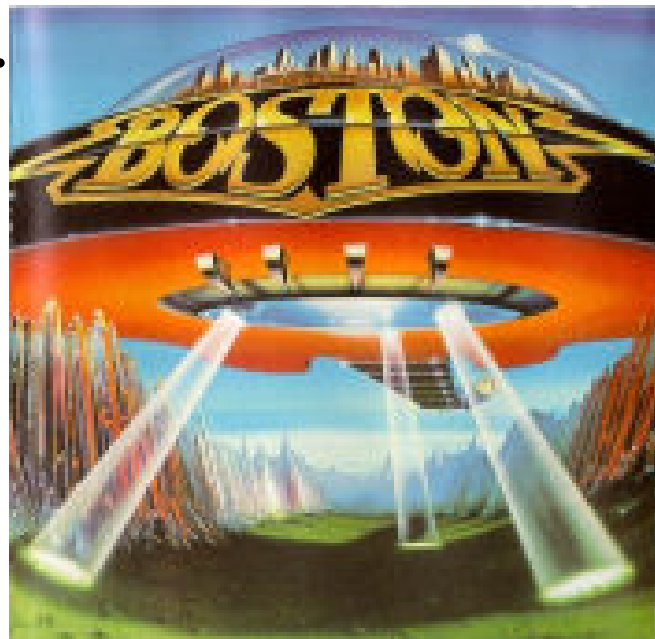
... has to be something more than
getting government funding

The Role of Industry

- Rethinking business models
- Interacting with government and education...
- Clustering and networking
- Loving Tasmania...

Business Models...

- Traditional model... acquire rights to content and IP (ideally for free...)
- New Model... focus on...
 - Services - brokering
 - Scarcity - Huon Pine
 - Experience
- Don't Look Back



Example: Open Source

- Not based on owning property
- Rather, the concept is to add value to the infrastructure
- Earnings are derived from product related support and services
- Build capacity in customers, not dependence

Interaction...

- ... or dependency?
- Rethinking the transfer of IP, technology
 - Government as partner, not funder
- Rethinking the idea of “training for industry’s needs”
 - The problem of lag
 - The problem of centralised decision-making

Developing Expertise...

- Principle of the market economy...
government cannot centrally plan industry and commerce
- Principle of the education economy...
government and industry cannot centrally plan individual expertise
- Innovation comes from the bottom
- Build capacity, not customers

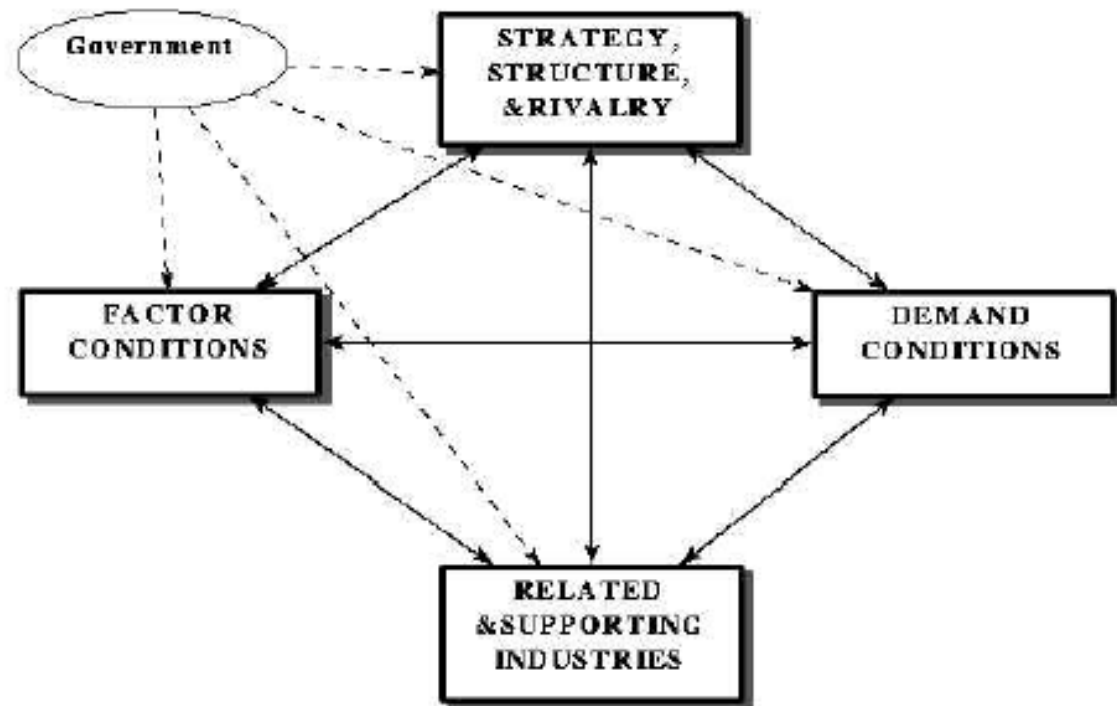
Networking

- The cluster model...
 - http://www.nrc-cnrc.gc.ca/newsroom/news/2001/moncton01_e.html
- You say potato
 - <http://www.nbpa.nb.ca/resources/cluster.asp>
- Toyota...
- E-Learning Forum... <http://www.elearningforum.com>

Clustering

Porter's "Diamond"

Definitions of "cluster" require specification of the nature and scope of local inter-firm traded and untraded interdependencies, which may result from co-location of related firms, co-located segments of a value chain, or inter-firm networks (Gordon and McCann, 2000).



Innovative Customers

- Simple logic – innovative customers are better customers
- Key role in educating customers, building capacity
- Share, share, share (no, really!)

What Networking Means...

- Communication...
- Autonomy at the local level
- Sharing capacity, expertise
- Voluntary collaboration, dynamic consortia
 - See government as a partner in this (not a customer)
- The whole is greater...

Loving Tasmania

- Reality check: business has no inherent attachment to place...
- What keeps business here? “They Love Tasmania”
- What does that mean? What are the intangibles? What is the Tasmanian Experience?

Part Three:
The Role of Education

The Role of Education

- Objectives:
 - Building skills, but more importantly
 - Personal Empowerment
- Methodology:
 - Access, access, access
 - Building the experience
 - Learner-centered learning

A Thought Experiment

- What if....
 - Educational institutions lost their monopoly on certification?
 - Government funding for educational institutions ceased to exist?
- It's a lot closer than you think...

Education on the internet

- *The Slogan:*
 - “Tell and Test”



Education on the internet

- *The Story:*
 - “Here’s how we created online learning at Assiniboine:
 - First, we took an existing course
 - Then, we designed a distance learning package
 - Finally, we converted the distance learning to an online format”

Education on the internet

- *The Lesson*
 - Online learning has followed the model of traditional distance learning
 - It has been viewed as a form of publishing – mostly static, with a “shelf life”
 - As such, designing and distributing learning is expensive
 - This model that favours large, centralized institutions
 - Britain's Open University, the University of Phoenix

Centralized online learning

- *The Slogan:*
 - “There’s only one way to do it”



Centralized online learning

- *The Story:*
 - “Trying to create a template in PowerPoint
 - Microsoft help isn’t helping
 - I know there’s a good tutorial out there
 - But in Microsoft, there’s only one way to do it”

Centralized online learning

- *The Lesson*
 - Despite the promise of “mass customization” there’s no practical way to do it
 - You need massive servers, massive software (think feature bloat)
 - It’s inherently unstable – think bottlenecks, house of cards
 - Learning must be standardized and addressed to the novice learner.
 - It must be addressed toward common goals

Interlude

- *A Mental Picture*

- Imagine the internet as a centralized education service
- With a single, massive server
- With one search engine, one news feed
- What would it cost to publish a web page?
- What would it cost to read one?

Internet culture

- *The Slogan:*
 - “There’s more than one way to do it”



Internet culture

- *The Story:*
 - “I needed to find some cool images for my presentation
 - Instead of accessing a central image service, I went to images.google.com
 - I simply typed the slogan I wanted the image to match
 - I picked the image most suitable for my needs”

Internet culture

- *The Lesson*
 - The internet is distributed – millions of servers, millions of authors
 - A seamless infrastructure (HTTP+HTML) joins them in a network
 - Anyone can publish to the internet; anyone can read any of the published pages
 - There is no central authority; decisions and activities occur in an open-ended environment.
 - This suggests an another approach to learning, one based on communication rather than publishing

Tasmania

- *The Slogan:*
 - “Small
 - Close to the ground
 - First to the banana”



Tasmania

- *The Story:*
 - “How many of you use Google?”
 - When was the last time you saw it advertised on TV?
 - How did you hear about Google?
 - Think!”

Tasmania

- *The Lesson*
- Well positioned to offer an alternative to monolithic e-learning.
- Can build on our existing expertise:
 - network technologies
 - peer-to-peer infrastructure
 - online learning content and distribution
- Can adapt to a distributed, student-centered learning network.

Part Four:
Bringing It All Together

The Way Forward

- Small Pieces, Loosely Joined
- Fast, furious, out of control
- Content as vocabulary
- Learning as conversation
- IEEE-LOM??? http://www.downes.ca/files/resource_profiles.htm

Wiki

- Downes Wiki <http://www.downes.ca/dwiki>
- Wikipedia <http://www.wikipedia.org>
- The Fuss <http://careo.elearning.ubc.ca/cgi-bin/wiki.pl?TheFuss>

Content Management Systems

- Scoop <http://www.downes.ca/scoop>
 - <http://scoop.cim.com.au/articleZone2.asp?articleZoneID=139&r=apod>
 - <http://scoop.kuro5hin.org/>
- PostNuke <http://www.downes.ca/PostNuke/html/>
 - <http://www.postnuke.com/>
- Others: Drupal, Plone
- Moodle <http://moodle.org/>

Blogs

- Wordpress <http://www.downes.ca/wordpress>
 - <http://wordpress.org/>
- Blogger <http://www.blogger.com>
- Some Resources:
 - More than Personal: The Impact of Weblogs
<http://www.downes.ca/cgi-bin/xml/papers.cgi?format=full&id=3>
 - Educational Blogging
<http://www.educause.edu/pub/er/erm04/erm0450.asp>
 - Educational Blogs...
<http://www.downes.ca/cgi-bin/xml/feeds.cgi?feed=all>

RSS

- The format →
- An Introduction...
http://www.downes.ca/files/RSS_Educ.htm
- How to Create...
<http://www.downes.ca/cgi-bin/website/view.cgi?dbs=Article&key=1059503386>

```
<channel>
  <title>Title</title>
  <link>Link</link>
</channel>
<item>
  <title>Title</title>
  <link>Link</link>
  <description>
    blah blah
  </description>
</item>
<item>
  .
  .
  .
```

Open Archives Initiative

- Main site... <http://www.openarchives.org/>
- OAIster <http://www.oaister.org/o/oaister/>
- Dspace <http://www.dspace.org/>
- Dublin Core <http://dublincore.org/>

Aggregators

- Bloglines <http://www.bloglines.com>
- Technorati <http://www.technorati.com>
- Feedster <http://www.feedster.com>
- Blogdex, Daypop, Popdex
- More... <http://blogspace.com/rss/readers>

Downes.Ca

- OLDaily
 - <http://www.downes.ca/news/OLDaily.htm>
- Articles
 - <http://www.downes.ca/me/articles.htm>
- Research
 - <http://www.downes.ca/research.htm>

Edu_RSS

- http://www.downes.ca/xml/edu_rss.htm

DLORN

- Distributed Learning Object Repository Network
 - <http://www.downes.ca/cgi-bin/dlorn/dlorn.cgi>
- RSS LOM
 - http://www.downes.ca/xml/rss_lom.htm

Social Networking

- Orkut <http://www.orkut.com>
- Flickr <http://www.flickr.com>
- Others: Friendster, LinkedIn
- Semantic Social Network
 - <http://www.downes.ca/cgi-bin/website/view.cgi?dbs=Article&key=1076791198>

XSLT

- Some info... <http://www.xslt.com/>
- Demo <http://www.downes.ca/dnd>

Recommenders

- HotOrNot <http://www.hotornot.com>
- Amazon <http://www.amazon.com>
- Launchcast <http://launch.yahoo.com/launchcast/>
- Match <http://www.match.com>
- Recommending E-Learning
 - <http://www.downes.ca/files/nutn.ppt>
 - <http://www.downes.ca/files/madlat.ppt>

we can revise our attitudes towards

the land under our feet; if we can accept a

role of steward, and depart from

the role of conqueror; if we can accept the

view that man and nature are inseparable

parts of the unified whole –

then Tasmania can be a

shining beacon in a dull,

uniform, and largely

artificial world.

Olegas Truchanas, 1971