

Effective engagement: Synergies between Education Clusters and ICT Clusters

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Clusters 101: benefits of engagement

- ❑ Companies “cluster” in geographic concentrations to take advantage of suppliers and specialised services.
 - ❑ Clusters collaborate for competitive advantage.
 - ❑ Knowledge - key asset for competing companies; learning - key process.
 - ❑ Long-term competitiveness is related to the ability of companies to continuously upgrade their knowledge base and performance.
 - ❑ Clusters can provide a framework for companies to achieve this through collaborative initiatives and links to educational and research institutions.
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Role of education institutions

- Effective links to educational and research institutions identified as among the key factors for successful clusters.
 - Companies need an ongoing supply of experienced and skilled labour
 - Availability of customised and specialised education and training that produces and upgrades skills and knowledge.
 - Research, knowledge transfer and support for innovation.
 - Different imperatives and perceptions of this role for institutions/industry
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Education clusters

- ❑ Clusters of tertiary education institutions.
 - ❑ Competitors who work collaboratively for mutual competitive advantage and to leverage defined specialisations.
 - ❑ Focus on what can be agreed and achieved together.
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The New Zealand scene

- ❑ Shape of business: 95% SME
 - ❑ Reputation for creativity, design, innovation
 - ❑ National and local government: some support for clusters, uneven
 - ❑ Govt vision: Growth and Innovation Framework
 - ❑ Centres of Research Excellence
 - ❑ HiGrowth Project
 - ❑ ICT Taskforce
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New Zealand ICT business

- "IT/ICT"? Both enabler and industry
 - Information technology - one of the fastest growing export sectors for New Zealand (estimated NZ\$1.5 billion in 2003).
 - Regional Clusters
 - Canterbury Software Inc
 - Wellington ICT Cluster
 - Health IT/ICT (Auckland region)
 - IT Central Cluster (Auckland region)
 - Others: Taranaki, Manawatu, Dunedin
 - Industry organisations
 - New Zealand Software Association
 - New Zealand Wireless Data Forum
 - Information Technology Association of NZ
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New Zealand tertiary education

- ❑ 8 universities
 - ❑ 20 institutes of technology and polytechnics
 - ❑ Colleges of education
 - ❑ Private providers
 - ❑ 9 Crown research institutes
 - ❑ Education clusters:
 - Tertiary Accord of New Zealand (TANZ)
 - Wellington Tertiary Education Cluster
 - Education Waikato
 - Others: Taranaki, Bay of Plenty
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Connections and synergies

- ❑ Customised training
 - ❑ Cooperative/collaborative R&D projects
 - ❑ Student work experience
 - ❑ Student projects with ICT companies
 - ❑ Specialist guest lecturers from ICT companies
 - ❑ ICT industry representatives serving on advisory committees and review panels
 - ❑ Academic secondment to industry on short contracts
 - ❑ Academic/practitioner co-location
 - ❑ “Adopt an ICT company” concept
 - ❑ Events:
 - cluster meetings
 - programming contests with students/business
 - “evening with industry”
 - site visits
 - research colloquia
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Case study:

Wellington Education Cluster

- ❑ Set up with support from EDA - Positively Wellington Business.
 - ❑ Six public tertiary education institutions – two universities, two polytechnics, one institute of technology, one college of education.
 - ❑ Chief Executives/Vice Chancellors meet regularly.
 - ❑ ICT Project Team – nominated representatives
 - ❑ Aim for ICT sector in the region: to facilitate closer and more effective engagement between the tertiary institutions and ICT cluster companies.
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Issues

- Process for identifying needs of ICT cluster companies and tertiary education institutions.
 - Differing views on the effectiveness of current arrangements and how to manage these better.
 - Large number of niche SMEs.
 - Range of possible connections.
 - Communication issues - knowing what's available, who to contact/no one stop shop.
 - Fitting student projects into the business environment.
 - Student and business culture.
 - Response time to business research and development proposals.
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Case study – Development Lab

- ❑ Community polytechnic, not university
 - ❑ Applied IT degree
 - ❑ Undergraduate projects with industry provide internship opportunities
 - ❑ Academic supervisor provides bridge/interpreter between students and ICT company
 - ❑ Commercial environment supports better transition to work and quicker productivity
 - ❑ Incubator encourages consideration of entrepreneurial options
 - ❑ Links to other institutions in the Education Cluster, research organisations and ICT companies
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Questions?
