Information & Communications Technology (ICT)
Global Enrolment Trends in Tertiary Education
&
Labour Market Trends in Australasia

Tertiary IT Conference
2009

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Content:

Trends:

- Tertiary Enrolments (past & recent)
  - NZ & global
  - Institutes of Technology & Polytechnics (ITP)
  - Information & Communications Technology (ICT)
  - Wintec School of IT (Diploma & Bachelor)
  - Gender balance – NZ & global perspective

- ICT Job Market (past & recent)
  - Australasia
2002 to 2008

15% Increase in EFTS

Total ITP EFTS

Education Counts (Accessed May 2009)
2002 to 2007
49% Decline in EFTS

ITP ICT EFTS
(49% Decline Between 2002 & 2007)

Source: NACCQ Statistics (Accessed March 2009)
NZ Vacancy Rate & Unemployment Rate

March 2000 – March 2009
USA - Computer Science Enrolments

8% Increase

‘Computer science major is cool again’
Carolyn Duffy Marsan, 03/17/2009

➢ U.S. undergraduate majors rise 8.1%, first increase since 2000

CRA Taulbee Report (Accessed April 2009)
Wintec ICT Enrolments by Gender

*Approximately 80:20*

Source: Student MIS (Accessed March 2009)
USA Computer Science & Computer Engineering Graduates - Approximately 1 in 10 Female
NZ Occupations for Computer Science

*Distribution by Gender 2006*

DoL JVM Shortage (Accessed August 2009)
NZ Occupations for Computer Science

*Highest Educational Qualification 2006*

- No qualifications
- School quals only
- Post-school qualified & Degree and higher

DoL JVM Shortage (Accessed August 2009)
New Zealand ICT Vacancies Index
May 2003 to May 2006
300% increase  (Total jobs relatively static)

McCallum, S. Dept. of CS, University of Otago (Accessed April 2009)
Australia ICT Vacancies Index
Jan 2003 to Jan 2008
300% increase
IT Regional Vacancies in NZ
Dec 2006 to Dec 2007
22% Increase

DoL JVM (Accessed May 2008)
NZ Vacancy Fill Rates

2006 & 2007

DoL JVM Shortage (Accessed August 2009)
IT Vacancies (NZ)
Sept 2008 to April 2009
57% Decline

Seek IT Job Vacancy Trends

- Sept 2007: 3487
- Sept 2008: 3207
- Apr-09: 1377

Seek IT (Accessed March 2009)
IT Vacancies - Rest of NZ

Seek IT Jobs by Region – April 2009

- Auckland
- Wellington
- Christchurch
- Total

Seek IT (Accessed March 2009)
NZ Vacancy Rate & Unemployment Rate

March 2000 – March 2009

Vacancy rate (number of vacancies/labour force)

Unemployment rate (unemployed/labour force)

DoL Skills Insight (Accessed August 2009)
Difficulty of Finding Skilled (& Unskilled) Labour
2004 - 2009

DoL Skills Insight (Accessed August 2009)
Australia
Decline in ICT State Vacancies

*NSW - 52%  //  Victoria - 56%*

SkillsInfo Australia (Accessed April 2009)
Australian ICT Labour Market

Feb 2009

ICT LABOUR MARKET INDICATORS

This presentation provides an overview of the demand side of the ICT labour market in Australia.

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Labour Supply and Skills Branch
Department of Education, Employment and Workplace Relations

February 2009
Wintec Information Technology Services

Percentage of staff -
Wintec School of IT graduates

42%
Global recession to hit investment in IT training market

Bangalore, July 27 Indo-Asian News Service (IANS)

- Gartner - Investment in IT training and software certification is set to decline by 25 percent in the Asia-Pacific region this fiscal as budgets on tech spending fall due to recession.

- At the same time, the pent-up demand for skilled engineers will force the firms in the region to scout for talent. The need for more human capital will encourage corporations to invest judiciously in training in hardware and software.

- The IT training market size in the region is estimated to touch $13.6 billion in 2013 from $5.6 billion, despite tremors being felt due to the meltdown.

- Once the economy recovered and IT budgets restored over the next 12-18 months, the study estimated that the industry in the region would require about 1.5 million skilled personnel by 2012.
Conclusions:

- ICT Enrolment trends;
  - 50% decline 2002 to 2007
  - Coincided with high employment /low unemployment rates
  - 8% increase in 2008 (NZ & the USA)
  - 12% to 15% in 2009 (NZ)?
  - Impacted/influenced by the global economic recession

- Gender imbalance in the field of ICT an ongoing challenge

- Australasian job market;
  - Global recession having a significant impact
  - Pockets of skill shortages still evident
  - Future IT/ICT job potential extremely healthy?
“In times of global recession it is those organisations who have good governance practices in place (IT being a major enabler and expense item in most organisations), and good HR practices in terms of recruiting, developing and retaining IT skills (that) will have major advantages over those who don’t.”

Quote from Maxsys (Murray Wills), February 2009 (Accessed August 2009)