Information & Communications Technology (ICT)

Tertiary Education Global Enrolment Trends

&

Australasian Labour Market Trends

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Garry Roberton & Susan Bennett
Waikato Institute of Technology

garry.roberton@wintec.ac.nz
Content:

Trends:

- Tertiary Enrolment
  - NZ & global
  - Institutes of Technology & Polytechnics (ITP)
  - Information & Communications Technology (ICT)
  - Women in Technology - Global
  - Wintec School of IT (Diploma & Bachelor)

- ICT Job Market
  - Australasia
2002 to 2008
7% Increase in EFTS
2002 to 2008
15% Increase in EFTS

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

Source: NACCQ Statistics (Accessed 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)
ITP Sector Enrolments by Gender
Approximately 50:50

ITP Domestic EFTS by Gender

- Male
- Female

Year | Male | Female
--- | --- | ---
2002 | 26,525 | 30,418
2003 | 28,719 | 33,022
2004 | 31,284 | 37,462
2005 | 33,960 | 37,453
2006 | 34,456 | 35,354
2007 | 34,996 | 36,619

Accessed March 2009
ICT Enrolments by Gender

Approximately 80:20

Wintec ICT Enrolments by Gender
Levels 5, 6 & 7

Source: Student MIS (Accessed March 2009)
USA Computer Science & Computer Engineering Graduates - Approximately 1 in 10 Female
Australia – Women in ICT

- The proportion of young women selecting a university Information Technology (IT) course is low and has been declining alarmingly in the last few years.

- VTAC and Higher Education statistics show steady decline in popularity of IT courses since 2000, with young women turning away at a greater rate than young men.

Swinburne Research: Women in ICT (Accessed April 2009)
In specific sectors, such as computing, female graduates are significantly outnumbered by male graduates.

ITP EFTS
2004 (Peak) to 2008
16% Decline in Diplomas 5 to 7 // 6% Decline in Bachelors
(11% Overall Decline)

Total ITP EFTS by Qualification

Education Counts (Accessed March 2009)
ITP Domestic EFTS
2003 (Peak) to 2008

7% Decline in Diplomas 5 to 7 // 1% Decline in Bachelors
(4% Overall Decline)

ITP Domestic EFTS by Qualification

Diplomas 5-7
Bachelors
Total
Linear (Total)

Education Counts (Accessed March 2009)
ITP International EFTS
2004 (Peak) to 2008
31% Decline in Diplomas // 38% Decline in Bachelors
(48% Overall Decline)

ITP International EFTS by Qualification
Wintec Domestic ICT EFTS
2002 to 2007

64% Decline in Diplomas // 58% Decline in Bachelors
(61% Overall Decline)

Wintec Domestic ICT Enrolments

Source: Student MIS (Accessed March 2009)
Wintec International ICT EFTS
2004 (Peak) to 2009

29% Decline in Diplomas  //  87% Decline in Bachelors
(79% Overall Decline)

Source: Student MIS (Accessed March 2009)
New Zealand ICT Vacancies Index
May 2003 to May 2006
300% increase (Total jobs relatively static)

Note: 30% Decline Sept 05 to Jan 2006

McCallum, S. Dept. of CS, University of Otago (Accessed April 2009)
Australia ICT Vacancies Index

Jan 2003 to Jan 2008

300% increase

SkillsInfo Australia (Accessed April 2009)
IT Regional Vacancies in NZ
Dec 2006 to Dec 2007
22% Increase

DoL JVM (Accessed May 2008)
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

- Total: 1270 jobs
- Auckland: 800 jobs
- Wellington: 400 jobs
- Christchurch: 0 jobs

Seek IT (Accessed March 2009)
Australia
Decline in ICT State Vacancies

NSW - 52% // Victoria - 56%

SkillsInfo Australia (Accessed April 2009)
Australian ICT Labour Market
Feb 2009

Note: Click on any line below while running the slide show

ICT LABOUR MARKET INDICATORS

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

bob.bunnett@deewr.gov.au or julian.sharrad@deewr.gov.au

Labour Supply and Skills Branch

Department of Education, Employment and Workplace Relations

February 2009
Conclusions:

- NACCQ diploma qualifications;
  - meeting the needs of the domestic market
  - demand continuing/consistent and
  - independent of fluctuating international market
- Gender imbalance an ongoing problem
- Australasian job market;
  - Global recession having a significant impact

Recommendations:

- Cherish the Blue Book (Harmonised ICT Qualifications)
- Harmonise ITP ICT degree qualifications

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