Tertiary ICT Enrolments and Job Vacancies: Reflecting on Trends

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ABSTRACT

Tertiary enrolments in ICT diploma and degree programmes are increasing from the 2007 lows, but at a rate insufficient to meet an increasing global demand. This impending shortage of knowledge and skills, which threatens the viability of the industry, is acknowledged by both industry leaders and by governments. The ICT monthly trend series, established in September 2010 on the CITRENZ (Computing & Information Technology Research & Education NZ) website, highlights NZ ICT education and job advert trends. Brief excerpts from selected news items are also included each month. These help give some insights into the reasons for the current and impending ICT skills shortages and suggest strategies for addressing the problem. This poster features selected extracts from the monthly trend series, with commentary, over the last 12 months.

Keywords

ICT, trends, skills, tertiary, jobs, enrolments

1. INTRODUCTION

National and international publications, such as Computerworld and TechRepublic, regularly feature articles publicising the growing global ICT skills shortage.

Here in NZ it is apparent that the ICT industry leaders are extremely concerned about the impact of the skills shortage on the potential growth of the sector and NZ's productivity.

Publication of the author's monthly ICT trend series on the CITRENZ website highlights this increasing demand for suitably qualified personnel to fulfil the growing demand.

2. CONTENT

"The ratio between the availability of ICT graduates versus industry demand significantly impacts the ICT sector and NZ as a whole. The trend of both has caused considerable concern in recent years and (has resulted) in a significant international skills shortage" (NZCS Newsline, June 2011).

Figure 1 illustrates the NZ IT enrolment trends from the 2002 peak to the present. Bachelor's degree EFTS enrolments are 43% lower, or 4210 fewer, in 2010 than in the 2002 peak enrolment year. Diploma EFTS enrolments are 32% lower, or 1680 fewer, for the same period.

Figure 2 illustrates the Seek ICT job adverts with the September 2007 peak proceeding the recession, followed by the recovery. In spite of the current dip in demand (April 2012) the overall trend is towards an increasing requirement for skills.
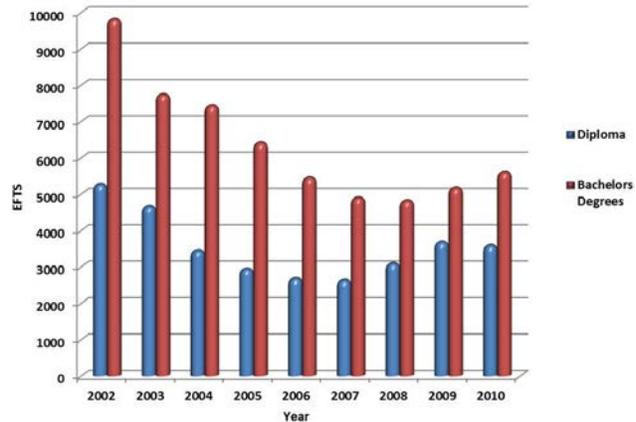
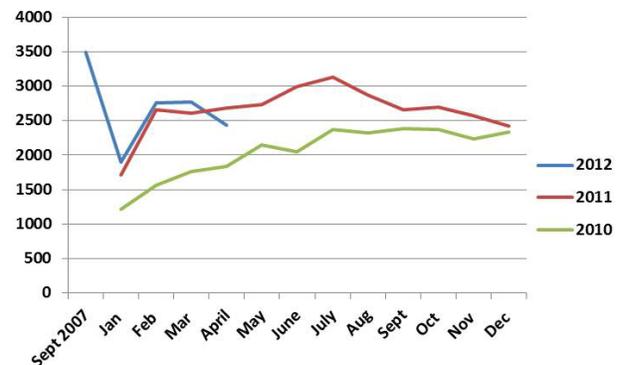**Fig. 1 NZ Tertiary Sector IT Enrolments (Dom & Intl.) 2002-2010**

Fig. 2 Seek ICT NZ Job Adverts 2007 & 2010-Present

These two charts are indicative of the NZ trend towards an increasing shortage of skilled personnel to fulfil industry demand.

3. CONCLUSION

An extract from the NZICT 2010 policy document, postulates an overall strategy for addressing the problem; "A focus on ICT-related education and skills are fundamental to New Zealand's endeavour to improve its Digital Economy".

Industry, professional organisations and tertiary institutions need to work with government to develop programmes that increase the flow into the ICT talent pipeline.

4. REFERENCES

Education Counts (Accessed April 2011)

Seek ICT Jobs (Accessed April 2011)