

Programming Languages in Tertiary Institutions and Industry Needs

Dr Dmitry Gakhovich

Dr Noel Bridgeman

Western Institute of Technology at Taranaki,
New Plymouth, NZ
d.gakhovich@witt.ac.nz

A survey was conducted to find out what programming languages and software technologies are being taught at New Zealand tertiary institutions (polytechnics, universities and private institutions). Another matter of interest was what skills were expected from potential employees (particularly graduates). The findings may be of interest to programme structure decision makers. The main results are represented in Fig.1 and Fig.2.

On the base of the study some conclusions can be drawn. The results for jobs may vary significantly

with time but the overall trend is nearly the same. While a good match between what is taught and what is required is observed, not all languages studied are in demand. Partly the explanation may be that some languages (e.g. Pascal) are used for educational purposes only.

The results show that the languages most in demand are Java and C++, but this is true mainly for main centers, while Visual Basic and RAD (e.g., MS Access) are more popular in the provincial centres.

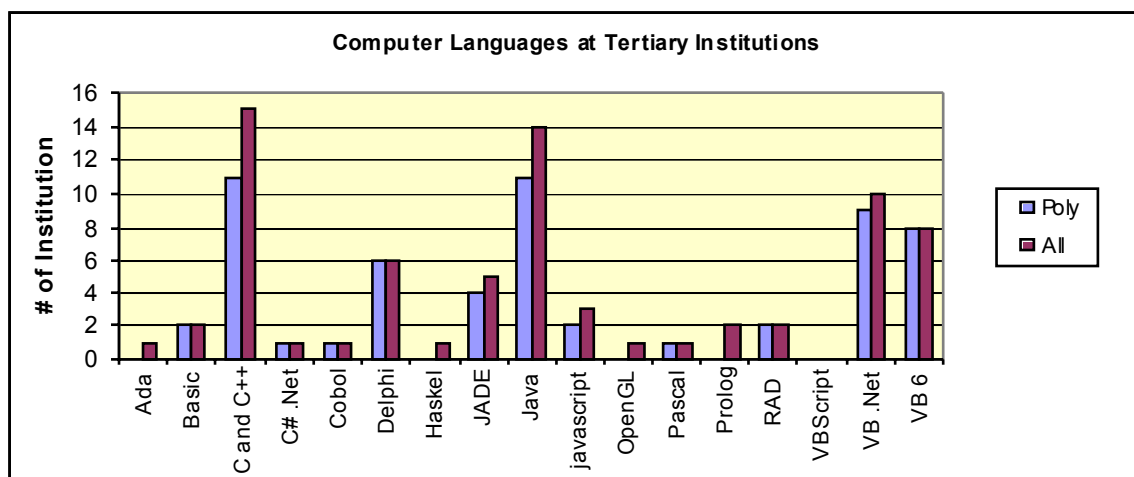


Fig.1 Programming languages taught by tertiary education providers: light – polytechnics, dark – polytechnics and universities

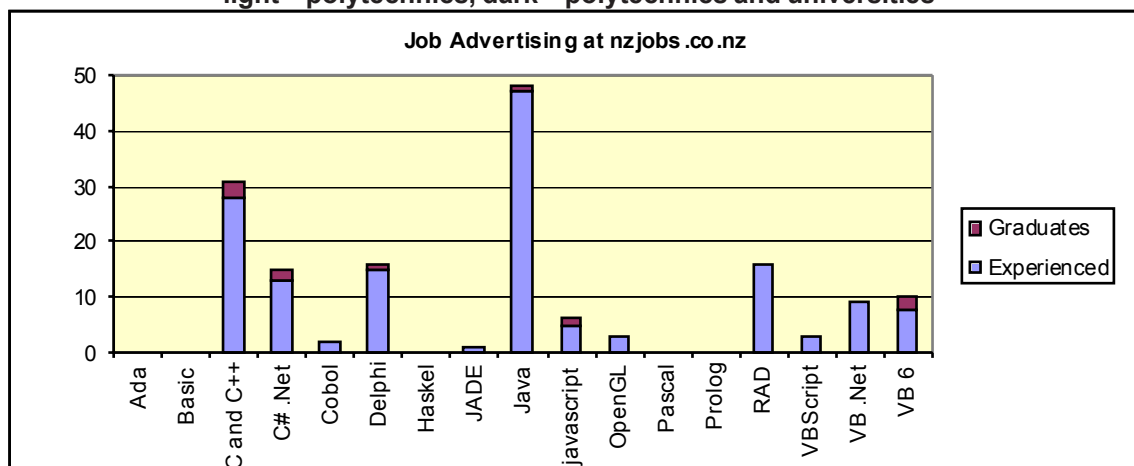


Fig.2 Number of jobs advertised by nzjobs.co.nz web site (on 28 April 2004): dark – graduate level; light - experienced. Total number of advertisements – 429, locations – all (including overseas)