



## DIFFERENCES IN THE EDUCATIONAL ACHIEVEMENTS, ASPIRATIONS AND VALUES OF BIRTHPLACE GROUPS IN NEW SOUTH WALES

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*Marked contrasts exist in the participation of young people from different birthplace groups in higher education in Australia. A 1993 survey of Year 11 school students shows that these contrasts are preceded by differing attitudes to education. Students from a number of Asian birthplace groups are more likely to aspire to university education, and to place a high value on academic development, than students born in Australia, parts of Europe, Britain, Ireland and New Zealand.*

### INTRODUCTION

In recent years in New South Wales, marked differences in educational performance, as measured by entry to higher education, between language groups have been observed: the Indonesian-Malay-speaking, Korean-speaking and Chinese-speaking groups have all outperformed their English-speaking counterparts, whilst the Italian-speaking, Arabic-speaking and Filipino-speaking groups have below average higher-education participation rates.<sup>1</sup> This paper shows that higher education enrolment rates differ considerably between country-of-birth groups. Such differences in educational attainment may be due to differences in attitudes to education which reflect cultural as well as socioeconomic differences between the birthplace groups.

Consequently, we compare differences in attitudes to education between birthplace groups using data from a large-scale study of year 11 secondary-school students in New South Wales conducted in 1993 by the authors. In doing so, we examine the following questions:

- (1) whether the proportions of year 11 students from different birthplace groups who aspire to university education differ significantly;
- (2) whether the effect of gender on university aspirations differs between birthplace groups;
- (3) whether the importance of a student gaining a university education to the parents of that student differs significantly between birthplace groups;
- (4) the extent to which the relative importance to parents of males and females gaining entry to university varies between birthplace groups;
- (5) whether birthplace groups differ in their expectations of the roles of schools to

develop students academically, vocationally and personally;

(6) whether in overseas-born groups the proportion of students who aspire to university converges to that of the Australian-born as the time of residence in Australia increases; and

(7) whether the between-birthplace group variation in importance to parents of their offspring gaining university entrance declines as the duration of time in Australia increases.

### HIGHER EDUCATION PARTICIPATION RATES OF BIRTHPLACE GROUPS IN NEW SOUTH WALES

There are a number of foreign students temporarily in Australia. They have been excluded from the analysis. Here we are concerned only with citizens or permanent residents, referred to in this paper as 'local students'. The rate of participation in higher education for a birthplace group can be measured by comparing the number of students from that birthplace group in 1994 to the size of the total 15-24 age group for that birthplace group as enumerated in the 1991 census. At the start of 1994, persons in this age cohort spanned the age range in which participation in higher education is most common, the 17-26 age range. Table 1 shows that, by this measure, most overseas-born groups have a higher rate of participation in higher education than do the Australia-born. The South Asia-born have the highest level of participation in higher education, and the New Zealand-born the lowest.

In New South Wales (NSW) in 1994, roughly a third (33.1 per cent) of all higher education students were outside the 17-26 age range and, in some birthplace groups, especially the European groups, the proportion outside this age range is far higher.

Consequently, the picture presented by using this measure of higher education participation is distorted by differences in the age structure of the various birthplace groups.

A participation rate based on the number of higher education students aged 17 to 26 at the start of 1994 to the number of 15-24 year olds enumerated in the 1991 census is far less affected by age-structure differences.<sup>2</sup> By this measure the Hong Kong-born, South Asia-born, South Africa-born, Malaysia/Singapore-born and Vietnam-born have the highest levels of participation in higher education, whilst the New Zealand-born and South Pacific-born have the lowest levels (see Table 1). All the East and South-East Asian birthplace groups have a higher rate of participation in higher education than do the Australian-born. Moreover, the Malaysia-born, Hong Kong-born and Vietnam-born have particularly high participation rates in high-status university courses such as medicine.<sup>3</sup>

Many of the groups with high participation rates also enjoy high socio-economic status in Australia. However, a notable exception to this pattern is the Vietnam-born, a group in which the level of participation in higher education is high, despite socio-economic disadvantage and high unemployment. The high enrolment rate among the Hong Kong-born and, to a lesser extent, the Malaysia-born may reflect the limited opportunities for tertiary study in these countries.<sup>4</sup> The availability of higher education in Australia may have been an important consideration in the decision to

**Table 1: Higher education participation rates for birthplace groups: New South Wales 1994**

Country of birth	Higher Education based on all enrolments <sup>a</sup>	Participation Rate based on enrolments of 17-26 year olds <sup>b</sup>
Hong Kong	592	377
India/Pakistan/Sri Lanka	615	278
South Africa	388	273
Malaysia/Singapore	408	262
Vietnam	288	236
China/Taiwan	344	219
USA/Canada	360	205
Korea/Japan	219	178
Philippines/Indonesia/PNG	206	150
Burma/Cambodia/Laos/Thailand	156	123
South America	202	123
<b>Australia</b>	<b>178</b>	<b>120</b>
East Europe	221	117
UK/Ireland	304	107
Middle East	165	102
West Europe	252	97
South Pacific	137	78
New Zealand	165	71

Source: Derived from Department of Employment, Education and Training (DEET), Aggregated Data Sets (unpublished) and Australian Bureau of Statistics (ABS) CLIB91 (an ABS data set published on CDROM)

- <sup>a</sup> Number of local enrolments of any age at start of 1994 per 1000 persons aged 15-24 enumerated in 1991 census.
- <sup>b</sup> Number of local enrolments aged 17-26 at start of 1994 per 1000 persons aged 15-24 enumerated in 1991 census.

**Table 2: Higher education participation rates by gender and birthplace: New South Wales 1994**

Country of birth	Higher education participation rate <sup>a</sup>	
	Male	Female
Australia	161	195
Burma/Cambodia/Laos/Thailand	177	136
China/Taiwan	371	320
Hong Kong	631	552
India/Pakistan/Sri Lanka	709	504
Korea/Japan	262	186
Malaysia/Singapore	412	405
Philippines/Indonesia/PNG	199	213
Vietnam	305	269
UK/Ireland	282	327
East Europe	196	246
West Europe	233	270
Middle East	194	137
New Zealand	136	192
South Pacific	149	127
South Africa	356	420
South America	197	207
USA/Canada	339	379

Source: Derived from DEET, Aggregated Data Sets (unpublished) and ABS CLIB91

- <sup>a</sup> Number of local enrolments of any age at start of 1994 per 1000 persons aged 15-24 enumerated in 1991 Census

migrate. But Birrell and Khoo have also shown that higher proportions of Australian-born persons who are second-generation migrants gain university degrees than Australian-born persons with Australian-born parents,<sup>5</sup> even though many of the first-generation parents had low socio-economic status.

#### GENDER DIFFERENCES IN THE HIGHER EDUCATIONAL PARTICIPATION OF BIRTHPLACE GROUPS

Whilst for the population as a whole higher education participation is more common for females than for males,<sup>6</sup> for many overseas-born groups male higher education participation exceeds that of females (see Table 2). The birthplace groups in which the ratio of the male higher education participation rate to that of females is highest are the Middle-East and the South Asian groups. Except for the Philippines-born, the higher

education participation rate is higher for males than for females in all the Asian birthplace groups, whilst for all the English-speaking and European-birthplace groups, female participation exceeds male participation by a considerable margin.

#### THE EDUCATIONAL VALUES OF NEW SOUTH WALES SECONDARY SCHOOL STUDENTS: THE SAMPLE

A total of 2,615 year-11 students from 30 secondary schools in Sydney were interviewed for the 1993 survey. (See Table 3.) Twenty-seven of the schools were randomly selected from the four metropolitan regions of Sydney. The remaining three schools were Saturday Chinese schools in metropolitan Sydney. Nine of the schools were independent schools, and the remaining 21 were government schools. The schools comprised 10 all-girls schools involving 837 female students, and 20 co-educational

Table 3: Sample sizes and definitions of birthplaces

Birthplace group	Number of males*	Number of females*	Total sample size	Per cent of sample in group	Countries in birthplace group
Australia	559	1,113	1,675	64.1	Australia
Vietnam	76	110	186	7.1	Vietnam
Hong Kong	36	78	114	4.4	Hong Kong
Middle East & North Africa	38	47	85	3.3	Afghanistan, Bahrain, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Palestine, Saudi Arabia, Syria, Turkey,
China	26	33	60	2.3	China, Taiwan
Philippines	18	40	58	2.2	Indonesia, PNG, Philippines, Timor.
NE Asia	22	32	54	2.1	Korea, Japan
UK	14	38	52	2.0	United Kingdom, Ireland
Indo-China	19	29	48	1.8	Burma, Cambodia, Laos, Thailand,
West Europe	20	25	45	1.7	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland
Malaysia	8	32	41	1.6	Malaysia, Singapore
New Zealand	12	23	35	1.3	New Zealand
South America	18	17	35	1.3	Argentina, Brazil, Chile, Mexico, Venezuela, West Indies
East Europe	11	18	29	1.1	Armenia, Czech & Slovak, Hungary, Poland, Romania, Ex-USSR, Ex-Yugoslavia
South Pacific	8	15	23	0.9	Cook Islands, Fiji, New Caledonia, Samoa, Tonga, Vanuatu
North America	10	12	22	0.8	Canada, USA
South Asia	1	18	19	0.7	India, Mauritius, Pakistan, Sri Lanka
South Africa	7	12	19	0.7	South Africa
Other Africa	8	6	15	0.6	Nigeria, Zambia, Zimbabwe

\* Six subjects did not report their gender

schools involving 911 male and 865 female students. The ages of the students ranged from 15 years to 21 years, but an overwhelming majority of the students were either 16 (64.4 per cent) or 17 (22.7 per cent) years old at the time of the study. About one in three (34.2 per cent) of the sample were from a non-English-speaking background. This figure closely represents the school census data,<sup>7</sup> which reports that, in mid-1992, 30.9 per cent of students in Year 10 and 35 per cent of year 11 school students in the four Sydney metropolitan regions were from non-English-speaking backgrounds.

#### ASPIRATIONS TO UNIVERSITY EDUCATION AMONG BIRTHPLACE GROUPS

The students were asked: 'what do you intend to do after leaving school?' The options provided were: 'get full-time work', 'take up an apprenticeship', 'take a year off', 'commence a university education', 'commence a Technical and Further Education (TAFE) course', or 'other'. Over half (53 per cent) the students intended to progress to university (see Table 4), and there were sizeable and statistically significant differences<sup>8</sup> in the proportion of students who aspired to university education between the different birthplace groups.

The four groups with the highest proportions intending to go to university were all Asian birthplace groups. Only the New Zealand-born, South America-born and West Europe-born had lower proportions intending to go to university than had the Australia-born. Except for the Other Indo-China born, in all the Asian birthplace groups the proportion who aspired to university education was above average.

The proportion of the females students who planned to go on to university was significantly larger than that of males. The only birthplace group in which the proportion of males who aspired to university exceeded that of females was the Middle-East

group (see Table 5). For the Australian, English-speaking, and West European groups, the differences between the proportions of males and the proportion of females who aspire to university tended to be wider than those for the Vietnam, Hong Kong, Other Asian, Middle-East, and 'Other' groups. However, these differences were not statistically significant.

#### VALUE OF UNIVERSITY EDUCATION HELD BY PARENTS OF STUDENTS OF DIFFERENT BIRTHPLACE GROUPS

The importance of parental beliefs, expectations and aspirations for their children's educational achievement as determinants of the children's educational success have been widely demonstrated in the literature.<sup>9</sup> In our study, students were asked how important it was to their mother, and to their father, that the student go to university or tertiary college in the year after year 12. The response scale for each of these items was a 9 point Likert-type scale ranging from: 1 'Not at all important' to 9 'Extremely important'. The mean of the values for the perceived importance to the mother of her offspring entering university and that to the father was

Table 4: Percentage of students aspiring to university, and mean score for parental importance placed on student going to university for birthplace groups

Birthplace group	Percentage of students who planned for university education	Importance of university education to parents
All Birthplace Groups	53	6.25
Hong Kong	91	7.99
North East Asia	90	7.82
Malaysia	88	8.20
China	86	7.78
South Africa	74	6.83
North America	71	7.35
South Pacific	65	8.03
Vietnam	63	7.29
East Europe	62	6.92
Philippines	62	7.31
South Asia	61	7.31
Middle East & North Africa	56	7.62
United Kingdom	54	6.16
Indo-China	48	7.30
Australia	46	5.69
West Europe	43	6.11
South America	42	7.19
New Zealand	40	4.93

analysed. The correlation between this measure of the parental importance placed on university entrance and whether or not a student aspired to go to university was +0.5, indicating that the more importance a student's parents place on him or her going to university the more likely it is that the student will aspire to enter university.

Except for the New Zealand-born, all the birthplace groups had mean scores for the parental importance placed on university entrance above the scale's natural mid-point of 5 'Moderately important'. Moreover, there were significant differences between the group mean scores on the importance scale, with the highest and lowest means for birthplaces differing by 3.06 points on the 9-point scale. In general, the Asian-born groups, especially the Malaysia/Singapore, Hong Kong, Korea/Japan and China-born groups, tended to perceive greater importance being placed on their going to university by their parents, than did their Australia-born, English-speaking and West Europe-born counterparts (see Table 4). Clearly, groups in which parents place a high importance on their offspring going to university tend to have high participation rates in higher education. The average importance placed by the parents of Hong Kong-born students in New South Wales on their offspring going to university exceeded the average score for this variable for a sample of students at the equivalent educational level living in Hong Kong by a considerable margin.<sup>10</sup> This indicates that Hong Kong-born migrants in

Australia come from a very select subsection of the Hong Kong population.

Males saw their going to university as less important to their parents than females did. However, this was not so for Hong Kong-born and Middle East-born males, whilst for the Vietnam-born the difference in the average scores for parental importance placed university education was slight. The extent to which separate male and female means for the various birthplace groups differed from the male-and-female-combined birthplace means was statistically significant.

#### DIFFERENCES IN EXPECTATIONS OF THE ROLE OF SCHOOLS

What do students think schools are for? The study collected information on the value students placed on 30 aspects of the role of a school in developing students' potential, using 5-point Likert-type scales. For the purposes of the analysis, these data were combined to produce three scales indicating the students' expectations of three aspects of the role of a schools: those of academic, vocational, and personal development (see Table 6 for details of the scales). Each scale was valued between 1 and 5, with high scores indicating that the respondent perceived great importance for the school to develop the aspect of the student's potential in question.

The results show that all three areas were seen as important; all three scales had overall averages above 3.5 on the 5-point scales (see Table 6). Moreover, for all three scales the differences between the birthplace groups'

Table 5: Percentage of students aspiring to university, and mean of score for importance placed by parents on student going to university by gender and birthplace group

Birthplace group'	Percentage of males aspiring to university	Percentage of females aspiring to university	Importance of university education of sons to parents	Importance of university education of daughters to parents
All groups	41	59	5.82	6.48
Australia	32	53	5.05	7.00
Vietnam	56	67	7.27	7.30
Hong Kong	83	95	8.06	7.95
Other Asia	66	77	7.23	7.91
English Speaking	39	60	5.30	6.31
Mid. East & Nth Africa	58	55	7.79	7.48
Wes: Europe	30	54	5.62	6.56
Other	50	64	7.14	7.32

<sup>1</sup> To assess the differences by birthplace and gender a regrouping of birthplaces was necessary, because some of the original groups had very low numbers of males.

'Other Asia' is a combination of the China, North-East Asia, Malaysia, Other Indo China, Philippines and South Asia groups. 'English-speaking' is a combination of the New Zealand, North America and UK groups. 'Other' is a combination of the East Europe, Other Africa, South Africa, South America and South Pacific groups.

means were fairly small in size. To analyse the data we computed two ratios for each student: (i) the ratio of the score for the value placed on academic development to that placed on vocational development and (ii) the ratio of the score for the value placed on academic development to that placed on personal development. These ratios indicate the priorities of the students. The correlations of these two ratios with whether or not a student aspired to university were 0.20 and 0.09 respectively, indicating that students with a high value for one or other of these ratios were more likely to aspire to university (although in the case of the academic/

personal development ratio only slightly more likely).

The ratio of academic to vocational development scores varies significantly between birthplace groups. This indicates that the relative value placed on schools developing students academically and vocationally varies between these groups. Table 6 shows that most of the Asian birthplace groups tended to value academic development by schools more than vocational development, whilst all the English-speaking and European birthplace groups tended to place a greater value on vocational development than on academic development.

**Table 6: Means of scores for importance of schools in students' personal development, academic development and vocational development, and ratios of scores by birthplace group**

Birthplace group	Personal development <sup>a</sup>	Academic development <sup>b</sup>	Vocational development <sup>c</sup>	Ratio of academic to personal <sup>d</sup>	Ratio of academic to vocational <sup>e</sup>
All groups	3.93	4.16	4.30	1.08	0.97
Australia	3.94	4.15	4.36	1.07	0.96
China	4.01	4.20	4.19	1.06	1.01
Hong Kong	3.85	4.18	4.05	1.11	1.05
Indo-China	3.75	4.21	4.12	1.15	1.03
Malaysia	4.07	4.36	4.27	1.11	1.03
NE Asia	3.83	4.03	3.94	1.06	1.03
Philippines	4.08	4.30	4.49	1.07	0.96
South Asia	3.94	4.21	4.12	1.10	1.03
Vietnam	3.76	4.08	4.05	1.10	1.01
UK	3.90	4.25	4.42	1.12	0.97
West Europe	3.99	4.22	4.35	1.08	0.98
East Europe	4.03	4.34	4.33	1.08	1.01
Middle East	3.98	4.16	4.16	1.05	1.00
New Zealand	3.99	4.07	4.21	1.03	0.97
South Pacific	4.03	4.13	4.18	1.03	1.02
South Africa	4.26	4.35	4.59	1.04	0.95
South America	3.94	4.03	4.21	1.04	0.97
North America	3.52	3.82	3.92	1.14	0.99

Note: all items included in the scales were of the form: 'a school should. . .'

- <sup>a</sup> Items in the personal development scale were: 'help students to discover themselves as persons', 'develop in students personal qualities of independence and initiative', 'respect each student irrespective of ability or appearance', 'help students to develop their personality and character', 'provide counselling to help students in their problems', 'provide students with a clear vision of life' and 'influence students' direction of life'.
- <sup>b</sup> Items in the academic development scale were: 'prepare students for the HSC/Year 12 examinations as well as possible', 'prepare students for university study', 'develop students' knowledge and skills in specific subject areas', 'develop students in problem-solving skills', and 'help students to develop sound study skills'.
- <sup>c</sup> Items in the vocational development scale were: 'prepare students for their future careers', 'provide students with advice on careers and further education', 'help students to prepare for future employment' and 'teach students about different careers'.
- <sup>d</sup> If the academic to personal ratio is greater than 1, this indicates that academic development is valued more highly than personal development.
- <sup>e</sup> If the academic to vocational ratio is greater than 1, this indicates that academic development is valued more highly than vocational development.

All birthplace groups had a mean ratio of academic to personal development expectations greater than one, implying that in all the birthplace groups the role of schools in developing students academically tended to be seen as more important than their role in the personal development of students. However, the differences between the birthplace groups means for this ratio were minute and not statistically significant.

**DO THE ATTITUDES TO EDUCATION OF OVERSEAS BIRTHPLACE GROUPS CONVERGE WITH THOSE OF THE AUSTRALIA-BORN OVER TIME?**

It is to be expected that the beliefs and values migrants bring with them will both influence

the culture of the host society and be modified by that culture. Ideally such changes in values should be assessed by longitudinal studies of groups of migrants and non-migrants. In our study the convergence (or otherwise) of attitudes to education between birthplace groups as the time of residence increases was assessed by comparing the attitudes of migrant groups with different times of residence in Australia.

The results in Table 7 show a clear tendency for the proportions of English-speaking-born and West Europe-born who aspire to university education to converge with that of the Australia-born as the time of residence increases. This convergence could indicate an assimilation of attitudes. For the

Hong Kong-born, the proportion who aspire to university education declines slightly with increasing time of residence, whilst for the Vietnam-born it increases notably with time of residence (see Figure 1). The high proportion of recently arrived Hong Kong-born students who aspire to university education may be closely tied to the migration process. If the greater opportunities for university education for their children influenced a family's decision to migrate to Australia, we would expect the children to aspire to university.

A convergence in the scores for the importance placed on university education by parents to those of the Australia-born is only clearly apparent for the English-speaking and the West European birthplace groups. For the Asian groups, no such convergence is apparent (see Figure 2). With regard to student expectations of the role of schools, for all birthplace groups except the Hong Kong-born there is a pattern of convergence over time towards the expectations held by Australia-born students. The Hong Kong-born diverge from the other groups in that they tended to hold lower

Figure 1: Change over time of proportion of students aspiring to university education by birthplace group

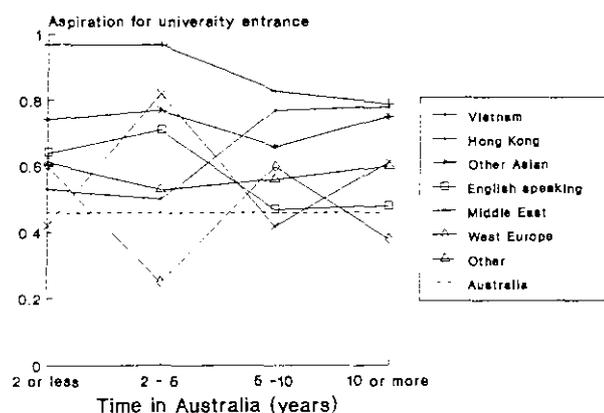
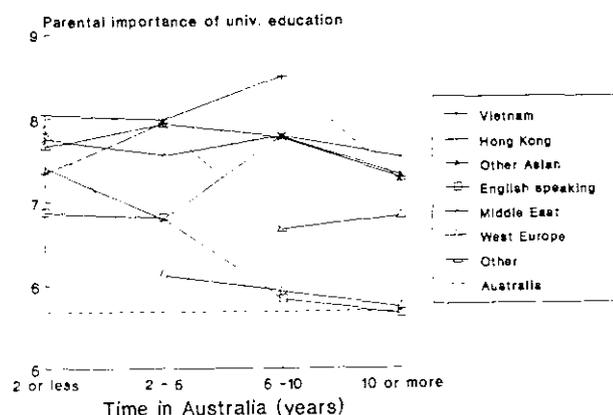


Figure 2: Change over time of mean scores for parental importance placed on university education by birthplace groups



expectations for vocational development than the other birthplace groups when they had been in Australia for over ten years. Their emphasis on the relative importance of academic development had increased rather than diminished (see Figure 3).

#### SUMMARY

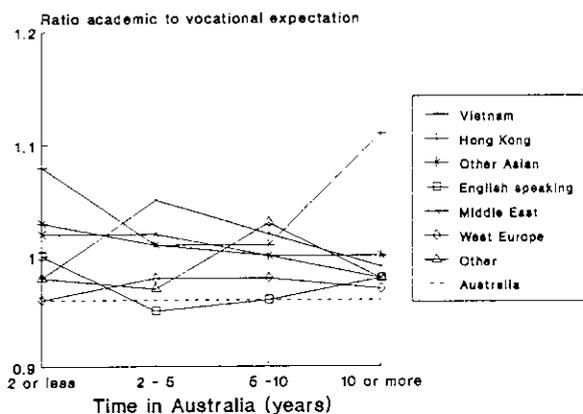
Two clusters of birthplace groups exhibit similar patterns of educational attainment, aspirations and values. The first cluster consists of the Hong Kong-born, the Malaysia/Singapore-born, Korea/Japan-born and the Vietnam-born. In all these birthplace groups, a high proportion of Year 11 students aspire to a university education, a high proportion enrol in university, the importance of a student's going to university to his or her parents tends to be high, and students tend to place a higher value on schools preparing them for exams and university than they do on schools preparing them for the labour force. For this cluster, our study found no strong evidence to suggest that students' aspirations to gain a university education, or the importance to their parents of their doing so, diminish as their length of residence in Australia increases.

The second cluster consists of the Australia-born, the New Zealand-born, UK/Ireland-born and the West Europe-born. In this cluster, the proportion of year 11 students who plan to go to university, and the importance to parents of this, tend to be close to or below the national average, whilst students see the school's role in their vocational development as more important than its role in academic development. Participation in higher education in this cluster is average, or below average, but female participation rates are much higher than those of males.

#### References

- <sup>1</sup> R. Iredale and C. Fox, *Immigration, Education and Training in New South Wales*, Australian Government Publishing Service (AGPS), Canberra, 1994, p. 46
- <sup>2</sup> Ideally the 17-26 population for 1st January 1994 should be used as the denominator. This will differ from the 15-24 census group because of mortality and migration to and from NSW.
- <sup>3</sup> C. Betts, 'Medical Students and the Changing Make Up of the Australian Medical

Figure 3: Change over time of ratio of academic to vocational expectations by birthplace



Workforce' in *People and Place*, 1994, vol. 2, no. 2, pp. 24-27

- <sup>4</sup> In Hong Kong in 1990 there were only two universities, offering places to only about seven per cent of age-eligible persons, although this percentage is expected to double in 1995. See B. N. Cauldwell, 'Made in Hong Kong: an imperialist rhetoric and the Teenage Mutant Turtles', paper presented to the Conference on Rhetoric and the Teaching of writing in Indiana, USA, 1990.
- <sup>5</sup> B. Birrell and S. Khoo, *The Second Generation in Australia*, AGPS, Canberra, 1995. See also J. Smolicz, 'Education for a multicultural Society' in J. Keeves (Ed.) *Australian Education: A Review of Recent Research*, Allen and Unwin, Sydney, 1987.
- <sup>6</sup> B. Birrell, I. Dobson, V. Rapson and T.F. Smith, 'Female achievement in higher education', *People and Place*, vol. 3, no. 1, pp. 43-54
- <sup>7</sup> These rates were calculated from Table 5 and Table 10, Management Services Directorate, NSW Department of School Education, Statistical Bulletin: Schools and Students in New South Wales Mid-Year 1992 (ISSN 1039-0383).
- <sup>8</sup> Unless otherwise stated, for all variables of interest the differences between birthplace groups were statistically significant at the 5 per cent level.
- <sup>9</sup> See, for example, K. Marjoribanks, 'Family Environment and Educational Achievement' in Keeves, op. cit.; and D. Scott-Jones, 'Family Influences on Cognitive Development and School Achievement', in E. Gordon (Ed), *Review of Research in Education*, American Educational Research Association, Washington D.C., pp. 259-306 for a comprehensive review.
- <sup>10</sup> T. Ling and M. Mok 'Different culture, different school culture', paper presented to the Annual Meeting of the Australian Association for Research in Education in Fremantle, Western Australia, 1993