

Urban disadvantage and VET participation and achievement

John McIntyre

UTS Research Centre for Vocational Education & Training

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UTS RESEARCH CENTRE FOR VOCATIONAL EDUCATION AND TRAINING

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INTRODUCTION

A previous paper, *Applying SEIFA disadvantage indexes to VET participation* (RCVET Working Paper 00-31), discussed the applications of the SEIFA disadvantage indexes to vocational education and training in Australia. It noted that, in contrast to school and higher education, areas identified as disadvantaged using such indexes may have quite high levels of VET participation by their residents (and consistent with this, more ‘advantaged’ areas have low rates of participation).

The paper concluded that indexes of disadvantage are nevertheless useful as one component of a planning methodology that seeks to establish which areas have large concentrations of people, including members of the ‘target equity groups’, that require higher levels of resourcing to increase their participation and support for improved outcomes.

A key element in this approach is that of identifying the local VET clienteles that access TAFE Institutes, community providers and other agencies to meet their education and training needs. The problem for local equity policy in the planning of provision is to first identify disadvantaged areas on some criterion, and then to establish to what extent these areas in fact have VET clienteles that represent their disadvantaged populations. A further step in the analysis would try to establish to what extent their participation leads to equitable outcomes (ANTA 1999).

Earlier work has urged VET researchers to make use of the wealth of data that is now provided by the AVETMISS collection to analyse local patterns of participation, because ‘client home postcode’ is included in the AVETMISS standard, making it possible to examine VET clienteles who live in any locality or region and to ‘profile’ their characteristics. The way is open to develop knowledge of VET clienteles in relation to their local community and socio-economic context.

This paper takes this approach further by examining the profiles of VET clients in disadvantaged areas in Sydney and Melbourne, building on earlier analysis of VET participation in those cities. It has a number of aims:

- to examine the characteristics of VET clients coming from postcodes identified as disadvantaged

- to determine, if this is possible, to what extent high levels of participation are accompanied by comparable achievement, judged by appropriate measures such as level of course and module outcomes
- to suggest further research building on these participation studies, as part of the ANTA national key centre program

The background to this work is evidence of the continuing importance of the role of the local TAFE Institutes as VET providers meeting the needs of disadvantaged people in their 'catchment' areas. Previous research on VET clientele has confirmed that the 'local participation effect' remains a strong feature of TAFE and ACE participation – that is, people living locally prefer to access courses near to their homes (NCVER 2000). This is the case despite the extensive rationalisation of provision in TAFE that has made many courses available only at certain campuses within the greater metropolitan area. (By contrast, ACE offerings are often targeted at a local market and local clientele, see McIntyre Brown & Ferrier 1997).

If local providers are continuing to have a significant impact on equity in the above terms, then questions arise as to what local equity strategies are responsible. How exactly are VET providers addressing the needs of disadvantaged clientele: which groups are they 'recruiting' to courses, what support is provided, what links to local employment are provided and what 'pathway planning practices' are being developed (see McIntyre & Kimberley 1997)? What providers do about equity is an important but currently neglected question in comparison to other aspects of the equity research agenda.

This paper then focuses on providing some insights into what kinds of disadvantaged VET clients (or 'equity groups') are participating in TAFE in selected regions of Sydney and Melbourne.

METHODOLOGY

The methodology of postcode participation studies and the rationale for analysing VET participation in relation to urban disadvantage is discussed in some detail in a recent journal article (McIntyre 2000), so it is unnecessary to review it here. The application of the methodology is discussed in the earlier papers reporting the Sydney and Melbourne postcode studies (McIntyre 1998 and 1999, also web-published as RCVET Working Papers at www.rcvet.uts.edu.au/working.htm). Some reference will be made to these studies, since the current paper is essentially building on this earlier work by incorporating measures of disadvantage into the analysis.

The main principle is that VET client data for an area (usually postcode) is mapped on to a socio-economic profile of that locality using census data (currently packaged by the ABS with mapping software). Postcodes within a broad region differ in their socio-economic profile across a range of indicators such as educational qualifications, occupational groupings and household income. They differ also in the proportions of their populations that were counted in a given year as attending TAFE or ACE,

permitting participation rates to be calculated for postcodes, since a client's home postcode is collected at enrolment.

Here it is important to note some of the limitations of using both Census data based indexes and AVETMISS data in applying the SEIFA indexes in local equity analysis.

First, there are limitations to the census data. At the time of writing, the available data from the 1996 census of population is 'snapshot' data collected at June 1996 and as such is no longer current. The data used here is the basic census count, not the usual residents, a further source of approximation. The accuracy of the data (the degree of non-completion) particularly affects income and education, and these levels are themselves associated with socio-economic status (there is greater non-completion in poorer areas). The TAFE data may suggest patterns of participation that no longer hold, since it used data for the reference year of 1996 to ensure comparability with census data. (Participation rates calculate VET students as proportion of the adult population, using census counts).

Second, there are limitations to the AVETMISS data. Data quality is best for TAFE providers, but much less so for ACE providers where this is used, as in the Melbourne study (McIntyre 1999). Again, non-response is greater for employment and schooling data items. There are limitations inherent in the time of collection early in the course, so that this may, for example, inflate participation rates. Again, disadvantage is likely to have an impact on data quality in certain types of courses.

Third, there are limitations to the method itself. Area analysis is in its nature broad-brush, and goes only as far as developing some crude generalisations. It remains for follow-up research to do the fine-grained regional studies that are indicated by the general analysis. There is a great degree of complexity within an urban region such as Western Sydney (whose population is comparable to that of the capital cities in other Australian states). Then again, there is a limit to the complexity of the data that can be shown in the form of tables or maps. There is a high degree of reduction, both in geographic scale and the data items used (for example, in using an aggregated measure such as the proportion of adults holding a post-school qualification across two hundred postcodes).

The definition of 'disadvantage' adopted here needs to be noted. As discussed in the earlier paper on SEIFA Indexes, this is one of *socio-economic* disadvantage. The emphasis on socio-economic disadvantage is a corrective to the one-dimensional concept of 'target groups' in VET policy.

The rationale for this approach has been argued in McIntyre (2000) and it concerns the key confusion of VET policy between *socio-cultural group membership* and socio-economic disadvantage. Some socio-cultural factors make socio-economic disadvantage much more probable—Aboriginal Australians are much more likely to be socio-economically disadvantaged than any other single social or cultural group. A person may be of non-English speaking background, but that is only one factor in the probability of them being poor, without a job and lacking skills to compete in the labour market.

VET PARTICIPATION IN DISADVANTAGED SYDNEY REGIONS

Sydney regions

The urban regions that make up greater Sydney may be defined using the unit of statistical sub-divisions employed as part of the standard geographical classification system developed by the ABS. Figure 1 shows these regions and Table 1 their values for the five SEIFA indexes. As noted elsewhere, the analysis of regional trends needs a finer unit of analysis, either the local government area or the postcode.

The Sydney region extends west to include the Blue Mountains, north Gosford-Wyong and to the south, St George Sutherland and Outer South Western Sydney. These outlying regions are large areas of national park, state forest or rural holdings.

Table 1. Disadvantage in Sydney regions (statistical sub-divisions)

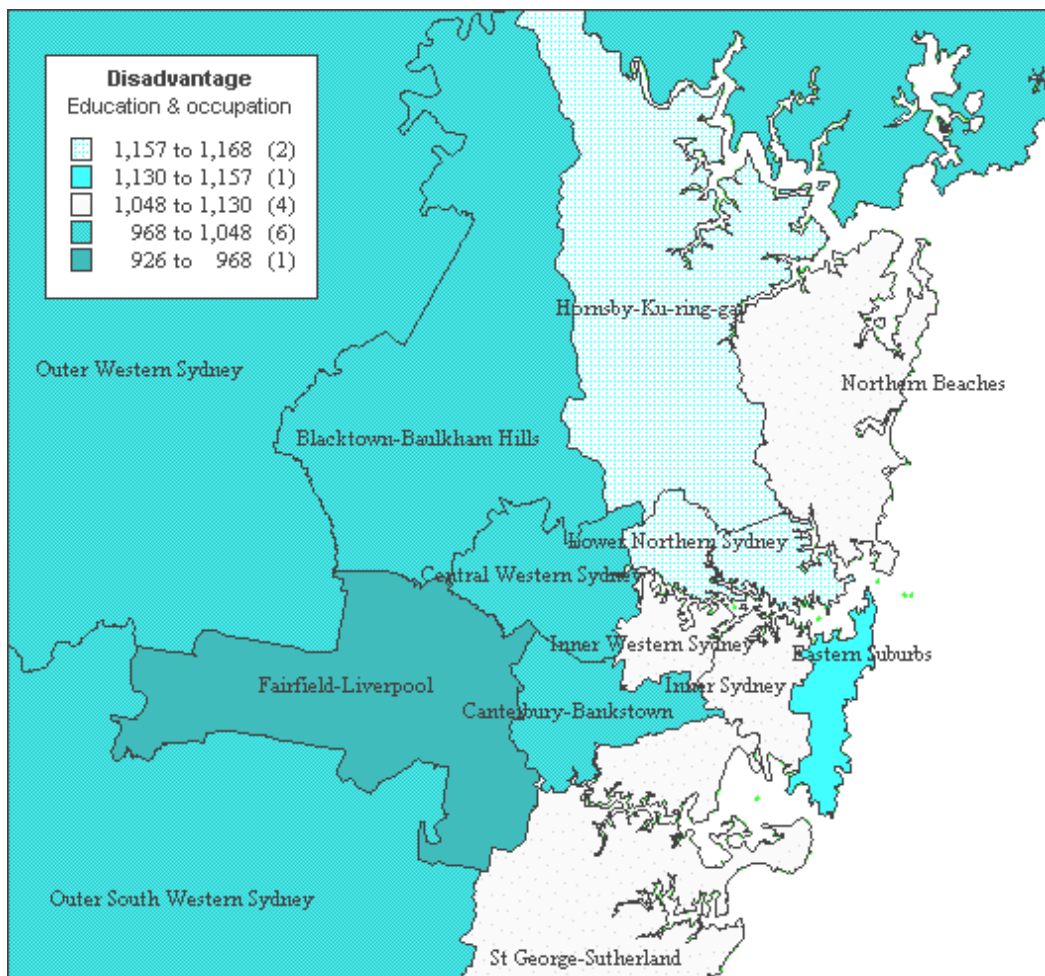
Statistical sub-division	Socio-Economic Index for Areas (SEIFA):				
	Disadvantage	Urban advantage	Rural advantage	Economic resources	Education & occupation
Inner Sydney	1000	1002	0	979	1082
Eastern Suburbs	1078	1070	0	1059	1131
St George-Sutherland	1056	1045	1213	1090	1049
Canterbury-Bankstown	960	947	0	982	968
Fairfield-Liverpool	925	929	1010	983	927
Outer South Western Sydney	987	949	1108	1026	972
Inner Western Sydney	1044	1040	0	1046	1081
Central Western Sydney	984	969	0	992	1000
Outer Western Sydney	1030	987	1103	1047	1010
Blacktown-Baulkham Hills	1019	1015	1115	1071	1009
Lower Northern Sydney	1115	1126	0	1111	1158
Hornsby-Kuring-gai	1146	1199	1162	1192	1167
Northern Beaches	1100	1091	1228	1130	1092
Gosford-Wyong	983	970	1106	997	973

Table 1 summarises the values for the Sydney regions for the five SEIFA indexes of advantage and disadvantage. These suggest the several socio-economic factors that are likely to affect VET participation and achievement. (Higher values denote relative advantage). Figure 1 maps these differences on the SEIFA index of educational and occupational disadvantage (lightest values most advantaged, darkest, most disadvantaged).

The most advantaged areas of Sydney are the Eastern Suburbs, Lower Northern Sydney, Hornsby-Kuring-gai and Northern Beaches. These areas have Australia's highest values on the indexes. The pattern in the inner city (e.g. Inner Sydney or Inner Western Sydney) reflects the steady gentrification of the older working class suburbs by more affluent and educated populations.

In contrast, western and south western Sydney are generally more disadvantaged than other areas of Sydney – for example, Canterbury-Bankstown, and Fairfield and Liverpool which has the highest levels of economic and educational disadvantage. (The degree of disadvantage may be defined in terms of ABS reference values. Fairfield-Liverpool’s value on some indexes is lower than that of 90% of the values for NSW). Outer Western Sydney is both ‘advantaged’ because of the rich rural holdings particularly around Camden and Campbelltown, yet disadvantaged in terms of the characteristics of many of the residents of their urban areas.

Figure 1. Disadvantage (SEIFA index) in Sydney statistical sub-divisions).



These regional differences are, of course very broad, and clearly, the values for a given area disguise great diversity across a region, which can be shown by a finer-grained analysis at the level of postcode or census collection district. In terms of VET participation and achievement, such variations are important — for example, where in a region there are concentrations of educationally disadvantaged people, with low skills levels, poor English or other factors that may disadvantage them in the labour market.

As emphasised in the first Working Paper on the SEIFA indexes, the ABS has generated different measures of ‘disadvantage’ from census data (ABS 1998). The differentiation of ‘economic’ and ‘educational-occupational’ factors in disadvantage is important for the analysis of TAFE participation, since traditional TAFE clientele tradespersons, for example, may have a high standard of living (in terms of household income and type of housing) yet relatively low levels of educational qualification. In assessing the degree of socio-economic disadvantage of VET clients, it is necessary to be aware of both dimensions.

VET participation

The analysis of postcode participation in Sydney postcodes (McIntyre 1998) used 1996 data for the sake of comparability with 1996 census data (enumerated population). Thus, the data do not reflect the current situation, especially in regard to levels of participation in the fast-growing outer suburban areas (e.g. in Western or South-Western Sydney). Though a good degree of change may have occurred, particularly due to new housing estates, current patterns are not expected to differ greatly.

This point raises the question of the stability of participation patterns over time. The topic is worthy of further research, since the local participation effect continues to be strong (NCVER 1999) despite continuous restructuring and rationalisation of public sector vocational education and training. Earlier work showed how the TAFE and ACE participation rates differ according to the socio-economic status of the postcode. Hence, there are good grounds for believing that the nature of such patterns reflects the socio-cultural preferences of VET clientele that are closely associated with educational and occupational characteristics. (Note: the Sydney data reported here excludes ACE enrolments, so the discussion will refer to TAFE participation not VET participation).

Table 2 shows the data for TAFE clients residing in some 235 greater Sydney postcodes in 1996 (see McIntyre 1998). The postcodes are grouped by sextile according to their TAFE participation rate together with three client indicators. (Full data, including the values of disadvantaged indexes, is given in Appendix 1).

Table 2. Mean values: disadvantage and VET participation, Sydney postcodes, 1996

Sextile	Total partps	TAFE	Part Rate (a)	Emply % (b)	Yr 10 % (c)	ATSI	NESB
1	50,944	1306	7.9	46.1	34.4	2.1	51.1
2	40,468	1038	6.9	54.2	34.1	3.0	36.8
3	25,341	618	7.0	57.7	33.8	2.4	27.5
4	29,369	734	6.9	60.6	32.4	2.2	21.1
5	20,944	537	6.4	62.7	29.4	1.8	15.5
6	19,810	495	4.9	62.2	22.0	1.7	19.0
All	186,876	785	6.7	57.3	31.0	2.2	28.4

Notes. Sextiles grouped by Index of Socio-Economic Disadvantage. (a) Participation rate is the number of 1996 TAFE students from the postcode as a proportion of persons aged 15 years and over. (b) Students self-employed or employed part-time or full-time. (c) Students with year 10 or less prior schooling as a proportion of all students. The last two rates ignore the 'not stated' numbers in each case.

It is apparent that:

- the greatest numbers of TAFE participants are in the most disadvantaged postcodes
- the relationship between disadvantage and participation is apparent mainly at the extremes of the most disadvantaged and most advantaged postcodes.
- there are, on average, proportionally more clients not employed and with Year 10 or less in the most disadvantaged postcodes, and these proportions decrease with increasing advantage

Table 3 shows the 40 most disadvantaged postcodes, those with the lowest values on the Index of Socio-Economic Disadvantage. (Other indexes would not materially change the list).

Figure 2 (from McIntyre 1998) maps TAFE participation on to the variations of socio-economic disadvantage in Sydney postcodes. This map shows only part of the regions of Figure 1, and is to a smaller scale showing the more central postcodes in greater Sydney. (Not all postcodes are shown for the sake of clarity).

It is clear that the most disadvantaged postcodes in the west and south-western suburbs have quite high participation rates, though participation is also high in less disadvantaged areas. Some, but by no means all postcodes with high socio-economic advantage in the northern and eastern suburbs have notably low participation rates.

Figure 2. Disadvantage and VET participation in Sydney regions, 1996

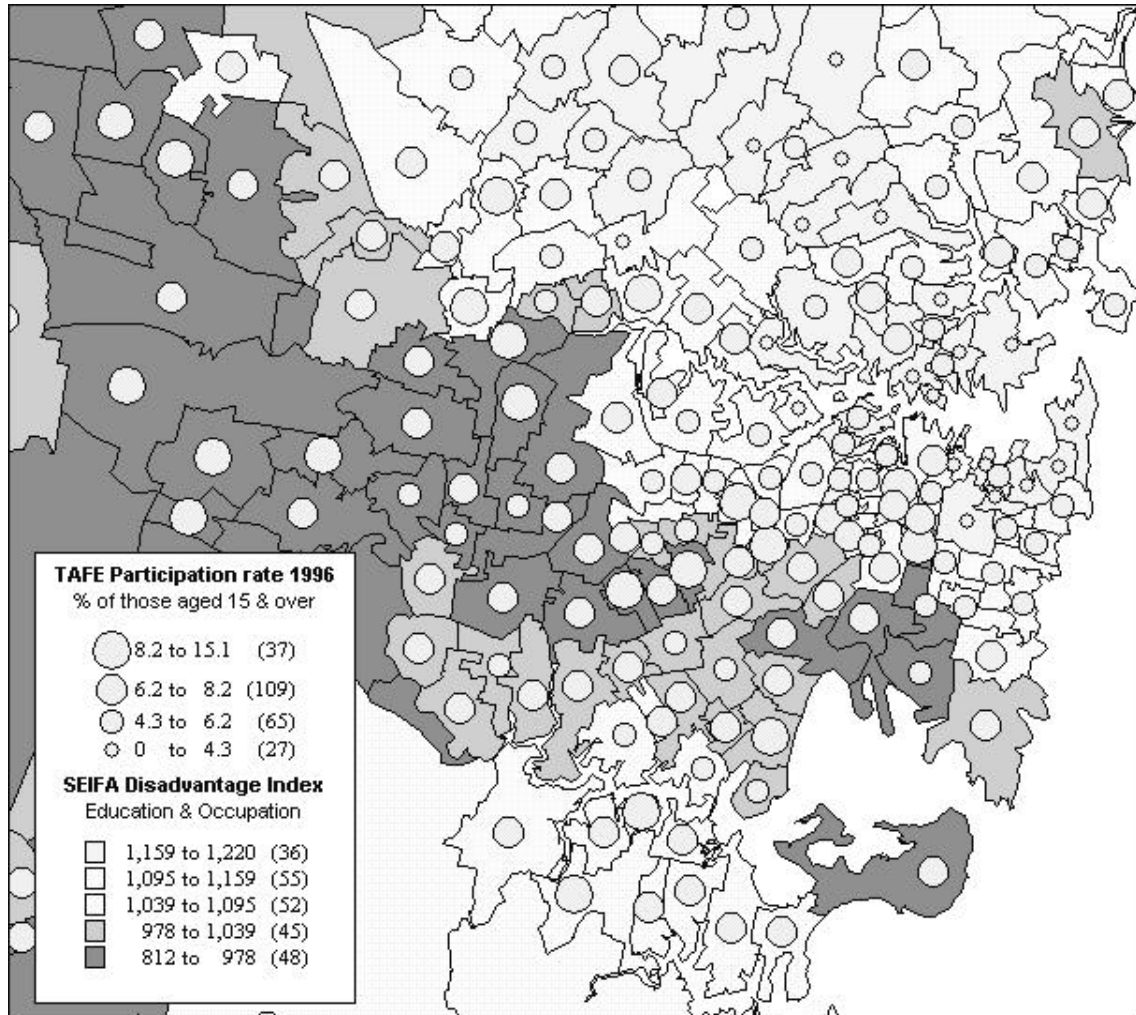


Table 3. VET participation in Sydneys' most disadvantaged postcodes

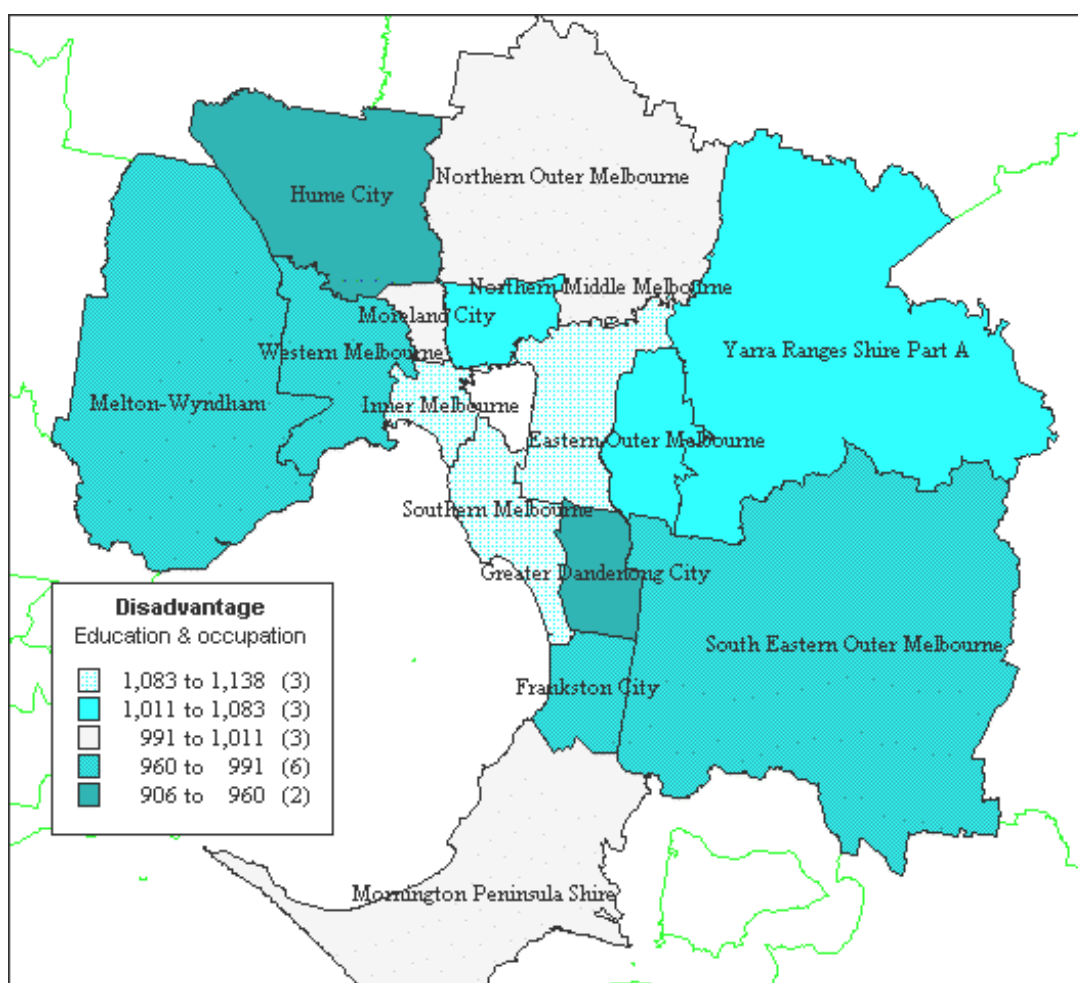
Postcode	SEIFA indexes:			TAFE participants					
	DIS	ERS	EDO	n	Part Rate %	Emply %	Yr 10 or less %	ATSI %	NESB %
2559 Blairmount	659	762	812	176	6.9	23.9	57.4	2.8	43.2
2017 Waterloo	719	754	934	422	9.0	30.1	46.0	11.8	49.1
2163 Villawood	795	855	878	633	6.1	34.6	34.4	0.8	65.9
2166 Cabramatta	829	910	870	3224	7.9	34.9	32.7	0.8	73.9
2770 Mt Druitt	854	920	880	3005	7.6	43.9	44.7	4.6	30.4
2564 Macquarie Fields	856	912	897	892	9.8	40.5	49.3	4.1	26.5
2177 Bonnyrigg	885	976	915	989	9.8	40.0	34.5	0.5	66.4
2168 Miller	891	967	903	2079	8.8	39.8	38.0	4.0	47.3
2016 Redfern	899	901	1046	601	6.5	42.9	30.4	5.8	50.4
2165 Fairfield	900	945	904	2460	9.9	39.2	29.8	0.9	68.5
2195 Lakemba	915	898	933	1427	8.5	41.6	22.6	1.4	73.5
2144 Auburn	919	929	938	2065	10.9	37.9	25.3	0.5	73.1
2760 St Marys	923	969	905	1359	7.4	54.5	45.3	2.6	26.2
2142 Granville	923	926	958	1334	9.4	45.4	31.2	1.6	61.5
2194 Campsie	928	914	946	1446	9.5	45.0	19.8	1.0	75.0
2204 Marrickville	931	945	988	1686	7.4	48.0	27.6	2.3	64.7
2200 Bankstown	932	958	952	1923	8.0	48.0	27.8	0.6	66.1
2767 Doonside	936	967	950	906	8.3	50.9	37.9	2.9	42.2
2196 Punchbowl	941	965	950	1614	7.0	48.3	26.5	1.0	65.2
2161 Guildford	943	971	945	1357	7.0	52.9	35.4	1.0	51.5
2192 Belmore	944	948	947	763	6.7	49.0	25.7	0.7	71.0
2018 Rosebery	944	973	965	588	5.4	48.6	26.9	0.9	68.0
2141 Lidcombe	946	972	958	1551	9.1	43.7	25.4	0.8	57.5
2162 Chester Hill	948	974	953	647	7.0	53.5	39.7	0.8	44.0
2143 Regents Park	952	984	966	339	5.9	50.7	34.2	1.5	43.4
2160 Merrylands	953	967	960	1638	7.9	54.9	33.3	0.9	55.9
2170 Liverpool	955	988	953	4728	8.4	46.1	34.2	1.7	44.4
2190 Greenacre	957	975	966	1042	6.7	53.6	32.4	0.5	59.7
2199 Yagoona	957	1001	955	657	7.0	52.4	32.6	0.8	50.7
2197 Bass hill	957	969	962	364	5.7	56.3	35.7	1.4	38.7
2044 St Peters	959	993	983	427	7.3	52.7	29.3	2.6	46.1
2164 Smithfield	964	1021	933	1448	8.6	50.3	40.1	0.3	51.7
2775 Wisemans Ferry	967	943	965	67	9.0	46.3	52.2	7.5	7.5
2205 Arncliffe	968	1007	975	695	6.6	50.4	32.1	0.7	60.0
2566 Minto	970	1009	960	1455	8.0	48.2	44.9	3.3	26.3
2007 Broadway	970	891	1109	276	10.0	33.3	13.0	1.8	46.7
2115 Ermington	972	988	996	443	8.0	56.7	39.7	2.5	25.5
2560 Campbelltown	973	1017	966	3718	7.7	52.7	42.3	2.5	19.2
2020 Mascot	974	1007	961	500	7.4	57.0	29.8	1.0	55.6
2019 Botany	974	1010	960	315	5.4	62.2	35.6	1.6	41.0

VET PARTICIPATION IN DISADVANTAGED MELBOURNE REGIONS

Like Sydney, disadvantage in greater Melbourne is concentrated in the outer suburban areas. Areas that are more affluent split the poorer western suburbs from the poorer south east.

The most advantaged postcodes run from the city to the east and north-east, and down through the nearer bayside suburbs. Figure 3 shows the broad pattern revealed when the Index of Education and Occupational Disadvantage is mapped by statistical subdivision. Hume City in the north west and Greater Dandenong have the most extreme values on this indicator. However, a fine breakdown by postcode reveals a more complex pattern as well as a greater concentration in certain localities.

Figure 3. Disadvantage in Melbourne statistical sub-divisions



A different map could be created by mapping another criterion of disadvantage, such as economic resource. Indeed, Table 4 shows that there is a degree of discrepancy between this and the values of the index of Economic Resources for the disadvantaged regions. Dandenong and Moreland have the lowest levels of Economic Resource, together with Hopkins and Glenelg, while Hume City is notably higher. On the other

hand, Inner Melbourne has markedly high educational levels but low economic resources. (There are various explanations for such discrepancies. for example, these inner city areas contain a mix of educated professionals and older residents on low incomes).

Table 4. Disadvantage index values for Melbourne regions

Statistical sub-division	Socio-Economic Index for Areas (SEIFA):				
	Disadvantage	Urban advantage	Rural advantage	Economic resources	Education & occup'n
Inner Melbourne	1031	1052	0	976	1138
Western Melbourne	962	969	1035	993	967
Melton-Wyndham	1019	960	1040	1037	976
Moreland City	958	969	0	966	991
Northern Middle Melbourne	999	1005	0	1004	1022
Hume City	976	943	1092	1022	942
Northern Outer Melbourne	1033	998	1170	1063	996
Eastern Middle Melbourne	1073	1093	1193	1085	1083
Eastern Outer Melbourne	1058	1025	1156	1069	1030
Yarra Ranges Shire Part A	1047	1002	1107	1048	1011
Southern Melbourne	1069	1068	0	1058	1086
Greater Dandenong City	921	922	945	965	907
South Eastern Outer Melbourne	1019	957	1063	1041	966
Frankston City	1005	968	1124	1017	978
Mornington Peninsula Shire	1011	995	1125	1017	992
Hopkins	1006	971	961	969	974
Glenelg	994	958	975	966	961

As stated previously, these regional differences obscure the more diverse picture that appears at the postcode level or finer levels of analysis, and the picture varies according to whether the general index of socio-economic disadvantage is used, or whether the more specific 'economic' or educational' measures are used to map disadvantage across Melbourne (see Figure 5 showing general disadvantage mapped by postcode).

VET participation

Some 229 Melbourne postcodes were grouped by sextile, according to their value on the Index of Socio-economic Disadvantage. (For a small number of postcodes, both census data and VET data was not available).

The average values for the sextiles, ranging from most disadvantaged to most advantaged, is shown in Table 5. The values of three indexes are given, together with the number of TAFE participants (TAFE), the TAFE participation rate, the

proportion of TAFE students employed (TAFE employ) and the proportion with Year 10 or less prior schooling (Low school).

The earlier Melbourne paper made some comparisons, albeit very general, between TAFE and ACE participation in postcodes and its relation to socio-economic levels as measured by qualifications and household income measures in Melbourne postcodes. NSW and Victoria are the two states with well-developed ACE systems returning statistics to the national collection.

The table therefore also includes the average of ACE participants in the sextile and the average TAFE-ACE ratio. The latter was calculated for each postcode and represents the number of ACE participants per TAFE participant – a measure of the relative size of the ACE clientele to the TAFE clientele coming from that postcode. (Unfortunately it is not possible to develop reliable measures of ACE participants' schooling and employment levels due to the typically high levels of non-response for these key data items).

As with the NSW analysis, this approach is highly reductive of the values of the individual postcode data (which is given for all 229 postcodes in Appendix 2). The range within the sextile group can be quite considerable. See Table 6 for a listing of the most disadvantaged postcodes.

Table 5 . Disadvantage and VET participation, Melbourne postcodes by sextile, 1996

Sextile	Total TAFE partps	Average TAFE partps	TAFE Part rate (a)	Employ (b) %	Yr 10 or less % (c)	Total ACE partps	Average ACE partps	TAFE-ACE Ratio
S1	51,380	1427.2	9.7	49.4	30.2	17,080	474.4	0.40
S2	41,082	1081.1	8.8	58.5	28.1	16,170	425.5	0.44
S3	30,389	799.7	8.4	56.0	29.1	12,915	339.9	0.52
S4	29,061	764.8	8.9	56.0	26.5	14,374	378.3	0.54
S5	33,140	872.1	7.6	53.1	20.5	19,600	515.8	0.75
S6	19,960	486.8	6.8	51.2	18.5	16,206	395.3	0.93
All	205,012	895.2	8.3	54.1	25.4	96,345	420.7	0.60

Notes. (a) Participation rate is the number of 1996 TAFE students from the postcode as a proportion of persons aged 15 years and over. (b) Students self-employed or employed part-time or full-time. (c) Students with year 10 or less prior schooling as a proportion of all students. The last two rates ignore the 'not stated' numbers in each case.

These limits considered, there are some important conclusions that may be drawn from this data:

- The *gross number* of TAFE participants and the average per sextile, is greatest in the more disadvantage postcodes, and this is somewhat less true of ACE

- There are marginally fewer *employed* TAFE participants in the most disadvantaged postcode sextile (S1) but this does not differ very much across the groups
- The proportion of those TAFE participants with *low schooling* (year 10 or less) is higher, in the more disadvantaged sextiles, falling to less than 20% in the more advantaged
- The average number of ACE clients relative to TAFE clients increases with increasing advantage, as represented by the TAFE-ACE ratio (Figure 4).

Figure 4. Disadvantaged postcodes by sextile and TAFE and ACE participation

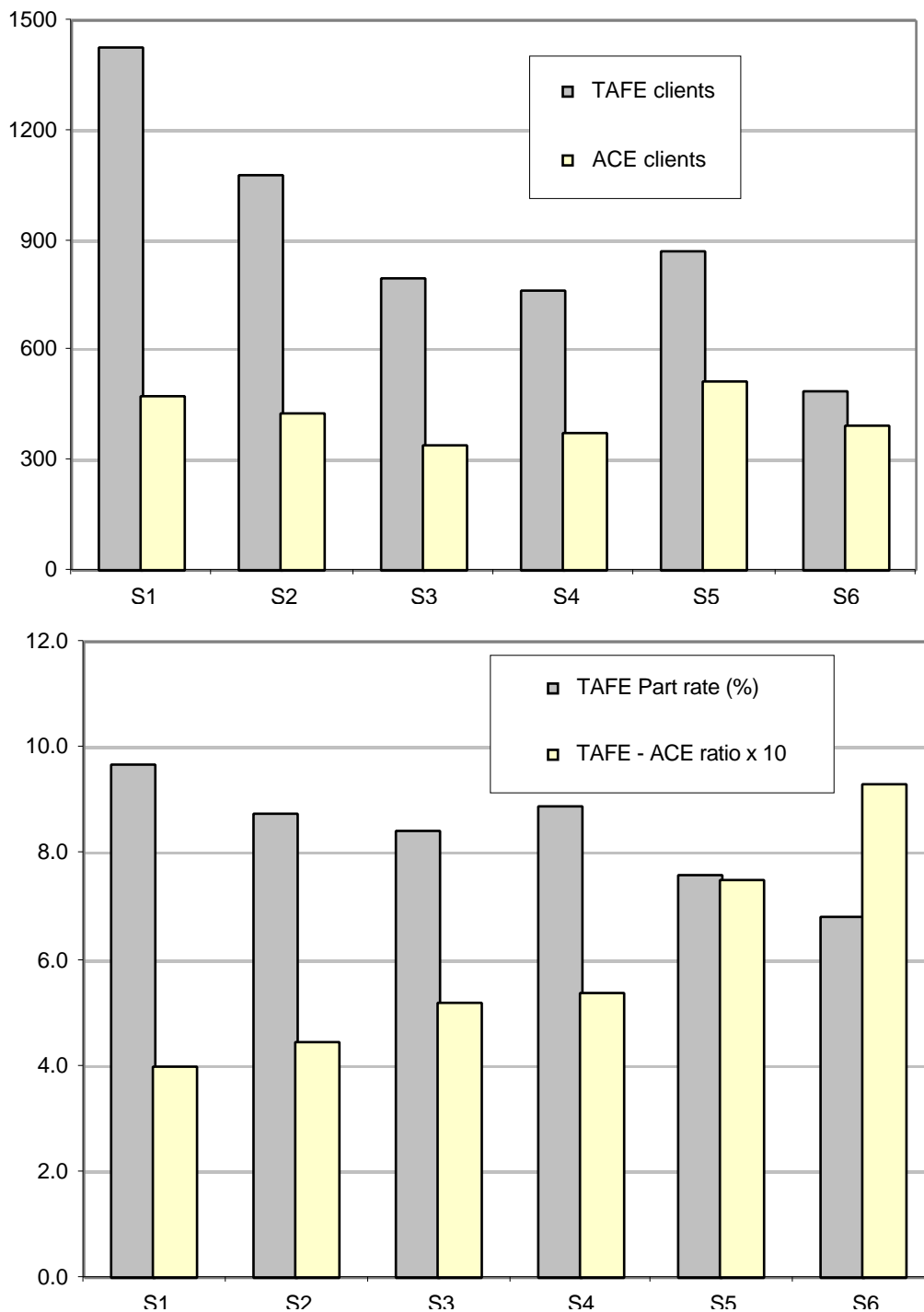


Figure 5. Disadvantaged Melbourne postcodes

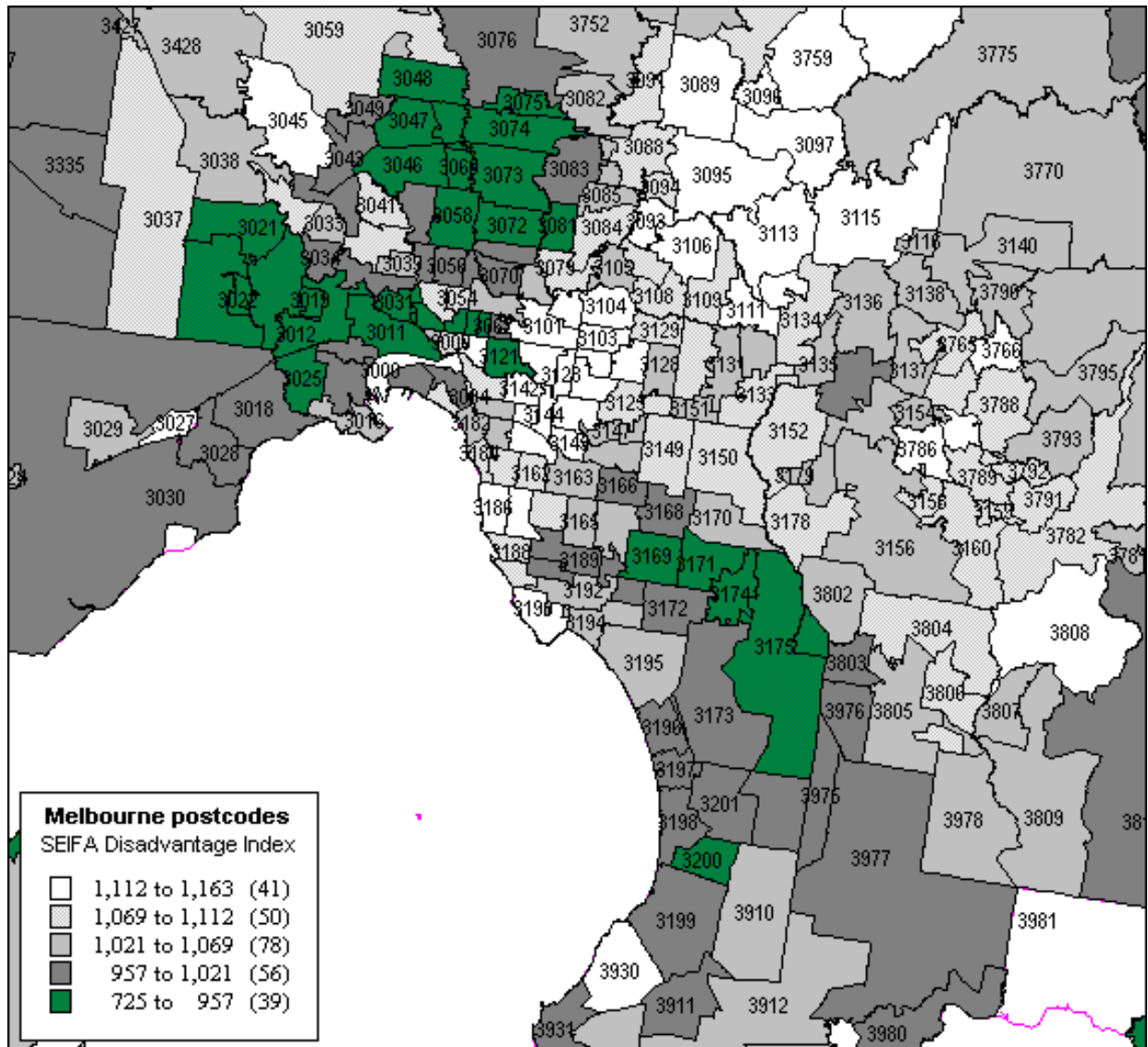


Table 6. VET participation in Melbourne's disadvantaged postcodes

Postcode		SEIFA indexes:			VET participants					
		DIS	ERS	EDO	TAFE n	Part Rate	TAFE Empl %	Yr 10 %	ACE n	TAFE - ACE
3019	Robinson	726	807	825	468	10.2	42.7	32.1	149	0.32
3177	Doveton	861	850	923	720	9.2	50.6	35.4	218	0.30
3171	Springvale	869	873	935	1521	9.6	42.2	24.3	615	0.40
3081	Heidelberg Nth	869	930	891	740	7.2	48.4	34.8	294	0.40
3020	Sunshine	879	882	945	2502	9.7	51.3	30.1	740	0.30
3025	Altona North	888	884	959	1040	9.4	58.9	38.2	347	0.33
3012	West Footscray	888	928	924	1816	10.9	57.5	43.5	720	0.40
3200	Frankston North	895	874	949	479	6.7	58.3	36.5	111	0.23
3022	Ardeer	896	871	986	407	6.1	47.4	28.8	80	0.20
3060	Fawkner	897	893	961	706	8.4	50.6	35.2	155	0.22
3048	Coolaroo	898	868	965	1225	10.2	57.7	33.5	303	0.25
3061	Campbellfield	900	877	967	511	12.2	62.1	29.5	91	0.18
3223	Port Arlington	906	896	959	183	5.5	50.0	34.9	133	0.73
3073	Reservoir	913	919	955	2684	7.3	51.4	27.6	501	0.19
3021	St Albans	918	893	978	3939	9.6	52.9	28.5	845	0.21
3175	Dandenong	918	911	951	4263	11.8	48.7	28.1	1035	0.24
3074	Thomastown	919	884	988	1592	8.7	47.3	30.4	259	0.16
3072	Preston	921	953	935	2018	8.7	46.9	25.6	493	0.24
3075	Lalor	925	888	991	1383	7.9	51.6	31.3	227	0.16
3174	Noble park	925	912	954	3258	13.2	57.9	25.8	1072	0.33
3023	Burnside	937	895	991	1006	8.9	54.7	31.3	320	0.32
3046	Glenroy	939	933	975	1781	7.3	60.4	31.8	550	0.31
3169	Clarinda	941	926	982	1457	9.3	47.6	22.7	289	0.20
3173	Keysborough	976	925	1035	1436	10.3	59.5	23.9	567	0.39
3975	Lyndhurst	982	907	1027	14	7.6	85.7		9	0.64
3028	Laverton	985	938	1020	1538	9.1	62.3	36.8	343	0.22
3338	Melton south	985	944	1011	791	10.5	64.0	40.9	250	0.32
3202	Heatherton	986	943	1034	57	3.6	58.2	26.2	17	0.30
3049	Attwood	991	950	1037	529	10.0	64.1	31.1	102	0.19
3980	Tooradin	992	924	1033	165	11.1	59.4	49.6	86	0.52
3977	Cranbourne	993	929	1017	2179	9.6	62.2	37.1	580	0.27
3810	Pakenham	1003	944	1019	890	10.1	69.0	37.8	327	0.37
3976	Hampton Park	1006	939	1036	1257	10.0	62.8	32.3	442	0.35
3076	Epping	1006	942	1033	994	7.6	58.2	32.6	120	0.12
3803	Hallam	1010	951	1053	626	10.0	60.5	26.6	185	0.30
3201	Carrum	1017	951	1021	774	8.7	65.2	36.2	102	0.13
3064	Mickleham	1024	951	1057	1024	8.7	73.3	35.7	201	0.20

CONCLUSION

This paper has reported further work on regional variations in VET participation that may be influenced by urban disadvantage as measured by the Socio-Economic Indexes for Areas (SEIFA indexes). The background to this work is the need for VET policy to develop more robust concepts of equity strategy that take greater account of local and regional differences.

There are limitations to the analysis that are due to the lack of currency of the available census data from 1996, and the differential effects of 'disadvantage' upon its accuracy and completeness—non-response rates are higher from more disadvantaged clients. The analysis also barely ventures beyond the analysis of TAFE clientele, for which the data is most complete. It is possible to make comparisons with ACE providers, but not the private sector, and even then only for Victoria and NSW, and that data is only reliable at the level of counts for postcodes. The high non-response rates in ACE data for employment and schooling do not support client analysis at the postcode level. Hence, despite the rhetoric of a training market and the diversification of provision, it appears that we are some way short of being able to perform a comparative analysis of the clienteles of public, community and private providers within a region. The methodology is thus broadly indicative rather than definitive.

It is also important not to exaggerate the significance of socio-economic factors in participation. The effects of disadvantage (and advantage) is more evident at the extremes of the social distribution of economic resources and educational opportunities - the most advantaged suburbs also have notably few VET participants and low rates of participation. There are many areas with average participation rates that show a wide range of variation on socio-economic indicators and the disadvantage indexes.

A further limitation of the analysis is that it has not gone as far as assessing the outcomes of participation in the disadvantaged areas studied. There is some evidence from concurrent work on West Australian data (McIntyre, Ball, Panh and Freeland 2000) that postcode disadvantage (as measured by SEIFA) is not related to module load completion rate. One explanation for this is that module completion is a crude measure of achievement, albeit one of the few that is available.

The paper has shown, together with earlier work, that the most disadvantaged regions of Sydney and Melbourne have high rates of participation in TAFE. It must be the case that TAFE providers are performing a significant role in addressing skill deficits, as well as achieving broader educational goals for many adult residents in these areas. As suggested above, it is an open question as to what role community (ACE) and private providers play in these areas. For ACE, there are continuing documentation of the role of providers in changing lives and transforming communities (Falk Golding and Ballati, 2000) but this falls well short of the comprehensive analysis of ACE clientele in disadvantaged localities using the available client data collected from AVETMISS.

The glimpses of ACE clientele by postcode given in Appendix 1 cry out for further analysis.

The evidence supports the contention that VET policy should give greater attention to addressing equity issues in disadvantaged urban regions precisely because this is where large numbers of people do participate in VET. One possible implication is that this socio-economic distribution of VET participation is likely to be important for 'marketing' VET to different groups of learners, particularly disaffected groups likely to be excluded from the system. Marketing must be regarded as having a geographic dimension.

Another implication of the paper is that VET policy needs to correct the over-emphasis on 'regional differences' as referring simply to non-metropolitan regions. While comparisons between rural and urban areas have not been made here, the socio-economic variations within Sydney and Melbourne and indeed other capital cities are marked, and deserve attention in their own right.

There is a need for more detailed studies of VET participation and achievement in these regions. Such studies could first continue the work of examining the strategic directions and activity and outcomes achieved by regional TAFE Institutes and other providers (see McIntyre, Volkoff and Egg 2000). However, it is also important to recognise, as Falk and others have shown for the non-metropolitan regions of Australia, that VET is mediated by non-formal learning, especially through local networks and other forms of community agency.

Therefore, a future study might begin to analyse what positive social influences within these regions may be at work in promoting formal participation in VET. It may be that strong informal networks among cultural groups do much to pave the way for engagement by adults with the VET system, an engagement that is reflected in relatively high rates of disadvantaged participation.

For this reason, it will be useful for a future study to examine such activity under the rubric of 'learning communities' following the international policy interest in promoting adult learning in areas where residents have had negative experiences of schooling and perceive themselves to be socially excluded. Such work will have interesting things to say about the wider social role of VET and strategies to increase participation by excluded groups. It may be that there are many social factors that facilitate the formation of 'learning communities' in these areas.

Note: This paper has been informed by work in progress for the WA Department of Training & Employment on the development of an index of socio-economic status for application to VET policy in that State (McIntyre, Ball, Panh and Freeland, 2001).

BIBLIOGRAPHY

- ABS 1998a, *Education and Training Experience, Australia 1997*, Cat No. 6278.0, Australian Bureau of Statistics, Canberra.
- ABS 1998b, *Socio-economic indexes for areas (SEIFA)*. Information paper, 1996 Census of Population and Housing, Cat No 2039, Australian Bureau of Statistics, Canberra.
- ANTA 1996, *Equity 2001: Strategies to achieve access and equity in vocational education and training for the new millennium*. ANTA, Brisbane.
- ANTA 1999, *Achieving equitable outcomes*. Supporting document for Bridge to the Future, ANTA, Brisbane.
- Falk, I, Golding, B and Balatti, J. (2000). Building communities ... Adult Community and Further Education Board of Victoria
- Golding, B and Volkoff, V 1998 Participation in VET in Australia: Different drives same needs, in F. Ferrier & D. Anderson (eds) *Different drums one beat? Economic and social goals in education and training*, NCVET and CEET, Adelaide.
- King, C 1987 Socio-economic status, educational equity and TAFE participation in the Sydney metropolitan area: preliminary findings, NSW TAFE Commission Policy Unit, Sydney.
- McIntyre, J, Volkoff, V and Egg, M, in progress. Beyond participation: Client group, regional influences and provider strategies in equity outcomes. Research funded by the National Research and Evaluation program. Adelaide: NCVET.
- McIntyre, J 1998 Equity and local participation in VET: Some preliminary findings in Sydney postcodes, in *Quality and diversity in VET research*, Proceedings of the second annual conference of the Australian Vocational Education and Training Research Association, Sydney, pp. 246-253.
- McIntyre, J, 1999 A further local participation study: TAFE and ACE in Melbourne postcodes, In *Future Research, Research Futures*, Proceedings of the third annual conference of the Australian Vocational Education and Training Research Association. Sydney, AVETRA.
- McIntyre, J 2000 Equity and local participation in VET: policy critique and research directions. *ANZ Journal of Vocational Education Research*, 8(1): 31-52.
- McIntyre, J, Ball, K, Panh, O & Freeland, J 2000. Developing an index of socio-economic status for application to VET policy. Research tender No 757. Perth, WA Department of Training & Employment.
- Powles, M & Anderson, D 1996 Participation and access in TAFE: Social service or economic utility? *Australian and New Zealand Journal of Vocational Education Research*, 4(1):97-129.
- Powles, M 1990a Access and equity implications of fees in TAFE, in Training costs of award restructuring, I Deveson (chair) *Report of the Training Costs Review Committee*, AGPS, Canberra, pp. 81-150.
- Powles M 1990b *Participation and access in TAFE*, NCVET, Adelaide.

Volkoff, V & Golding, B 1998, Drowning not waving: equity target groups in the marketplace, in *VET Research: Influencing Policy and Practice*, eds J McIntyre & M Barrett, Proceedings of the Annual Conference of the Australian Vocational Education and Training Association, Sydney.