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**AUSTRALIAN CENTRE FOR INDUSTRIAL
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(ACIRRT)**

***WOMEN & TRAINING:
EDUCATION IN THE WORKFORCE***

LITERATURE REVIEW

Martha Knox & Richard Pickersgill

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Employment and Training**

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PREFACE

This literature review originated in a research project to investigate women and training undertaken by the Australian Centre for Industrial Relations Research and Teaching for the Women's Bureau under the Women's Research Employment Initiatives Program (WREIP) program.

The project was to investigate issues involving women and training through case studies of the banking and finance industries. The project involved an initial literature search which was intended to assist the development of interview protocols for the case studies. In the course of the literature search it became apparent that there was no general review available of the area of training for women.

In order to provide such a review the Women's Bureau requested ACIRRT to expand the reference lists and bibliographical material relating to the Banking and Finance sectors into a broader review of the issues of women and training. This working paper is the preliminary result. A separate industry paper is being prepared on the Banking and Finance Industry by Dr Jim Kitay of the Department of Industrial Relations, University of Sydney on behalf of ACIRRT.

The outcomes of the project itself, the case studies, will present a snapshot of training for women in the workplace for which the literature search and the industry paper form part of the research background. The final Report for this project will contain an updated and revised version of the Working Paper.

1 SCOPE AND DISCUSSION OF SOURCES

The Women's Bureau requested that a literature review be conducted which would consolidate the existing statistics on training and women and involve a review of the issues involving women and training in organisations by examining:

- * the pattern of training for women;
- * the factors that encourage the development of effective training strategies for women workers;
- * the management practices and policies which inhibit the delivery of effective training for women workers.

Specifically therefore, the review is concerned with issues surrounding "training and women" rather than "education and women". Although the distinction between "education" and "training" is, with respect to the development of national strategies for overall skill formation in the post-compulsory sector, somewhat blurred¹ and is held by at least some industry parties to be a false dichotomy (MTIA 1990), for the purpose of this review "training" has been limited to a review of skill formation activities undertaken by women in relation to their participation in paid employment.

This limitation, although necessary given the scope of the project, has important consequences.

First, it eliminates a large body of literature relating to subject choice - and subsequent career choice - made during schooling. It is apparent the results of decisions made during both pre- and post-compulsory education and training will have a major impact on an individual's final income as well as a more general effect on the production and reproduction of gender segmented labour markets. This is true irrespective of whether the cause of such segmentation is explained by sociological theories of status ascription or by explanations based on returns on investments made by families and/or individuals as explained by human capital theory². In the former case gender and status are necessarily linked while in the latter the existence of segmentation (determined by

1 See for example. Education and Skills Formation Council, *The Australian Vocational Certificate Training System*, National Board of Employment Education and Training, Canberra, March 1992. (The Carmichael Report).

2 See F L Jones, *Sex and Ethnicity in the Australian Labour Market*, Occasional Paper, Australian Bureau of Statistics, Canberra 1992, ch.1 for an accessible short account of the different theoretical approaches. See J. Mincer and S. Polochek, "Family Investment in Human Capital: The Earnings of Women", *Journal of Political Economy*, 82(2) 1974, pp.76-106 for a foundation Human Capital Theory perspective

previous choices and the distribution of attributes) provides the framework within which future choices on investment by individuals and families are "rationally" made. That this initial choice has long term effects can be derived from Daly (1986), Gregory, Daly et al (1989) who note that in the Australian labour market there is strong complementarity between "education" and "training", unlike some overseas markets where they may be substitute activities. This complementarity has been confirmed by Miller's (1991) most recent secondary analyses of workforce training data where it is noted that previous qualifications are a strong predictor of further access to training.

Second, it eliminates from consideration training (both formal and informal) for the range of unpaid work undertaken by women performing household duties and/or a variety of caring roles in the community. Notwithstanding the economic and social contributions this makes, and the considerable cost this work would incur if money wages were paid, consideration of this issue is limited to the specific question of the transferability and recognition of skills in paid employment³.

Finally, with few exceptions, the review encompasses only material from the mid 1980's. This particularly true of government policy documents. This periodisation is somewhat arbitrary as there is a long history in dating from the colonial period of reviews into education, training (especially apprenticeship training) and (what was previously termed) "manpower needs". This is a reflection of the increased emphasis on education and training which, for convenience, may be approximately dated from the 1985 *Report of the Committee of Enquiry into Labour Market Programs* (Kirby Report). The proposals in Kirby to extend indentured skills training from the basically male dominated areas of "skilled trade" apprenticeships into non-apprenticable areas through the Australian Traineeship Scheme (ATS) represent an important change in the approach to vocational training. Although the ATS has not attracted the originally expected numbers the inclusion of female dominated occupations in its scope reflect an (as yet unrealized) potential to extend entry level training beyond traditional boundaries (Schofield 1985). This, coupled with the proposed linkage between skills acquisition and pay outcomes through award and industry restructuring, which gained momentum following the publication of the ACTU/TDC's (1987) *Australia Reconstructed* makes the mid 1980's a practical cut-off point.

Sources

A wide range of English-language bibliographic sources were consulted. The increased availability of electronic search methods assisted this process and data bases consulted

3 For a succinct overview of these issues and an analysis of policy implications see Sally Washington, "Women at Work", *OECD Observer*, No. 176, 1992, pp.28-31

include those for education and training; organisational behaviour; psychological literature (especially learning theories) and management sources (especially for discrimination and selection processes). The Commonwealth Department of Education Employment and Training's (DEET) Canberra Library also compiles an internal current awareness listing of education and training matters which was consulted with the assistance of the DEET library staff. The Australian Bureau of Statistics has either released, or is in the process of releasing, a range of statistical publications intended to support the increased national focus on training. These are detailed in *ABS Training Statistics Program*, ABS, Canberra, November 1992.

Discussion of the Sources

Some general comments are required on the nature of the source material. Although "training" is usually subsumed within the broader term "education" in most bibliographies and thesauri, the vast majority of work in the area is focussed on the school system. This is particularly true of Australian educational sources which tend to divide around the role and career opportunities for female school teachers and academics or investigate opportunities and/or pressures on the socialisation of female school or tertiary students. No doubt this represents the occupations and interests of the individual authors as well as the dominance in the field of "education" rather than "training" writing. With the exception of policy statements and initiatives to assist female access to traditional male dominated skilled trades (Eg. Pocock 1988; VEETAC November 1991) the literature on women and training, particularly the earliest material, focuses on reasons for the structural position of women in the labour market through general industry case studies (Eg; Game and Pringle 1983; O'Donnell 1984; Williams 1988; Windsor 1988; Women's Bureau 1989). While these studies are valuable in building on the equal pay and EEO work of the 1970's and in providing theoretical insights and empirical descriptions of the operation of the labour market, (particularly those informed by labour process and market segmentation theories), their treatment of training and women is necessarily peripheral to their investigation of women and labour market access.

The neglect in the literature of women and training can be seen as a specific example of the general neglect of training. There are few outlets for specialist training articles in Australian educational journals and the majority of useful guide-lines for the development and delivery of training material have been developed internally by the various state TAFE systems (Eg; Ellis 1982) or the range of research material developed by TAFE National Research and Development Centre in Adelaide. All suffer (understandably) from an emphasis on institutional (public) providers and neglect the range of formal and informal training conducted in industry.

The classical general texts on training have traditionally been sourced overseas and although there is a vast literature on the sociology of education, those which bring a general social perspective to adult education and trainings are rare. In general overseas training literature, and particularly North American literature, reflects occupational structures and in-house credentialing which reflects internal labour markets (Eg; Phillips 1991) rather than the Australian situation of publicly funded entry level training instruction and externally recognised and publicly certified credentials. This major difference in industry structure has been noted by Australian industrial tribunals in areas such as apprenticeship training, EEO and comparative worth (McCallum, Pittard & Smith 1990, chapter 12). The caution of industrial courts in applying doctrines "... from Canada, the United States and the United Kingdom (which) have very different industrial relations backgrounds from our own...and in which different approaches have been taken in these different countries " (Ibid p.469) should also cause reservations about the uncritical acceptance of overseas training models to Australia. This point has also been emphasised by Bray (1993) in an international comparison of models of collective bargaining, an area which is of increasing significance to Australia with the shift to enterprise level bargaining which may, or may not, include the best interests of all categories of workers within the enterprise.

Three recent Australian texts on training (Fuller, Oxley and Hayton 1988; Field 1990; Smith 1992) were intended for industry as well as TAFE trainers and although they do place training in the Australian industrial context they do not greatly extend considerations of the social significance of training in allocating opportunities and providing monetary and status rewards. This trend is continued in the most recent manual for Skillshare providers (DEET, July 1992) *CBT: A Practical Guide for Frontline Trainers* . While it is a step forward from previous haphazard approaches to training design in the labour market programs area, it is theoretically confused in its traditional (behaviourist) approach to task analysis (s.5), makes doubtful analogies between Competency Based Training and outmoded models of Quality Control (s.8.2) and contains a mistaken identification of a delivery mode (self-paced learning) with a teaching/learning strategy (student centred learning).

The result is a lack of definitive source material for the field of this review. Usually there are a number of key texts which can be supplemented at both theoretical and practical levels by citing a range of supporting or critical argumentation. In the present case this is not possible.

The major policy documents of the Training Reform Agenda also present problems when attempting to interpret their actual and potential impact on women in the workforce. The documents either propose or assume a preferred policy position and rarely address details of implementation. The major discussion paper which does address matters of

implementation (VEETAC 1992) does so from the perspective of the administrative problems of State Training Authorities. This omission is critical because, as the learning theory and sociological literature makes clear, it is at the level of implementation that practical issues of access to and equity in training opportunities manifest themselves.

In the key policy documents there appears to be a primary assumption that if a national training framework can be established then the details of equity will resolve themselves. This entails a secondary assumption that the training market will adequately and equitably distribute training opportunities.

Implicit throughout are economic rationales for improved national economic performance which, as numerous authors have pointed out, (Eg Buchanan & Callus 1993), are supported at the macro level by the assumptions of neo-classical economic policy models. Human Capital Theory is the form that neo-classical theory takes in analyses of training markets. Essentially Human Capital Theory (implicitly) assumes that, in the long run, the self interest of employers to minimise costs will ensure that recruitment and training policies will not be discriminatory because discrimination is economically inefficient. In other words the market will allocate opportunity in proportion to individual attributes.

The historical evidence for this position is ambiguous, given the evidence of feminisation of occupations (Powers 1975; Williams 1988) and various United States longitudinal studies into racial and gender segmentation of the United States labour market⁴. It would appear however that from the general silence in the mainstream training documents that the theory has been internalised in training policy formulation. Evidence in Australia of this approach may be found by comparing the first draft of the National Training Board's Policy and Guide-lines with the second edition and noting the practical limitations on equity included in the addendum even after strong representation by women.

In conclusion, after surveying a wide range of literature the authors would be most reluctant to recommend any particular source as authoritative in this area. An obvious conclusion from this is that further research is needed if *formal* policy strategies for access and equity are to be *substantively* integrated within the proposed new national training system.

2 THE NATIONAL TRAINING ENVIRONMENT

In order to review the effect on women of the new training and skills acquisition policies and programs it will be necessary to outline the origins of the current training and then briefly describe the "training reform agenda" through which policy is intended to be implemented.

Training and Economic Performance

Since the mid 1980's the role of training in improving national economic performance has developed as a major issue in the formulation of public policy. There is a general agreement amongst peak government and industry advisory bodies that global economic pressures have made it necessary to substantially increase both quality and flexibility in the Australian product and labour markets and that improved and more flexible training systems are required to support higher levels of skill formation in the workforce. (Dawkins and Holding 1988; MTIA 1987; CAI 1991; TDC/ACTU 1987).

Under the accord between the government and the ACTU the strategy for industry restructuring of the post-1983 Labor administrations has proceeded on three broad fronts. First, policies of tariff reduction, deregulation and privatisation have been introduced with the objective of improving competitive performance by increasing competitive pressure. Second, structural reform has been pursued through a series of industry plans, for example in the Steel, Automotive and Textile Clothing and Footwear industries, supported by a range of initiatives to encourage "best practice", quality improvement and export enhancement. Third, a program of award restructuring has been introduced whose object is to develop a skill-based classification system where award classification - and hence wage outcomes - are to be linked to recognised skills and training. Award restructuring has been accompanied by a strategy of union amalgamation around broad industry grouping and a process of linking national wage increases to enterprise productivity growth through the Structural Efficiency (SEP) and Second Tier agreements.

Curtain and Mathews have stressed the centrality of "award restructuring issues (such as job reclassifications, skills formation structures and skills-linked wages structures) within the wider debates over structural adjustment" and consider that linkages based on skills acquisition will "free up the external constraints which have reinforced Taylorist forms of work organisation" and provide the possibility of a "new industrial relations of skill". (1990 p's 58,62,70) This perceived need for a new emphasis on training has been allied with the view that the Australian training effort has fallen behind that of overseas competitors. This belief provided the background to the introduction to the Training Guarantee

Legislation in 1991 which requires enterprises whose pay-roll exceeds \$214,000 p.a. to spend more than 1.5% (from 1992) of pay-roll on training (Murphy 1991).

The Origins Of The Training Debate

In his discussion of the adoption of theories of "new production concepts" in the Australian process of structural adjustment, Gahan (1990 p.159) has noted that "...the exact origins of an emergent theoretical paradigm is, more often than not, an elusive task." Gahan however does locate some of the ideas of Mathew's influential (1989) *Tools of Change* in the early work of Kerr, Dunlop, Harbison, and Myers (1960; second edition 1974) *Industrialism and Industrial Man*. The dominant arguments for a major emphasis on skill formation would appear to derive, in part at least, from claims that new forms of industrial production have arisen, variously called "post industrial" (Kerr et al 1960,1974; Bell 1974) or "post-Fordist" (Piore and Sabel 1984), and have both quantitatively and qualitatively increased the training and skills need of the workforce in advanced industrial societies.

Generally the "post-industrial/post Fordist" argument is that technological advances required to satisfy rapidly changing product markets which place high value on elaborately transformed manufactures (ETM's) and services have created the need for more flexible forms of work organisation and new practices of skills formation. Piore and Sabel in (1984) *The Second Industrial Divide* claim that a choice must be made between the new and old forms of production. They describe the new production methods as "flexible specialisation" in which production using general purpose tooling operated by skilled workers is replacing the mass production of standard products by "unskilled or "semi-skilled" workers operating single purpose machinery. In Australia these arguments, associated with an optimistic view of the effect of new production processes on workers, may be generally associated with the work of Ford (eg;1982), Curtain (1987), Curtain and Kverbric (1987) and in particular with two recent books by John Mathews (1989) *Tools of Change: New Technology and the Democratisation of Work* and (1989) *Age of Democracy: the Politics of Post-Fordism*. The influence of these theories is noticeable in the TDC/ACTU's (1987) *Australia Reconstructed* and is the context within which active government policies of skill formation based on European models have been advocated. (TDC/ACTU 1987, Chapter 4)

As may be seen in the titles of Mathews (1989a;1989b) books the proponents of "post-industrial" and "post-Fordist" theories of production have generally optimistic view of the effect on all workers of the introduction of new forms of work organisation and production. The development of their position can, in many ways, be seen a counter to the more pessimistic views of Labor Process Theorists as they developed following Bravermans

(1974) *Labour and Monopoly Capital: The Degradation of Work in the Twentieth Century*. Essentially Labor Process Theory argues (following Marx) that the development of capitalist production involves continued division of labour. This produces an on-going process of "de-skilling" for the majority of workers. A primary labour market of skilled workers and peripheral or secondary labour market of "semi-" and "unskilled" provides both numerical flexibility and, effectively, a "reserve army" of labour to hold down wage demands. Labour Process Theory has been influential amongst feminist and other writers who have identified the structural position of (most) women workers in the secondary labour market and have also identified the "feminisation" of occupations (such as banking and clerical work) with de-skilling technological change. (Williams; 1988 Lowe 1987; Williams & Lucas 1989; Knights and Willmot 1986, 1990; Jenson 1990). In the Australian context these arguments are encountered in association or in conjunction with analyses of labour market segmentation on ethnic as well as gender lines (Eg. Curthoys 1979; Collins 1988; Jones 1992, Vaughan 1992a, 1992b; Quinlan and Lever-Tracy)⁵.

Notwithstanding theoretical differences amongst authors a direct implication is that training may itself increase disadvantage by widening the gap between the "skilled" core and "unskilled" periphery. Authors holding these positions would argue that as "skill" is socially constructed, access to it will require social and political intervention (Baldock 1990). In its advocacy of interventionist training and industry policies to overcome gender and ethnic labour market segmentation *Australia Reconstructed* (1987 p xiii, chapter 4) accepted both the optimistic view of the benefits of a highly skilled workforce in a "post industrial" society and the need to overcome the de-skilling and segmentation tendencies of mass production. The subsequent government training policies which have grown from these propositions have been criticised by the BCA (1990) as intruding on skill formation practices that should be left to the individual enterprises and by Ewer et al (1990) as falling short of the original intention of developing active training and industry policies towards specific social goals.

Baker and Wooden in a secondary analysis of ABS training statistics (1990a,p.25) however have noted that with respect to the quantity of training there has been a "general and uncritical acceptance of the assumption that training in Australia has lagged behind OECD competitors" and that "the few critics of this assumption such as Strombach and Moy (1988), have found little support". Butterworth (1992) has, from an educational perspective, also questioned the view that the quality of training in Australia is inferior. At a more theoretical level Gahan (above) has questioned the "novelty" of "new production concepts" as applied in the work of Mathews and others, a view shared by Baldock (1990) who rejects the optimistic proposition that such models of skills formation necessarily encompass progressive social change, particularly for female workers in the lowest job classifications. Feminist writers, particularly those influenced by Labour

⁵

See Vaughn (1992) p. 1 and pp5-8 for a succinct summary of the various segmentation arguments.

Process Theory, have also consistently rejected notions of automatic improvements in the position of women workers. Two collections by Knights and Willmott (1986;1990) and a review by Williams and Lucas (1989) contain examinations of the relationship between gender and the labour process while Jenson (1990 p.144) explicitly investigates "the gender-blind" nature of many discussions of flexible specialisation.

In Australia concern that new production methods may produce a core of skilled (mainly male) workers and a secondary market of "unskilled" (and disproportionately female) workers is reflected by Baldock (1990) while earlier industry studies such as those of Game and Pringle (1983) and Williams (1988), theoretical positions such as Cuthoys (1979), Connell (1987), Williams and Lucas (1989) and more recent case studies such as Windsor (1988), Cox and Leonard (1991) and Kokkinas and Robinson (1991), when taken together, question any simple assumption that structural and training reform will automatically benefit women workers. The reservations of writers who consider that increases in training (for those classified as "skilled" and whose awards include career paths) may in fact increase the disadvantage of those defined as unskilled is summarised by Baldock (1990) who argues against Mathews (1989a) that structural change and its associated training opportunities offer, a best, a "site for intervention" rather than automatic benefits.

Notwithstanding this range of critical perspectives, Curtain and Mathews provide what can be described as the widely accepted "mainstream" rationale for the development of the current (1987-1993) national skill formation strategies.

"It is clear that there are now competing models of productive efficiency in world markets. The simpler forms of mass production can be expected to move increasingly to the third world. In industrially advanced countries the basis of competitive strength is shifting from price to non-price factors, such as responsiveness to market trends, the capacity to be innovative, to increase quality and service. Hence an industry strategy in this country that merely relies on price competitiveness achieved through cost reductions cannot improve Australia's relative position with respect to firms in countries whose products are both competitively priced and of better quality. Nor can it be expected to improve the productivity performance of Australian firms ..." (Curtain and Mathews 1990, p.61)

The Training Reform Agenda

The Training Reform Agenda (Murphy 1991) may be described as the collection of policies developed in conjunction with industry and award restructuring to support the skills formation processes intended to underpin the linkage of skills and productivity. Although the need for such a strategy was identified in a range of earlier writings and reports (Eg; Gilmour and Lansbury 1979; Jones 1982 and Kirby 1985) the current development can be traced through a series of key policy initiatives and documents commencing with the tri-partite mission to Europe which resulted in the publication of (TDC/ACTU 1987) *Australia Reconstructed*. This in turn was followed by three further Department of Industrial Relations (DIR) tripartite missions in the Metal and Engineering(1987), Forestry(1987) and Automotive (1988) industries. Continuing the general call from peak government and industry bodies for better quality and more flexible skill formation policies are Dawkins and Holding (1987) *Skills for Australia*, The Australian Manufacturing Council's (1988) *Skills in Manufacturing Industry* and the Commission for the Future's *Skilling the Community: Futures for Public Education*, prepared by Beare and Milikan (1988).

The key policy objectives are outlined in Dawkins (1989) *Improving Australia's Training System*. They are;

1. To increase the national investment in training
2. To improve the quality and flexibility of national training arrangements
3. To improve national consistency of training arrangements and the co-ordination of the National training effort;
4. To improve access available to disadvantaged groups; and,
5. To improve arrangements for the recognition of overseas skills

These policy objectives have been pursued through a range of programs which have included the Australian Committee of Training Curriculum's (ACTRAC)⁶ support of national modular TAFE syllabuses (particularly for the metal trades), the revamping of the Industry Training Advisory Boards (ITAB's) at both national and state level⁷, and the

⁶ ACTRAC was formerly known as the Australian Committee of TAFE Curriculum (ACTC). The change of name was intended to represent a change from an educational institutional focus to an industry focus.

⁷ At the state level these are sometimes called Industry Training Committees or Industry Training Advisory Committees (ITC's or ITAC's)

introduction of the Training Guarantee legislation requiring, in 1993, requiring companies with a pay-roll of over \$214,000 p.a. to devote 1.5% of this amount to training.

Two significant arms of this strategy have been the 1989 agreement by the state and federal Ministers of Vocational Education Employment and Training (MOVEET) to "substantially implement competency based training by 1993" (a situation far from achieved) and the agreement to set up a National Training Board (NTB) to oversee the development of an eight level Australian Standards Framework (based largely on a British model) In addition the development of industry competency standards by Competency Standards Bodies (CSB's), usually the relevant ITAB would be endorsed and registered by the Board and these standards would then, within the ASF, substantially guide the development of training curriculum. Provision has also been made for the development of enterprise standards although these are expected to be compatible with national standards (NTB 1991;1993). The objective has been to develop a national framework for vocational education and training (VET) in which the various states, territories and educational providers mutually recognise each other's provision of accredited competencies. This process has been complicated under the Australian federal system where education and training, with minor exceptions, is a state matter. Nevertheless memorandums of understanding have been exchanged by all states and territories which will permit a National Framework for the Recognition of Training (NFROT) and, as of 1 January 1993, the establishment of a peak supervisory body known as the Australian National Training Agency (ANTA).

The outcome, with the establishment of ANTA has been the development of a new institutional training structure within which national policies of training reform may be implemented. The thrust and effect of these policies have not been without criticism. The Business Council (1990) and Sloan (1992) have seen the process as an attempt by the government and the ACTU to takeover the training agenda and push national training programs at the expense of what is claimed to be a more appropriate enterprise focus. Competency standards, particularly those developed at the higher levels of the ASF have been criticised as too task oriented and behaviourist (Hesketh) or inappropriate and intrusive descriptions of cognitive professional skills (Pennington 1992). The development of narrowly focussed CSB's is seen as a potential barrier to the recognition of broad competencies which will need to be controlled (*NTB Networker* January 1993) while there have been some well known "demarcation" issues amongst CSB's (notably between the National Metal and Engineering Board and the Electrical and Electronic ITC) which reflect tensions between an industry and an occupational approach to training.

In summary the training reforms instituted at a national level may be seen to provide an institutional structure within which other social policies may be pursued. While at a formal level questions of women's access are potentially improved through, for example,

the recognition of prior learning and workplace competency assessment, there is no guarantee in the structure itself that formal equity will translate into substantive equity.

3 CONSOLIDATION OF THE STATISTICS ON WOMEN AND TRAINING

The major statistical description of training and the Australian Labour Force is to be found in the 1990 ABS survey *How Workers Get Their Training*. This was an Australia wide survey of approximately 15,500 households.

The picture presented may be supplemented by the ABS's *Employer Training Expenditure* (July to September 1990) and secondary analyses of the ABS by Baker and Wooden (1991a; 1991b) and Miller (1991). Together the ABS data and the secondary analyses provide a comprehensive picture of the relative participation in training by women (and other groups).

From table 1 (below) it can be seen that the gender distribution for participation in training was similar for

- external courses
- in-house course
- on the job training, and
- study for educational qualifications.

and that overall

- for full-time workers, a higher percentage of females (84%) undertook training than did males (79%).

The advantage held by women over men in receiving training diminishes slightly when the training undertaken by all workers is considered. The "all workers" category includes casual and part-time workers and when these are included the female advantage is reduced to 0.6% (females 79.4%; males 78.8%) with the largest percentage declines occurring in the categories of employer supported external training and (structured) in-house training.

As can be seen from table 1 there is an overall concentration of training in the category of "on the job" training, and a higher proportion of females than males engaged in it. This pattern remains when the statistics for internal training (in-house and on-the-job) are disaggregated by industry for both full-time and all-workers categories.

TABLE 1: Full Time Workers/All Workers

	Full Time Workers		All Workers	
	Females	Males	Females	Males
Studied for an Educational Qualification	16.9	15.3	16.5	17.0
Undertook External Training	11.1	10.7	9.1	10.4
Employer Support for External Training	7.3	7.8	5.2	7.4
In house Training	42.0	36.4	34.6	35.1
On-the-job-training	77.6	71.4	72.7	71.1
Some Training	84.0	79.6	79.4	78.8

Source: ABS Catalogue 6278.0, November 1992.

TABLE 2: Internal Training Full Time Workers

Industry	In House Training			On the Job Training			Some Training		
	Females	Males	% Diff	Females	Males	% Diff	Females	Males	% Diff
Agriculture, forestry fishing and hunting	*7.70	11.00	-2.30	66.60	66.70	-0.10	68.70	70.10	-1.40
Mining	*43.40	44.60	-1.20	92.30	66.20	26.10	94.60	74.40	20.20
Manufacturing	19.20	27.90	-8.40	66.80	67.50	-0.70	71.00	74.60	-3.60
Electricity, gas and water	55.60	59.80	-4.20	84.30	73.10	11.20	87.90	85.50	2.40
Construction	*29.50	19.20	10.30	79.50	70.20	9.30	87.00	75.70	11.30
Wholesale & Retail Trade	30.10	30.10	0.00	76.20	73.90	2.30	83.40	79.90	3.50
Transport and Storage	55.20	31.70	23.50	82.70	59.40	23.30	92.10	69.40	22.70
Communications	48.20	61.40	-13.20	67.00	73.10	-6.10	81.60	87.30	-5.70
Finance Property and Business Services	48.80	52.00	-3.20	84.70	81.50	3.20	89.60	88.10	1.50
Public Administration and Defence	62.00	49.90	12.10	82.70	70.80	11.90	90.40	80.30	10.10
Community Services	56.80	56.80	0.00	80.00	77.60	2.40	87.20	87.10	0.10
Recreation, personnel and other services	24.50	26.80	-2.30	72.50	74.70	-2.20	78.50	80.60	-2.10
TOTALS	42.00	36.40	5.60	77.60	71.40	6.20	84.00	79.00	5.00

Source: ABS (1989) Catalogue.6278.0 Table 2

* Subject to high sampling variability

TABLE 3: Internal Training - All Workers (Percentages)

Industry	In House Training			On the Job Training			Some Training		
	Females	Males	% Diff	Females	Males	% Diff	Females	Males	% Diff
Agriculture, forestry fishing and hunting	*3.40	10.90	-7.50	58.70	64.60	-5.90	64.50	68.70	-4.20
Mining	*39.90	44.70	-4.80	87.50	66.00	21.50	89.60	74.70	14.90
Manufacturing	16.80	27.40	-10.60	65.50	67.40	-1.90	69.90	74.50	-4.60
Electricity, gas and water	52.10	58.90	-6.80	79.70	72.70	7.00	86.20	84.90	1.30
Construction	22.10	18.70	3.90	72.40	69.70	2.70	78.20	75.40	2.80
Wholesale & Retail Trade	25.60	28.60	-3.00	70.90	73.70	-2.80	78.40	80.20	15.50
Transport and Storage	45.30	31.30	14.00	76.50	58.80	17.70	83.90	68.40	-8.40
Communications	44.00	60.90	-16.90	65.30	73.10	-7.80	78.80	87.20	-4.00
Finance Property and Business Services	40.70	49.50	-8.80	78.50	80.40	-1.90	83.30	87.30	4.00
Public Administration and Defence	54.50	49.60	4.90	76.50	71.00	5.50	84.40	80.40	-3.40
Community Services	46.50	53.30	-6.80	-6.80	75.30	77.40	-2.10	83.00	-8.20
Recreation, personnel and other services	17.00	23.30	-6.30	66.80	72.70	-5.90	72.40	80.60	0.60
TOTALS	34.60	35.10	-0.50	72.70	71.10	1.60	79.40	78.80	1.40

Source: ABS (1989) Catalogue.6278.0 Table 2(b)

* Subject to high sampling variability

For the purposes of the survey ABS defined "on-the-job training" as

"whether any of the following activities were undertaken to improve job skills over the last 12 months;

- being shown how to do the job
- watching others
- asking questions of co-workers, and
- teaching self".

As Miller (1991 p.43) and the OECD (1991 p.146) have noted this broad definition of training raises questions about the usefulness of this particular category (particularly for international comparisons) while the inability to determine the quality of all categories of training (Baker and Wooden 1991b) apply *a fortiori* to on-the-job training as defined above.

The type of training undertaken by workers can be conceptualised in various ways such as internal and external training, structured or unstructured, general and specific training. The choice will largely depend on the theoretical framework adopted. In the present Australian context it is most useful to look at structured training, at least in the sense that structured training is most likely to have some immediate relevance to skills linked award classification levels and hence have some more or less direct relationship with pay outcomes. This should be true whether the training is linked to industry or enterprise level competency standards. For this purpose the relevant categories are;

- studied for educational qualifications
- external training
- in-house training

Tables 2 and 3 (above) combined with the "in-house" training column from tables 4 and 5 (below) provide a basic description of the of the gender distribution of structured training.

TABLE 4: External Education & Training All Workers (1989)

INDUSTRY	FEMALE			MALE			FEMALE minus MALE		LABOUR FORCE (000's)	
	STUDIED FOR EDUC QUAL IN 1988	EXTERNAL TRAINING EMPLOYER SUPPORTED	TOTAL EXTERNAL TRAINING	STUDIED FOR EDUC QUAL IN 1988	EXTERNAL TRAINING EMPLOYER SUPPORTED	TOTAL EXTERNAL TRAINING	EMPLOYER SUPPORTED	TOTAL EXTERNAL TRAINING	FEMALES	MALES
Agriculture, forestry fishing and hunting	*16.30	*1.00	*4.00	13.30	*2.40	*4.70	-1.40	-0.70	32.00	116.50
Mining	*20.90	*12.00	*17.20	11.70	*8.00	12.80	4.90	4.40	12.60	85.70
Manufacturing	8.70	3.60	5.70	14.20	7.00	8.90	-3.40	-3.20	349.70	906.70
Electricity, gas and water	*11.20	*13.30	*16.60	13.00	9.30	11.70	4.00	4.90	17.00	110.00
Construction	*11.70	*8.90	15.00	18.30	4.00	6.90	4.90	8.10	38.60	325.00
Wholesale & Retail Trade	17.20	2.70	5.80	19.90	5.70	8.70	-3.00	-2.90	598.80	641.30
Transport and Storage	14.40	*6.60	10.40	8.60	4.90	7.20	1.70	3.20	77.60	255.30
Communications	*10.60	*7.90	*12.00	10.40	*7.00	8.70	0.90	3.30	36.10	106.40
Finance Property and Business Services	17.70	5.70	8.10	21.90	14.10	17.00	-8.40	-8.90	431.80	313.10
Public Administration and Defence	18.30	9.10	12.20	17.90	10.60	13.70	-1.50	-1.10	148.60	244.50
Community Services	17.90	6.70	12.80	20.20	9.90	15.90	-3.20	-3.20	934.50	445.10
Recreation, personnel and other services	19.80	*2.70	6.30	22.30	5.00	8.00	-2.20	-1.70	286.60	191.20
TOTALS	16.50	5.20	9.10	17.00	7.40	10.40	-2.20	-1.30	2964.00	3740.70

Subject to high sampling variability

Source: ABS (1990) Catalogue 6278.0 Table 2

TABLE 5: External/Training Full Time Workers (1989)

Industry	% per cent attending an external course			1 - 9 hours p/a			10 - 19 hours p/a			20 - 39 hours p/a			40 plus hours p/a		
	females	males	% diff	females	males	diff	females	males	diff	females	males	diff	females	males	diff
Agriculture, forestry fishing and hunting	4.0	4.7	-0.7	25.0	38.3	13.3	0.0	6.9	-6.9	20.6	9.2	11.4	54.4	45.6	8.8
Mining	17.2	12.8	4.4	0.0	28.0	-28.0	52.0	25.7	26.3	24.7	28.3	-3.6	23.3	18.0	5.3
Manufacturing	5.7	8.9	-3.2	28.2	18.5	9.7	29.4	25.5	3.9	23.9	19.3	4.6	18.5	36.8	-18.3
Electricity gas and water	16.6	11.7	4.9	0.0	15.0	-15.0	55.4	31.7	23.7	44.6	33.4	11.2	0.0	19.9	19.9
Construction	15.0	6.9	8.1	27.2	33.1	-5.9	28.9	21.3	7.6	18.9	17.2	1.7	25.0	28.4	-3.4
Wholesale and retail trade	5.8	8.7	-2.9	35.9	29.1	6.8	17.9	20.7	-2.8	19.1	17.4	1.7	27.0	32.8	-5.8
Transport and Storage	10.4	7.2	3.2	31.2	17.1	14.1	17.4	29.7	-12.3	21.8	29.3	-7.5	29.6	23.9	5.7
Communication	12.0	8.7	3.3	10.4	17.1	-6.7	22.4	15.0	7.4	37.3	27.4	9.9	29.3	40.4	-11.7
Finance, property and business services	8.1	17.0	-8.9	31.5	20.9	10.6	20.2	26.9	-6.7	20.5	28.4	-7.9	27.2	23.9	3.8
Public Administration and Defence	12.2	13.7	-1.5	22.8	17.5	5.3	20.7	19.0	0.8	28.1	33.3	-5.2	28.4	29.2	-0.8
Community Services	12.8	15.9	-3.1	26.9	1.9	25.0	23.3	18.7	-15.4	25.3	22.2	3.1	24.5	37.1	-12.6
Recreation personnel and other services	6.3	8.0	-1.2	41.3	34.4	6.9	8.5	40.1	-31.6	19.1	11.1	8.0	21.1	14.4	6.7
TOTAL	9.1	10.4	-1.3	28.7	22.6	6.1	22.5	23.4	-0.9	23.7	23.0	0.7	25.1	31.1	-6.0

Source: ABS (1989) Catalogue 6278.0; Table 2(a) Subject to high sampling variability

A summary of tables 2 - 5 (above) shows that for all workers (full-time, part-time and casual);

- more males (17%) studied for an educational qualification than did females (16.5%)
- more males (10.4%) received external training than females(7%)
- males (35.1%) received only slightly more structured in-house training than females (34.6)
- males (7.4%) received more employer support for external training than females (5.2%)

This (simplified) picture changes somewhat if only full-time workers are described. For full-time workers

- more females (16.9%) studied for an educational qualification than males (15.3%)
- more females (11.1%) undertook external training than males (10.7%), although
- more males (7.8%) obtained employer support for external training than females (7.3%)
- more females (42.0%) received in-house training than did males (36.4%)

The overall distribution of training by gender and industry gives an impression of training opportunities which are weighted towards full-time workers and with males receiving more employer support for outside training. In the tables below the total hours spent on external and structured in-house training is given by industry and by occupation.

**TABLE 6: Hours Spent Per Year On External Training By Industry
And Gender (1989)**

Industry	% per cent attending an external course			1 - 9 hours p/a			10 - 19 hours p/a			20 - 39 hours p/a			40 plus hours p/a		
	females	males	%diff	females	males	diff	females	males	diff	females	males	diff	females	males	diff
Agriculture, forestry fishing and hunting	4.0	4.7	-0.7	25.0	38.3	13.3	0.0	6.9	-6.9	20.6	9.2	11.4	54.4	45.6	8.8
Mining	17.2	12.8	4.4	0.0	28.0	-28.0	52.0	25.7	26.3	24.7	28.3	-3.6	23.3	18.0	5.3
Manufacturing	5.7	8.9	-3.2	28.2	18.5	9.7	29.4	25.5	3.9	23.9	19.3	4.6	18.5	36.8	-18.3
Electricity gas and water	16.6	11.7	4.9	0.0	15.0	-15.0	55.4	31.7	23.7	44.6	33.4	11.2	0.0	19.9	19.9
Construction	15.0	6.9	8.1	27.2	33.1	-5.9	28.9	21.3	7.6	18.9	17.2	1.7	25.0	28.4	-3.4
Wholesale and retail trade	5.8	8.7	-2.9	35.9	29.1	6.8	17.9	20.7	-2.8	19.1	17.4	1.7	27.0	32.8	-5.8
Transport and Storage	10.4	7.2	3.2	31.2	17.1	14.1	17.4	29.7	-12.3	21.8	29.3	-7.5	29.6	23.9	5.7
Communication	12.0	8.7	3.3	10.4	17.1	-6.7	22.4	15.0	7.4	37.3	27.4	9.9	29.3	40.4	-11.7
Finance, property and business services	8.1	17.0	-8.9	31.5	20.9	10.6	20.2	26.9	-6.7	20.5	28.4	-7.9	27.2	23.9	3.8
Public Administration and Defence	12.2	13.7	-1.5	22.8	17.5	5.3	20.7	19.0	0.8	28.1	33.3	-5.2	28.4	29.2	-0.8
Community Services	12.8	15.9	-3.1	26.9	1.9	25.0	23.3	18.7	-15.4	25.3	22.2	3.1	24.5	37.1	-12.6
Recreation personnel and other services	6.3	8.0	-1.2	41.3	34.4	6.9	8.5	40.1	-31.6	19.1	11.1	8.0	21.1	14.4	6.7
TOTAL	9.1	10.4	-1.3	28.7	22.6	6.1	22.5	23.4	-0.9	23.7	23.0	0.7	25.1	31.1	-6.0

Source: ABS (1990) Catalogue.6278 table 2; Miller (1990) table 5.7

**TABLE 7: Hours Spent Per Year On In-House Training By Industry
And Gender (1989)**

Industry	% per cent attending an in house course			1 - 9 Hours p.a.			10 - 19 hours p.a.			20.- 39 hours p.a.			40 plus hours p.a.		
	Females	Males	%Diff	Females	Males	Diff	Females	Males	Diff	Females	Males	Diff	Females	Males	Diff
Agriculture, forestry fishing and hunting	3.4	10.9	-7.5	29.6	41.2	-11.6	0.0	16.3	-16.3	70.5	11.9	58.6	0.0	30.6	-30.6
Mining	39.9	44.7	-4.8	29.6	28.4	1.2	16.8	12.5	4.3	23.0	18.9	4.1	30.6	40.1	-9.5
Manufacturing	16.8	27.4	-10.6	36.5	22.1	14.4	18.9	16.6	2.3	24.7	19.2	5.5	19.9	42.1	-22.2
Electricity, gas and water	52.1	58.9	-6.8	21.1	17.1	4.0	29.8	15.6	14.2	24.8	18.9	5.9	24.2	48.4	-24.2
Construction	22.1	18.7	3.4	29.7	34.6	-5.1	33.4	14.2	19.2	22.4	18.8	3.6	14.5	32.4	-17.9
Wholesale & Retail Trade	25.6	28.6	-3.0	43.8	27.5	16.3	18.5	18.4	0.1	18.7	18.7	0.0	19.0	35.5	-16.5
Transport and Storage	45.3	31.3	14.0	29.4	22.6	6.8	14.1	10.5	3.6	19.5	19.0	0.5	37.0	47.9	-10.9
Communications	44.0	60.9	-16.9	22.7	13.6	9.1	5.3	10.6	-5.3	15.3	18.5	-3.2	56.7	57.3	-0.6
Finance Property and Business Services	40.7	49.5	-16.5	25.9	14.2	11.7	18.9	12.8	6.1	24.6	28.7	-4.1	30.6	44.2	-13.6
Public Administration and Defence	54.5	49.6	4.9	22.8	21.9	0.9	19.9	17.1	2.8	21.8	29.1	-7.3	35.6	31.9	3.7
Community Services	46.5	53.3	-6.8	32.7	17.9	14.8	21.6	18.6	3.0	24.9	24.6	0.3	20.8	38.8	-18.0
Recreation, personnel and other services	17.0	23.3	-6.3	35.5	31.2	4.3	19.6	13.2	6.4	19.8	20.5	-0.7	25.1	35.2	-10.1
TOTALS	34.6	35.1	-0.5	32.3	21.7	10.6	19.9	15.8	4.1	23.1	22.0	1.1	24.6	40.5	-15.9

Source: ABS (1990) Catalogue 6278 Table 3: Miller (1990) table 5.9

**Table 8: Hours Spent Per Year On External Training By Occupation
And Gender (1989)**

Occupation	% per cent attending an external course			1 - 9 hours p/a			10 - 19 hours p/a			20 - 39 hours p/a			40 plus hours p/a		
	females	males	% diff	females	males	diff	females	males	diff	females	males	diff	females	males	diff
Managerial	21.1	20.5	0.6	31.0	19.1	11.9	18.5	29.1	-10.6	24.4	23.1	1.3	26.1	28.8	-2.7
Professional	21.5	24.1	-2.6	30.4	22.4	8.0	23.3	22.1	1.2	23.6	28.8	-5.2	22.7	26.6	-3.9
Para-professional	16.1	13.1	3.0	23.9	16.0	7.9	18.7	23.5	-4.8	29.0	19.1	9.9	28.4	41.3	-12.9
Tradespersons	8.9	7.2	1.7	51.7	25.8	25.9	23.0	20.9	2.1	10.7	16.5	-5.8	14.6	36.8	-22.2
Clerks	8.1	12.0	-3.9	4.7	22.4	-17.7	28.3	24.7	3.6	24.4	22.5	1.9	22.6	30.5	-7.9
Salespersons	6.0	10.1	-4.1	33.6	29.1	4.5	17.2	23.7	-6.5	17.2	18.2	-1.0	32.0	29.1	2.9
Plant Operators	1.4	4.3	-2.9	22.6	30.7	-8.1	0.0	15.9	-15.9	77.4	23.8	53.6	0.0	29.5	-29.5
Labourers	1.6	3.2	-1.6	9.6	19.6	10.0	9.8	23.6	-13.8	32.0	22.1	9.9	48.6	34.7	13.9
TOTAL	9.1	10.4	-1.3	28.7	22.6	6.1	22.5	23.4	-0.9	23.7	23.0	0.7	25.1	31.1	-5.0

Source: ABS (1990) Catalogue.6278 table 2: Miller (1990) table 5.8

**Table 9: Hours Spent Per Year On In-House Training By Occupation
And Gender (1989)**

Occupation	% per cent attending an in-house course			1 - 9 hours p/a			10 - 19 hours p/a			20 - 39 hours p/a			40 plus hours p/a		
	females	males	%diff	females	males	diff	females	males	diff	females	males	diff	females	males	diff
Managerial	48.3	49.8	-1.5	13.2	8.8	4.4	20.8	11.9	8.9	29.9	25.3	4.6	36.1	54.1	-18.0
Professional	59.1	61.5	-2.4	22.0	12.2	9.9	21.9	8.2	13.7	30.1	27.2	2.9	26.0	42.4	-16.4
Para-professional	57.3	53.3	4.0	31.1	17.6	13.5	24.1	10.5	13.6	18.9	24.2	-5.3	25.9	47.8	-21.9
Tradespersons	16.1	25.4	-9.3	34.2	28.9	5.3	27.5	17.3	10.2	16.1	15.2	0.9	22.2	38.6	-16.4
Clerks	34.9	45.2	-10.3	31.6	18.5	13.1	19.0	18.6	0.4	24.6	24.1	0.5	24.9	38.8	-13.9
Salespersons	32.3	43.0	-10.7	40.4	22.3	18.1	18.3	17.8	0.5	18.4	23.9	-5.5	22.8	35.9	-13.1
Plant Operators	6.7	25.3	-18.6	32.1	39.4	-7.3	7.5	13.1	-5.6	21.3	15.9	5.4	39.2	31.6	7.6
Labourers	12.6	15.1	-2.5	62.4	41.6	20.8	13.0	14.9	-1.9	11.3	16.4	-5.1	13.2	27.0	10.5
TOTAL	34.6	35.1	-0.5	32.3	21.7	10.6	19.9	15.8	4.1	23.1	22.0	1.1	24.6	40.5	-15.9

Source: ABS (1990) Catalogue.6278 table 3: Miller (1990) table 5.10

The significant information from these tables is the relative number of hours of training received by males and females with males more prominent in the 40 hours plus category in all tables. Females have a slight advantage in receiving external training in three occupational classifications (table 8). In the managerial category 21.1% of females attended external courses compared with 20.5% of males; amongst para-professionals 16.1% of females attended external training compared with 13.1% of males while in the tradespersons category 8.9% of females compared with 7.2% of males attended external training courses. However males regain an advantage in the 40 hours plus column with quite significant differences apparent for para-professionals (females 28.4%; males 41.3%) and tradespersons (females 14.6%; males 36.8%) 30

1. A similar pattern emerges for in-house training by industry and occupation (tables 7 & 9).

Miller (1991), from whom the above tables are derived, has suggested that as "females are concentrated in the smaller hours of training categories ... (it) suggests that the overall gender effect on average hours of external training will not be due to occupational mix effects" (1991 p.93) and that the

"concentration of women in training courses involving low hours is a particular concern if the training provided through in-house courses is a means to achieving more senior positions within each occupation. In such a case training would tend to reinforce the existing pattern of occupational segregation and inequality" (1991 p.97)

Miller's comments are strengthened when it is considered that for in-house trainees only 18.5% of females compared with 25.7% of males reported that they undertook the training to improve chances of promotion (p.217). However the *How Workers Get Their Training* survey obtained its results from workers' perceptions and it is not possible from the data to determine if these perceptions reflect the reality of their workplaces. Nonetheless, the overall results would tend to confirm the views of Baldock (1990) and Jenson (1991) that training, particularly training limited to an enterprise focus as advocated by some peak groups (BCA 1990), may not advantage all workers equally and may actually disadvantage those in the lowest classifications. This becomes particularly significant for pay equity for women if training and recognised skill are linked to wage outcomes as proposed in "skill-based award classifications. As Rimmer (1991) has noted the differential between male and female earnings is attributable to unequal earnings *within* individual occupational categories rather than differences in earnings *between* male dominated and female dominated occupations.

1 The difference in the tradespersons category would be largely an occupational effect due to the concentration of females in only two apprenticeship trade areas, hairdressing and food neither of which have significance post-trade training opportunities.

The conclusion from the data is self-evident. Notwithstanding gender differences in occupational classification which are explicable by different human capital attributes (education; labour force experience; intermittent labour force participation due to marital status etc) there remains gender inequity, particularly in low status and low paid jobs in terms of classification and training opportunity. Access and equity needs to begin at the workplace where (enterprise) training decisions are made. An imposed national training structure may give formal equity without advancing substantive equity.

4 DECIDING WHO WILL UNDERTAKE TRAINING

Labour market data provides researchers with an empirical description of the macro result of "structural discrimination". This macro level result is however, the consequence of processes which operate within society generally. For the analytical purposes of this project it is the practices which operate within the workplace which are significant. However, this should not be taken to imply that such workplace practices can be isolated from wider social practice. With this caveat, the identification of discriminatory factors means examining what access (or lack thereof) to training really means in an organisational context.

According to Becker (1975) training may be categorised as either "general" or "firm specific". General training has the capacity to increase productivity across a diversity of enterprises, whilst firm specific training is more narrowly focused on increasing productivity within the training enterprise. As Miller (1991) points out, this dichotomy has implications for the public and private financing of training. Becker's model predicts that workers will pay for general training, whilst the costs of firm specific training will be shared by both the worker and the organisation.

Organisational behaviour theory also depicts training as increasing employee resources. Nordhaug (1989) reports that training is perceived by management as the cornerstone in most Human Resource systems. Nordhaug comments that decisions about access to training is a political one as training increases employees' ability to participate in organisational processes. Mejia, Balking and Milkovich (1987) also emphasise that training is seen as reward, and that support for further education can be incorporated into remuneration packages to retain valued employees. Thurrow's (1979) interviews with staff and management indicated that training was used as a defacto promotional process where an employee's performance on a training course was interpreted as evidence of her/his trainability. The general sentiment that is expressed by organisation behaviourists is that training is an organisational reward. In this context training, or access to training, can be seen as a management tool which may, explicitly or implicitly, be used to encourage certain types of behaviour and/or groups.

Although organisational behaviour theorists are usually writing from an American or Swedish perspective, much of what is said is compatible with the expressed policies of Australian employer associations. The political nature of training access is clearly in evidence by it's being linked with enterprise bargaining in such documents as the MTIA/MTFU *Enterprise Bargaining Guide-lines*. The MTIA also mentions it's concern that "competency standards reflect the true needs of employers for skills and that they do not lead to undue claims for reclassification, (MTIA, 1992)."

Whilst industry training can be provided by either TAFE or industry bodies, the bulk of industry training is in-house training (chapter 3 above). Major employer associations have called such in-house training to be formally recognised as a basis for entry into tertiary training. This in itself is part of strategy that is akin to Meijia et al's and Becker's observation that general training may be used as a device for retaining valued employees. The tying of access to higher education through in-house training is also related to Becker's model of increasing the financial penalties of labour mobility to both workers and employers.

However, even though employer associations may call for industry portable training, the associations are generally averse to taking responsibility for basic general education. This raises the sensitive issue of who pays for different types of training. Even though Becker's model of general versus firm specific training is useful in categorising training, it does not take account of the role of Government in financing training. Employer groups share the view that "the responsibility for the provision of general basic skills training must clearly be that of the Government." General basic skills includes generic literacy, numeracy and basic vocational education. Further both the Australian Chamber of Manufactures (ACM) and Business Council of Australia (BCA) raise the issue of employees undertaking education in their own time as a means of "demonstrating a personal commitment and contribution to their own development, (ACM, 1990, p 7). Interestingly, MTIA seems to take a more moderate stand, omitting mention of individual employee responsibility for costs and allocation of time spent on training.

This in turn highlights another weakness of both the organisational behavioural literature and Becker's model. The macro level models do not adequately account for the differences amongst employer associations policies on training market regulation. The most extreme view is expressed by the BCA which states it's concern that the Training Guarantee is an ACTU initiative (BCA, 1992). The BCA's position is that,

"Enterprises should be free to pursue a wide range of skill formation strategies without coercion from Government and the Industrial Relations System", (BCA, 1992).

This is a heavily utilitarian perspective - that the competitive national training market be designed to service the competitive requirements of companies and raises the as yet unresolved problem of worker benefit of undertaking in-house training designed solely to improve company or enterprise productivity. The models around which in-house training can be of personal benefit to the individual worker all involve career progression through the operation of internal labour markets. Career progression due to skills formation programs developed for the sole benefit of the firm can only operate in large scale organisations, which are the exception rather than the norm for Australia.

A different perspective is taken by the MTIA, which tacitly endorses government regulation of the training market, by highlighting its own strong involvement with the National Training Board and TAFE restructuring. Further the MTIA claims a much more strategic role in the training arena, by asserting its "rights" to monitor the National Framework for the Recognition of Training (NFROT) agreement (MTIA, 1992).

Acceptance of organisational behaviour and human capital models must be taken with some reservation about the application in practice of such models to Australian managerial practices as expressed at a workplace rather than employer association level.

The Council for Equal Employment Opportunities (1990) compiled findings from 112 case studies of Equal Employment practices within Australian Workplaces. The case studies demonstrate an enormous diversity in company responses to the matter of career development for their female employees. For example, the National Australia Bank provides special career development workshops for their female staff, CRA has developed special training videos to encourage female employees to adopt scientific and technical career paths. What does emerge throughout these case studies is that few companies monitor the gender distribution within their workforce, let alone the attendance at training courses. Indeed, Shell Australia appeared to be the only private sector Australian company in the case study sample, that monitored female/male representation on training courses. Notwithstanding the administrative problems that the provision of such data may impose on companies its absence makes it difficult to determine the effect of training policy initiatives on the provision of training access. Further these case studies were extremely brief, and there is still a gap in our understanding of how Australian workplaces actually treat the matter of equitable access to training.

However, training still clearly emerges as an organisational reward in the eyes of practitioners and theoreticians and it is necessary to examine the distributive principles that are involved in the dissemination of organisational rewards.

Staley and Shockley-Zalabak (1986) pointed out that reports of no difference between men and women may have little to do with the attitudinal and practical difficulties that women face. This is aptly demonstrated by the research on attribution bias. For example, Feldman-Summers and Kiesler (1974) were not able to find a single occupation, including those which were traditionally female dominated, in which women were expected to be more successful than males. Deaux (1982) found that success for a women was more likely to be attributed to luck or circumstance, whilst male success was more likely to be attributed to effort and ability. However, more recent studies indicate that gender biases are still alive and well in the workplace performance appraisal systems (Pazy, 1986, Dornstein, 1988, Lewis and Stevens, 1990).

Although, there is some controversy over the consistency with which gender bias is said to occur, recent reviews attribute gender bias to occupational prestige and job status (Mount and Ellis, 1989). Evaluations of female employees are contaminated by their over-representation in lower status jobs. Reduced chance of recognition of good performance may mean that women are less likely to be offered career development training. Gender biased perceptions may mean that managers of female employees are generally less likely to identify employees training needs. For example, Staley and Shockley-Zalabak (1986) compared employee and supervisory assessments of female employees competencies and training needs. Female professionals agreed with their supervisors ratings on only three of the fifteen competency areas, and on four of the fifteen training needs areas.

Gender bias is significant in the Alexander and Franks (1990) case studies of the Australian Banking Industry. Their report identifies growing concern with Job Evaluation systems in the banking industry, as these were found to undervalue many of the skills involved in lower grade work. Secondly, the nature of part time work means that employees have less opportunity to demonstrate the full range of their skills to their supervisors. This presents a potential source of gender discrimination as 95 percent of part time employees are women. Thirdly, the report identified a prejudicial perception amongst management concerning the training of part-time staff. Middle and supervisory management held the view that part-timers (most of whom were women) were less career oriented. Other industry case studies (in retail, education and oil refining) also demonstrate part-timers' limited access to career development and training, as part-time options were restricted to the lower levels of the organisation (DEET, 1990).

Occupational stereotyping is a more specific type of gender bias. Beliefs in occupational stereotyping are caused by observation of actual gender segregation vis-a-vis roles which are considered to require quite different skills, (Eagly and Stephen, 1984). Gutek and Cohen (1987) hypothesize that there is a sex role spillover into the workplace - where the work role takes on many of the characteristics of the dominant gender. Hence entire job classifications become "masculinised" or "feminised". The historical processes have been described by a range of authors on the feminisation of various occupations (Power (1975); Williams and Lucas (1988); O'Donnell) while its effect in the Australian wage-fixing system is noted by Ryan and Bennett (1984;1988).

There is further evidence from the psychological literature to describe these processes. Chatterjee and McCarrey (1991) found that occupational choice was only judged as suitable if the candidate's gender was stereotypically congruent with the perceived characteristics of that occupation. This is particularly the case when information about candidate characteristics are unavailable, then the bias of sex role congruency takes precedence. A practical illustration of the effects of occupational stereotyping is provided

by Surrey's discussion of career norms. Surrey (1983) argued that prevailing career norms emphasise "masculinised traits" of competitiveness, aggressiveness and success defined in terms of doing better than another; whereas traditional stereotypes of women are associated with submissiveness, care taking and self devaluation. The disadvantage that this poses to women is obvious. Gambrill and Richey (1986) argue that if a supervisor perceives female employees as less aggressive and competitive than their male colleagues, then they will be less likely to be given work related and training opportunities where these skills are required. Morgan and Knights (1991) analysis of workforce segmentation in the Hamlet Insurance Company and Bank co illustrates this process. Women were restricted to bank telling positions, whilst the insurance sales force was an extremely male dominated area. There was a perception that sales staff had to be aggressive, competitive and have a large stock of bluff. Insurance managers justified the exclusion of women on the grounds that they were lacking in these qualities, that they would be too sympathetic to the client, and were not "hungry" enough.

In effect, female employees are operating within the confines of a gender based catch-22. Low estimates of their performance mean that they will not be promoted or allocated training as a reward. Therefore women continue to remain over-represented in low status jobs. However occupation of such jobs contaminates assessment of women's performance and trainability.

5 DELIVERY ISSUES

Access to training is only one step in the training cycle. Successful gender equitable training is also based on quality delivery methods and the premise that trainees actually learn new skills. A problem for trainers has always been the development of "trainee centred" delivery methods. Increasingly, this challenge is becoming one of how to incorporate gender sensitivity into training design and delivery, (Robinson and Mageean, 1992).

Cognitive Psychological literature on learning and human information capacity make it quite clear that learning is an individualistic exercise, (Houston, 1986). This derives from a recognition that pre-existing general knowledge distorts trainees capacity to process new and different information. This difficulty arises from the individual's possession of cognitive schemata or "frames of reference" that are used in interpreting the world. Incoming information is amended to be congruent with pre-existing schema, (Houston, 1986). To illustrate, Kintsch and Van Dijk (1975) found that culturally dissimilar groups had difficulty recalling information that was not culturally congruent. When respondents were tested for recall it became obvious that culturally incongruent information had gradually but consistently been replaced with culturally congruent features. McGowen and Hart (1990) postulated that because gender is a critical aspect of identity, self perceptions of gender can be used to filter gender dissonant information. Chatterjee and McCarrey (1991) provide evidence of the links between women's own perceptions of sexual stereotypes and occupational choice by comparing women in traditional and non-traditional occupations. These authors found that these two groups of women had widely differing value priorities, value attainment expectations, sex role attitudes and inferred sex role attitudes of their peers. The results of this study highlights the need for female role models as presenters and in case studies. This feature has already been incorporated into British and Australian Technical training programs for women, (Morrell, 1988). Female apprentices and engineers are sent to local high schools to assist students in workshops and science classes, (McGowen and Hart, 1990).

"Self involvement" of trainees in the learning process is also pursued in humanist feminist educational critiques. Robinson and Mageean (1992) note that there is a substantial body of literature which argues for the existence of a "woman's way of learning". Authors such as Belenky, Goldburger and Tarule (1986), and Biddlecom et al (1986), pursue the theme that women are trained to place priority on relationships and connectedness. Following from this it is argued that women would learn best in co-operative, socially oriented, relational milieu. The practical corollary of this is that female trainees should work as a team, rather than being set individual goals. Morrell (1988) reports that "women only teams" were cited by Australian educational providers as the most critical aspect of success in women focused training programs.

"Identity involvement" in training has clear implications for the language of training scripts. Cox and Leonard (1990) established that women stopped short of applying terms such as "skills" and "aptitudes" and "competencies" to their own informally acquired experience. Female respondents did not, however, hesitate to associate these descriptors with males' experience. British research on continuing adult education for women identified a similar phenomenon. Educators made use of female trainees previous experience, to build their confidence and assist trainees in contextualising their experience, (NIACE, 1991). The role of identifying language also has obvious implications for recognition of prior learning. Davis, Denning, Travers and Glasby (1992) observe that lack of public recognition and language is a major obstacle for women who are seeking recognition of prior experience. This implies that women would respond best to an interactive process of assessment and selection for training courses, (Davis, Denning, Travers and Glasby, 1992).

Identity involvement highlights the need for training scripts and strategies that do not alienate female trainees. Robinson and Magaeen (1992) found that the use of gender exclusive language was the most common complaint by female apprentices. Female students complained that some teachers and students would use terms such as 'tradesman', 'handyman' and 'foreman', implying that female apprentices are either misplaced or non-existent. The need for gender inclusive curriculum and training scripts is has been formally acknowledged by both the National Training Board and the National TAFE Women's Network, (NTB, 1992, NPAWT, 1992).

While the humanist school of thought has been influential, it should be noted that it has also been criticised on the grounds of anglo-centrism, (Jarre, 1983). It has been described as reductionist, because it does not accommodate class, cultural and age based characteristics. The humanist perspective also been criticised on the grounds that it does not challenge the social construction of femininity. Leah and O'Brien (1992) cite an alternative position which they identify as "post modernist". The "post-modernist position

"assumes that both reality and self are discursively constituted, that is, there is no essential self or coherent identity which individuals develop. Rather, the possibilities for who and what we think we are or might become derive from systems of meaning inherent in the discourses and social practices of the academic disciplines." (1992 p 32).

This poses a much more complex research agenda, and one which has been mainly explored in secondary and primary education systems, rather than the workplace level. A further criticism that should be made of much of this literature is it's singular lack of rigour. At times post-modernist feminist critiques of educational strategies seem to border

on the anecdotal. There is little mention of systematic forms of content analysis, representative respondent samples or the principles by which qualitative interview data were excluded or included from analysis. The loose nature of much of the analysis in this area does little to clarify the extent and nature of "women's learning styles".

Discussion of gender equity and training must also address the issue of training portability. The lifetime learning model that is being promoted by current policies means that training needs to be as portable as possible. Portability of training is about more than the process of external credentialing, it also refers to the credibility and quality of those credentials. This is where the discussion of learning transfer or training designed for adaptability becomes pertinent. Transfer is defined as the utilisation of previous learning on subsequent learning, it refers to the skill of "learning to learn". The transferability of knowledge acquired on training courses is in part determined by training program design features. The next section hypothesizes on the implications of gender based training patterns for training program design and transferability.

It has long been recognised that previous participation levels are the best predictor of future participation in adult learning programs (Eg; Miller 1991, chapter 3 above). On first inspection, female workers would seem to be better placed for education as female workers have higher participation rates in training (chapter 3 above; tables). However, it is necessary to take account of the *type* of training that female employees are engaged in. It is arguable that women's' over-representation in structured in-house training programs and reception of "on-the-job training" presents problems in labour mobility and formal credentialing. It can also be contended that women's' over-representation in "on-the-job training" incurs potential problems in terms of future education.

Specific learning transfer is most likely when the learning context is identical to the performance context. By extension, this implies that on the job training is preferable, if specific knowledge is actually going to be deployed and consolidated. Unfortunately, the close relationship between the training and working environment means that generalised transfer, (applying knowledge across diverse environments), may be reduced. In effect, women may be comparatively disadvantaged in terms of transferring their knowledge across employers. This is a particular concern given evidence from Australian surveys that part time jobs are associated with the lower levels of the organisation, and involve only basic and non-transferable skills, (DEET, 1990).

The problem may be framed as being able to achieve a balance between structuring training so that skills can actually be deployed on the job; whilst giving those skills sufficient portability. Hesketh and Chandler (1987) note that use of varied samples or exercises which involve practice on one or more systems might facilitate transfer. Hesketh and Chandler (1987) argued very strongly for what is referred to as training by

"discovery training". This entails the trainee being encouraged to develop their own set of "principles" rather than simply memorising procedures. Murphy and Mitchell (1986) commented that there is an increasing degree of generality on the learning continuum. This ranges from skills based learning through to rules or knowledge based learning. Familiar tasks can be driven by skill based or procedural knowledge. When people face new and unfamiliar tasks or situations, it becomes necessary to draw on rules based or knowledge based information which represents more abstract principles of generality.

There is a need for adult trainees to be allowed to experiment or "discover knowledge" within a diversified training environment, (Hesketh, Andrews and Chandler, 1987). Instead of the learning environment being restricted to standardised arrangements, it is arguable that training should occur in a "simulated work environment" which contains several training learning systems, (Hesketh and Chandler, 1990). This implies that the ideal would be for all vocational training to be based on a combination of externally accredited training and on the job experience. These features are already present in the mainstream apprenticeship system and the Australian Traineeship Scheme, and theoretically represent an arrangement that is advantageous to both employers and employees.

6 SUMMARY

Several conclusions may be drawn with regard to female workers access to training. Firstly the available Australian statistics indicate that there are gender differences in training patterns. Contrary to usual perceptions in this area, female workers are actually *more likely* to receive training than male workers. However the training that women receive is more likely to take the form of unstructured internal training and male employees are more likely to receive employer support for externally provided training. Female workers are proportionally over-represented within casual and part time positions and evidence from historical and sociological studies suggests an increase in participation in labour market areas in which training (if undertaken) has little relationship to career progression. An exception here is women in high status positions who are undertaking relatively more training than their male colleagues. The effect of this may well be to further increase wage differentials *within the female workforce*. Overall there are significant implications for equity as it would appear that not only are market forces alone insufficient to achieve the social goals of industry restructuring, but also that within the female labour force women in high status positions are increasing their advantage over women in low status positions to a relatively greater extent than is occurring in the male workforce.

The determination of equitable outcomes extends further than structural segmentation. As noted by Miller (1991; p.106,229) the higher incidence of employer support for male employees on external courses provides "one of the largest gender differences in the *How Workers Get Their Training* data". Notwithstanding significant qualifications which need to be made about the aggregation of data from various types of training, and the relative influences of supply side and demand side factors in determining the overall allocation of training places (see Miller; 1991 chapter 8) a range of questions are raised about the factors which influence decisions on recruitment and access to training. Management decisions about who receives training can be influenced by gender bias and occupational stereotyping. To this extent the overall higher incidence of internal training received by women (specifically women in low paid, low status positions) may only assist them in retaining and performing low paid, low status jobs; whilst the training received by (full-time) male employees (and high paid, high status women) may be directed towards career development.

The type of training received is also linked with the adult learning issues, the transferability of learning and the portability of qualifications. In chapters 4 & 5 it was postulated that over-representation in on the job training may disadvantage female workers in terms of their future trainability as well as restricting the portability of any qualifications. Further, the gender inclusive/exclusive nature of training design and delivery was raised. There is a large body of work on alienation of women within male oriented educational systems. Problems identified in this literature include the confidence

levels of females, the lack of a "common language" for describing female trainees experience, an inability to identify with "male role models" and the use of gender exclusive training scripts.

Aggregate labour market data is useful in presenting a snapshot of macro-level distribution of training opportunities, however for the objectives of this current project additional research is required which examines firm level training systems. This will need to examine issues such as the policy making processes determining the allocation of training places and the quality of internal training. For example what are the policy considerations for training casual/part time staff, and what are the preconditions of obtaining employer support for attendance on external training courses. Do supervisory and senior managers have concerns about the return on investments in training part time/casual staff? This is a significant issue for the finance sector where it has been claimed that the industry is developing an hourglass shape, where employment at the lower levels is based on casual female labour, which is disconnected from industry career opportunities.

Further research is also required into the development and delivery of internal training programs themselves. To what degree has the company made an effort to develop externally accredited courses? How does in-house training complement industry training structures? What is the knowledge level of in-house trainers with regard to current training issues such as appropriate adult learning principles, trainee centred teaching, Competency Based Training and criterion referenced (standards based) assessment. Are in-house trainers formally qualified to deliver staff training, and what factors are taken into account in designing training programs? To what extent do trainers evaluate trainee's knowledge both at the end of programs and on the job? None of these issues is adequately covered in Australian literature although the choices, usually management decisions, will largely determine whether equity concerns are addressed formally or substantively.

Finally there is the matter of training outcomes. Does the higher incidence of internal training received by women assist in career progression or is it, as critics have suggested, a process which reinforces a part-time or secondary labour market position. Although there has been considerable work on the return for the attainment of educational qualifications, returns on workplace based training is an under researched area.

APPENDIX

A SELECT ANNOTATED BIBLIOGRAPHY

Alexander, R and Frank, S (1990) *Award Restructuring and Part Time Work in Banking*, WREIP, AGPS, Canberra.

This study focuses on the inter-relationship between technological change, financial deregulation and work practices. The report highlights the stark over-representation of women as part time workers in the banking industry. Many of these jobs are located in local branches, and are were made vulnerable through the introduction of EFTPOS and similar technology. The report also describes the career and training experiences of part time workers, and management perceptions of the same within this industry.

Australian Chamber of Manufacturers (1992) *Education and Training: Policy Statement*, ACM, Sydney.

This position paper outlines the ACM's nominated strategies at each level of the education system. The paper outlines the ACM's requirements at primary, secondary and tertiary level. The ACM espouses employer support for portable industry training, but calls for Government to maintain it's involvement in providing basic, general literacy and numeracy skills. In addition the ACM calls for improved management education, and the development of incentives for larger companies to subsidise the training costs of small companies.

Australian Bureau of Statistics, (1991) *how Workers Get Their Training* [cat.6278.0] & (1991) *Employer Expenditure Survey* [cat.6353.0]

The results of the major ABS surveys on training. However the ABS should be contacted for new materials which are being collected as part of the Training Guarantee evaluation process.

Baker, M and Wooden, M (1991) "Training in the Australian Labour Market: Evidence from 'How workers Get Their Training Survey'", *Australian Bulletin of Labour*, 18(1), March 1991, pp.25-45.

An accessible short article which provides secondary analysis of the ABS *How Workers Get Their Training* data from a human capital perspective. Provides a critical analysis of the data and some of the assumptions of the training debate with a useful bibliography of recent materials.

Baldock, Cora Vellacoop (1990) "Award Restructuring: Tool of Change or Stagnation?", *Australian Feminist Studies*, no.12, Summer, pp.43-49.

Strongly criticises John Mathew's *Tools of Change* claiming that Mathews and "his school" at best only identify a "strategic point of intervention". It Also criticises Hall and O'Donnell in that "they don't acknowledge to any serious extent that both 'training' and 'skills' are social constructs. It concludes that Award Restructuring has not yet "delivered" and notes equity problems for women with skills audits and participation in the part-time and casual workforce.

Biddlecom, L Browne, J Charlton, B Dowden, H Northcott, C Onslow, J Priestly, J and Thompson, J (1986) *Learning the Hard Way: Women's Oppression in Men's Education*, MacMillan, London.

Documentation of the experiences of working class women through the British educational system. Extracts include experiences within the secondary school system and encounters with specialist vocational technical programs for women. Particular problems facing women include the masculinisation of male dominated learning environments and low confidence of mature age women re-entering the education system.

Belenky, M F Clinchy, B M Goldberger, N R and Tarule, J M (1986) *Women's Ways of Knowing: The Development of Self, Voice, and Mind*, Basic Books Inc. New York.

This text emphasises the notion of constructivist learning - where the learner cannot be separated from the knowledge

process. The authors criticise what they refer to as detached "scientism" or traditional lecturing and teaching methods which teach trainees to discount their own experience. On this basis, education for women should follow a more interactive, consensual model. They also argue that women should understand their own identity and have their own voice.

Burke, R J and Bolfe, C (1986) 'Learning within Organisations: Sources and Content', *Psychological Reports*, 59, pp.1187 - 1196.

A study of key organisational learning sources for managers and professional staff. The authors comment that it was difficult to find consistent trends - indicating that learning is a highly individualised process. These authors also found that status within the organisation did not predict the utility of an individual as a learning source. In fact, it was found that management reliance on subordinates was associated with increasing experience.

Business Council of Australia (1991) *Business Council Bulletin: Annual Report Special Issue*, BCA, Melbourne.

The annual report documents developments for the period from November 1990 to November 1991 for the BCA. The report contains the BCA's expressed policy on economic management, business law, human resources and education and training. The report also contains profiles of member companies and the policy making structure of the BCA. The training policy expresses the view that Australian companies should be allowed to opt into the training market. The report stress that companies should be free to select whichever options they prefer without compulsion from third parties.

Chatterjee, J and McCarrey, M (1991) 'Sex Role Attitudes, Values and Instrumental Expressive Traits of Women Trainees in Traditional versus Non-Traditional Programs', *Applied Psychology: An International Review*, 40 (3), pp.281 - 297.

This study focuses on the sex role attitudes, instrumental expressive traits, values, and value attainment expectations through life roles of 151 female trainees in traditionally male dominated occupational areas (less than 25% female workers). The comparison group consisted of 135 female trainees in Nursing/Nursing Assistance - "traditional occupational areas" for women. The results support the significance of sex role attitudes and instrumental expressive traits in the examination of vocational choice of women in non-traditional as compared to traditional areas of job training. The theoretical and social implications of these findings are discussed in the light of Super's self concept theory and the notion that sex role attitudes and instrumental/expressive traits can be thought of as reflecting a value expressive filtering mechanism that portrays certain options as appropriate, and others as less appropriate routes leading individuals to the fulfilment of their values.

Council for Equal Employment Opportunity in Employment (1990) *Equal Employment Opportunity at Work: 112 Case studies from major Australian Companies*, Council for Equal Employment Opportunity, Melbourne.

This is a collection of ten booklets of case studies which covers specific facets of equal employment opportunity. Notable amongst these are booklets 4, 5 and 6 which cover specific aspects of E.E.O., such as personnel policy formation, skills formation and career development within Australian companies.

Cox, E and Leonard, H (1991) *From Umm...to AHAI*, WREIP, AGPS, Canberra.

Cox and Leonard present the results of focus group interviews conducted with groups of female volunteer workers. The intention of the project is to address women's perceptions and evaluation of the volunteer work that they do for the community. Cox and Leonard identify the gendered nature of the term "skill". They discuss the implications of it's use in skills audits and the broader agenda of award restructuring.

Cox, S and Swarbrick, A (1987) "Women and Technology: a review of training initiatives", *Work and Stress*, 1(3), pp.285 - 291.

This paper considers the entry of women into technological areas of work and their subsequent career progression after a career break. It considers the development of those training programs and related initiatives in the U.K. which have attempted to encourage girls and young women to enter non-traditional areas of work, and others which help women return to work after a career break. It also reviews some of the courses which are currently available and comments on their apparent success. In its concluding paragraph, it refers to the problem of funding such training and providing a supportive database.

Davis S Denning S Travers, B and Glasby, D (1992) *Recognition of Prior Learning - Implications for Women*. A National Plan of Action Project, DEET. Canberra.

This report defines recognition of prior learning and explores the possible implications of RPL for improving women's labour market status. Findings of a survey on women's attitudes to RPL are presented. A principle finding which emerges from this process is that RPL could be undermined by the difficulty in describing "feminine work skills".

DEET (1990) *Part Time Work: Trends and Issues*, DEET, Canberra.

A two part project which incorporates labour market ABS data and industry case studies for its conclusions. The case studies have been selected from educational institutions, retail and an oil company. The data indicates marked differences in the companies response to part time work. Teachers and retail staff were found to receive fewer training and career development opportunities than part time workers in the oil company. This is in spite of all workers nominally having the same rights to have access to training. However, workers in all three industries were found to experience problems with career progression, as the part time work option was restricted to jobs at the lower levels of the organisation.

Dornstein, M (1988) Pay Equity Evaluations of Occupations and Their Bases, *Journal of Applied Psychology*, 18, pp.905 - 924.

Dornstein explores the priority which are assigned by job evaluators to job characteristics. Dornstein establishes that although evaluators are asked to carefully consider a whole range of features, they tended to take a very narrow set of factors into account when making their decision. More specifically, Dornstein found that pre-existing job status and wage level were the most influential factors. There is a brief discussion of the implications of job evaluation systems in legitimating the "status quo" of women's wages.

Downs, S and Perry, P (1984) 'Developing Learning Skills', *Journal of European Industrial Training* 8, pp.21 - 26.

The article documents a series of adult learning principles and delivery techniques that are said to facilitate learning and information retention in young adult trainees. This is useful as an introductory document on basic adult learning principles.

Gambrill, E D and Richey, C A (1986) 'Criteria used to define and evaluate socially competent behaviour among women', *Psychology of Women Quarterly*, 10, pp.183 - 196.

Criteria used to evaluate socially competent behaviour of women are described and critiqued. Many definitions of social competence do not employ a process view of social behaviour in which individual goals and values as well as specific verbal and non-verbal behaviours are considered. The relationship between the definition of competence used and the assessment methods relied on is discussed. The advantages of focussing on specific goals are noted and a checklist that consumers can use to review the content of training programs is provided.

Gomez-Meija, L R Balkin, D B and Milkovich, G T (1990) 'Rethinking Rewards for Technical Employees', *Journal of Organisational Dynamics*, pp.62 - 75.

High turnover rates of technical staff and rapid obsolescence of technical skills are considered in this paper. The article presents a variety of ideas on how technical staff may be retained and utilised. Ideas include training, performance incentive schemes, career paths and individual entrepreneurial ventures.

Gronau, Reuban (1988) 'Sex-related Wage Differentials and Women's Interrupted Careers - The Chicken or the Egg', *Journal of Labour Economics*, 6(3), July, pp.277-301.

Employers are reluctant to give women positions which involve investment because they believe that women will drop out to the labour force. However, low paid positions do not have sufficient incentive to retain women who have children, therefore confirming the expectations of employers.

Hesketh, B and Chandler, P (1987) 'Training for New technology: Adaptability and Developing Learning Skills', *Training and Development in Australia*, 14(3), pp.8-10.

The authors argue that the uncertain nature of future job markets makes transferable training a necessity. They document their findings with respect to developing transferable technical training. These authors also identify a number of blockages to transferable training that exist within the Australian context. The chief factors that are identified as blockages to learning are lack of confidence, basic keyboard and numeracy skills, inappropriate training delivery methods.

Hesketh, B Chandler, P and Andrews, S (1987) 'Training for Transfer: Developing Learning Skills', *The Australian TAFE Teacher*, 20(12), pp.51-56.

This article discusses the role of cognitive schemata in technical training, and how the design of training context can be used to promote transferable learning. Hesketh et al also present results comparing learning outcomes under different training delivery methods. There is some evidence of gender differences in response to each presentation method.

Houston, J (1986) *The Fundamentals of Learning and Memory*, Harcourt Brace Jovanovich. San Francisco.

This is a good introductory text which presents a detailed review of developments in both Behavioural Learning Theory and Cognitive/Memory Research. The text is presented in two sections. The first section covers historical research on behavioural conditioning and the resilience of learned responses. The section examines the structure of memory, human capacity for abstract conceptualisation and the role of subjective perception in learning.

Jones, F L (1992) *Sex and Ethnicity in Australian Labour Market*, Occasional Paper, Australian Bureau of Statistics, Canberra.

An analysis of labour market outcomes based on census data by a leading sociologist. It discusses various discrimination theories from a sociological perspective and provides both an empirical and theoretical introduction. If read with Vaughn (1992; below) it provides a range of sociological approaches to women's (and other groups) labour market position which may be contrasted with prevailing human capital models. Contains a useful bibliography with an emphasis on status models.

Knocke, Wuokko (1991) "Women Immigrants - What is the "Problem'?", *Economic and Industrial Democracy*, 12(4), November, pp.469-486.

The image of the immigrant women as a problem is socially constructed. It is argued that subordination in an ethnically and gender segmented labour market are central frames of reality. The challenge is to define "the problem" as generated by structural subordination. Bibliography. Of interest is the 1991 combination in Sweden of ethnic and gender and structural subordination which may be compared with Australian authors such as Curthoys, Game and Pringle etc and the international (esp. European sourced) debate at the time

Kizilos, Peter (1990) 'Take my Mentor, Please', *Training*, 27(4), April, pp.49-55.

US review of monitoring programs of the Inland Revenue service. It expresses reservations about mentor programs, but agrees that companies should continue to foster formal and informal mentor relationships that exist.

Kokkinos, Anna and Robinson, Joanna (1991) *Career Paths and Training for Women in Local Government*, Report commissioned by the Municipal Officers Association of Australia, Commonwealth Department of Employment Education and Training, Women's Research and Initiatives Program, AGPS, Canberra.

A significant report in the local government area which questions many of the assumptions that structural and training reform will automatically benefit female workers.

Leah, M and O'Brien, B (1992) "Post Modern Tensions: Femininity and Reality". In C. Hyde, *Femininity and Reality: Factors that affect Girls Learning. A Project of National Significance*. DEET, Canberra.

The project captures the adolescent learning experiences of women from aboriginal, Italian and anglo-australian backgrounds and women in juvenile remand centres. The project documents the difficulties that women face in classrooms, particularly when those difficulties are compounded by racism and linguistic difficulties.

Lewis, C T and Stevens, C K (1990) "An Analysis of Job Evaluation Committee and Job Holder Gender Effects on Job Evaluation", *Public Personnel Management*, 19, pp.271-278.

The key objective of this study was to establish whether the gender composition of job evaluation committees reduced negative bias against female dominated jobs. The researchers found that gender bias occurred irrespective of which gender dominated the committee. This study's findings are in accordance with previous research on the same topic.

Light, Audrey and Ureta, Manuelita (1990) "Gender differences in Wages and Job Turnover among Continuously Employed Workers", *American Economic Review*, 80(2), May, pp.293-297.

Data analysis from the National Longitudinal Survey. Shows that wage gap is less amongst continuously employed workers that amongst the full sample in almost every race-cohort-schooling group.

Lynch, Lisa M "The Role of Off-the-Job v's On-the-Job Training for the Mobility of Women Workers", *American Economic Review*, 81(2), May, 1991.

Data from the USA longitudinal survey. Results show that training in US companies is firm specific, even for new entrants. for women, on-the-job training increases length of time in employment (reluctant to leave) while off-the-job training increases their labour turnover probability.

Morrell, S (1988) *Links, Adult Education and Work*, Melbourne, Network of Women in Australia.

Report on provision of educational programs specifically for women in Australia. The results demonstrate that a substantial proportion of education is community based, and funded on a user pays system. More pertinently the results indicate that only a very small proportion of courses are vocationally oriented.

Morgan, G and Knights, D (1991) Gendering Jobs: Corporate Strategies, Managerial Control and the Dynamics of Job Segregation, *Work Employment and Society*, 5(2), pp.181 - 200.

Morgan and Knight have documented the effects of relegating women to cashiers and tellers positions, whilst maintaining a male dominated insurance sales staff. The case study documents a unique situation, whereby the bank management decided after the October 1987 crash to begin bring sales of insurance and financial products in-house. The study illustrates the role gender stereotypes in excluding women from highly

paid insurance jobs, and preventing insurance sales being brought in-house.

Mount, M and Ellis, R A (1989) Sources of Bias in Job Evaluation: A Review and Critique of the Research, *Journal of Social Issues*, 45, pp.153-167.

Mount and Ellis have conducted a detailed review on job evaluation research which has been conducted within psychology. They examine the work on the structural properties of job evaluation instruments and perpetual factors involved in decision making. Mount and Ellis note that research to date has been inconsistent on the occurrence of gender bias. The authors conclude however that gender bias is an artefact of occupational prestige and status.

MTIA (1992) *Annual Report: 1 July 1991 - 30 June 1992*, MTIA, Sydney.

The report documents the MTIA's progress in the development of National competency standards and the role of these standards in the enterprise bargaining process. The report also details MTIA's policy on Award Restructuring and decentralisation of the Wage fixing System. The MTIA also advocates a policy of managed decentralism, where enterprise bargaining is conducted within the framework of the Award system.

National Institute of Adult Continuing Education (NIACE) (1991) *Women Learning: Ideas, Approaches and Practical Support*, NIACE REPLAN, Leicester.

Lists ideas on developing training courses specifically for women. Suggestions include low enrolment fees, child care provisions, and sensitivity to possible lack of confidence and discomfort with formal learning situations. This paper seems to be drawn from anecdotal evidence, rather than data that has been gathered at all systematically.

National Training Board (1991) *Eliminating Gender Bias in the Development of National Competency Standards: An Addendum to National Competency Standards Policy and Guide-lines*, N. T. B., Canberra.

The addendum briefly discusses language and how methods of (task) analysis can affect gender equitable outcomes in the development of National Competency Standards. The report identifies three areas of skills that have been traditionally associated with women's work, and that are prone to being eliminated from audits. The areas identified are derived from technical, organisational co-ordinating and communication skills.

Nordhaug, O (1989) "Reward Functions of Personnel Training", *Human Relations*, 42(5), pp373-388.

This author conducted interviews with 273 Swedish adult workers who had participated in firm level training. The interviews focused on respondents perceived outcomes from training in terms of career development, motivation to learn and psychosocial development.

Pazy, A (1986) "The Persistence of Pro-Male Bias Despite Identical Information Regarding Causes of Success", *Organisational Behaviour and Human Decision Processes*, 38, pp.366-377.

Pazy exploring whether attributional biases regarding the differential causes of males and females successes can be modified by information presentation techniques. Pazy attempted to emphasise the role of effort and aptitude in good performance by female employees. Pro-male bias still occurred in spite of these manipulations.

Ramsey McGowen, K and Hart, L E (1990) "Still Different after all these Years: Gender Differences in Professional Identity Formation", *Professional Psychology, Research and Practice*, 21(2), pp.118-123.

This article considers issues affecting professional identity formation, such as individual differences, graduate training, cultural perspectives and ideology. Ramsey McGowen and Hart review the professional socialisation process and then discuss three theoretical issues related to gender differences that appear to affect women in their professional roles: a relational focus, distance versus intimacy in relationships, and contextual decision making. We explore the theoretical issues under consideration and offer observations from personal experience in professional roles that are related to these theoretical concepts. They offer recommendations for training programs, the workplace, and further research concerning the impact of these issues.

Miller, Paul (1991) *How Workers Get Their Training; A Report Prepared for the Department of Employment Education and Training*, typescript.

The most comprehensive secondary analysis of the data set and includes specific technical and analytical chapters on women and training. It is an essential reference for the area and contains a useful bibliography of Australian and overseas studies, with a human capital emphasis.

Mincer, Jacob and Polachek, Solomon (1974) "Family Investments in Human Capital", *Journal of Political Economy*, 82, March/April, pp.76-108.

An historically and methodologically important article for human capital theory. Recent Australian work by Baker and Wooden (1991;above) and Miller (1991;below) should be consulted to update the bibliography.

Noe, Raymond A and Ford, J Kevin (1992) "Emerging Issues and New Directions for Training Research", *Research in Personnel and Human Resources Management*, 10, pp.345-358.

As a result of economic, demographic and technological changes, a number of important learning and training issues are emerging. These issues include continuous learning,

acceptance of attitudes and values of employees from diverse cultures, transfer of training, experience-centred learning and training evaluation. In this paper, theory and research related to these issues are discussed and future research needs are identified. Notes that much of the research on skills upgrading has been on engineering - a useful point for comparison with the importance of the MIA. Good bibliography of US sources. Notes IR connection by quoting Kochan et.al. Transforming US Industrial relations.

Ouellte, Larry (1990) "A Culture of Training", *Canadian Banker*, 97(6), November/December, pp.6-14.

The paper notes that bank expenditure on training is 7 times higher than other private enterprise sectors. Notes that women account for 70% of students enrolled in ICB (specialist banking) courses, and that women have been promoted to senior or even high level(!) executive positions in the last ten years. It is noted here as an example of the naivety frequently encountered in business publications.

Power, Margret (1975) "Women's Work is Never Done - by Men: A Socio-Economic Model of Sex-Typing in Occupations", *Journal of Industrial Relations*, 17(3), September, pp.225-239.

A relatively earlier article in an accessible Australian source which looks at the feminisation of work. Important for the development of Australian perspective's on the issue.

Robinson, P and Mageean, P (1992) *Gender Inclusive Teaching in TAFE*, NPAWT, Melbourne.

This paper documents the results of an intensive study of TAFE student and teacher responses to female students in non-traditional areas. The paper seeks to present a fair and balanced critique of the experiences of all parties concerned. It provides a list of staff development recommendations so as

promote gender inclusive teaching methods in TAFE, and more specifically trades training divisions.

Staley, C C and Shockley-Zalabak, P (1986) Communication Proficiency and Future Training Needs of the Female Professional: Self Assessment versus Supervisors Evaluations, *Human Relations*, 39(10), pp.891 - 902.

This research investigates the perceptions supervisors have of their female employees' communication proficiency, assuming, as has been repeatedly discussed in the literature, that communication skills are a critical component of organisational effectiveness and promotability. In particular comparisons were made between evaluations of supervisors on a variety of communication competencies and female employees' self evaluations. Similar comparisons were made between the supervisors' assessment of the importance of future training in each skill and females' own assessment of their need for future training. While this research is exploratory in nature, the results demonstrate striking and potentially important differences between the perceptions of female employees and their supervisors. The research involved surveying 122 female professionals and 80 of their direct supervisors, (92% of whom were male).

Stempel, Robert (1990) "Training and Re-training to Meet the Needs of Globalization and Technological Change", *Executive Speeches*, 4(12), July, pp.6-10

Interesting short article as it indicates the global acceptance of an emphasis on skills formation. Stempel is President of General Motors. Stempel notes the globalisation of business and the 'explosion of technology' and hence the need for training and re-training. Notes that GM has specific programs for minorities and women and the importance of literacy and basic skills, p.8, and commitment to EEO p.10. States GM's support of "minority owned businesses" p.10 who are suppliers to GM. He argues that this is new form of training.

Thomson, P (1992) *Assessing Prior Achievement: Methods for Recognising Learning Gained through Experience*, NOOSR, Canberra.

Thomson describes many of the practical issues which are involved in the assessment of experiential learning. The report is written from the perspective of gaining recognition for overseas qualifications, however the points are still germane in terms of recognising informally acquired experience. Thomson identifies analysis of the underlying knowledge component of competencies as a key issue. Lack of appropriate national administrative structures for the assessment and accreditation; and a need to clarify relationships between state and federal bodies are cited as priorities.

Vaughn, Graeme (1992) *Sex Differences in Occupational Attainment*:(Census of 1986), ABS Catalogue no.62830, 23 September.

Useful introductory discussion of broad explanations of difference which divides into 1 that acquired or achieved characteristics are related to job performance (ie; theories of status attainment and Human Capital Theory) and 2 theories based on ascription which argue that extraneous factors account for occupational distribution (ie; explanations based on social discrimination: social stratification: and (relatively independent) effects of patriarchy.

Washington, Sally (1992) "Women at Work", *OECD Observer*, 176, June/July, pp.28-31.

A short but useful and easily obtained article which summarises the issues surrounding the identification a value of female skills and the economic implications of unpaid female labour and provides a concise introduction to equity issues of female labour force participation in western economies.

Williams, Claire and Lucas, Jan (1989) "Gender and the Labour Process: A Review of the Literature", *Labour and Industry*, 2(1), pp.145-161.

As indicated by the title it provides a relatively recent summary and argument on women from a labour process perspective.

Windsor, Kim (1988) *Short-circuiting. Women in Electronics: Skills, Training and Working Practices*, A report produced for the Electrical Trades Union, Victorian Branch. WREIP, DEET, AGPS, Canberra, July.

Argues that the electronics industry has been at the forefront of technological change but that "it is incongruous that the production of electronic equipment is characterised by traditional production techniques" ... and that therefore the application of technology has been used to reinforce this approach by increasing the number of jobs that can be transferred from formally qualified to internally trained low skill workers of which women make up the majority. The approach is considered inappropriate and limits the potential for skill intensive technology transfer. It also notes that wage differentials of women workers may be compounded when combined with regressive tax measures.

Women's Bureau, (1989) *New Brooms: Restructuring and Training Issues for Women*, AGPS, Canberra.

This project explores female employment patterns, training, organisational and technological change within female dominated sectors such as retail, banking, hospitality and community services. The paper considers the implications of the Structural Efficiency Principle for female workers in these industries. Particular issues that are raised include skills auditing of entry level qualifications, the development of career paths, and retraining of women returning to the workforce. *New Brooms* also questions the inevitability of the development of a contingent female workforce in these industries. The authors argue that it is as much a social construct as an economic one.
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Women's Bureau (1990) *Clean Sweep: Conference on Restructuring and Training*, AGPS, Canberra.

A "standard" which should be consulted by students and researchers.

Young, Christabel (1990) *Balancing Families and Work: A Demographic Study of Women's Labour Force Participation*, Commonwealth Department of Employment Education and Training, Women's Research and Employment Initiatives Program, AGPS, Canberra, February.

Young is with the Demography Department, Research School of Social Sciences, ANU. Standard text on women's labour force participation. Contents include; demographic experience and labour force participation of cohorts; entering and leaving the labour force; person years in the labour force; the contribution of women to the labour force and implications for the future.

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