JOB DISPLACEMENT AND ITS IMPLICATIONS FOR ADULT EDUCATION AND RETRAINING POLICY: THE CASE OF HONG KONG

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ABSTRACT

The study explores the economic returns to adult education and retraining for displaced workers and highlights policy implications in the case of Hong Kong. The study addresses four broad questions: (1) What is the social and economic profile of displaced workers? (2) What are the earnings effects, if any, of adult education and retraining? (3) What determines reemployment after retraining? (4) What do participants think about the effects of adult education and retraining?

The design of the study attempts to bridge possible gaps between rates of returns analysis and interpretation of the subjective views of individual workers. Rates of returns analysis generated the following results: (1) participation in adult education explained earnings premiums pre-displacement but the payoff was not carried forward to reemployment; (2) earnings effects of work experience were reported at all stages—from pre-displacement through reemployment—but experienced workers had greater difficulties in re-entering the job market; (3) a gender bias in the earnings profile was identified; and (4) employer sponsorship explained earnings premiums for reemployed workers.

Analysis of the views of stakeholders and participants in retraining revealed eight major themes: (1) workers intentions to re-enter the job market, (2) outcomes and shortcomings of retraining programs, (3) barriers to adult education and training, (4) growing concerns about changing labor market requirements, (5) perceptions of discrimination, (6) training following reemployment, (7) understanding of the need for lifelong learning, and (8) concerns for changes in retraining policy. Stakeholders did not always agree in their views and opinions of the benefits of participation in retraining programs. Learners questioned
whether employers were genuinely interested in recruiting displaced workers from retraining programs, and employers argued that the onus was on displaced workers to take the initiative and demonstrate adequate skills and a positive attitude, in order to meet the requirements of employers.

To synthesize individual perspectives and aggregate rates of returns analysis, issues were reframed in terms of questions about how to: (1) recognize the multiplicity of goals of adult education and retraining as an integral part of the lifelong learning system, (2) retrain displaced workers to maintain their long-term employability, (3) rectify the market failure represented by the mismatch of jobs, barriers and discriminations to access to jobs, and (4) enhance greater commitment of employers to the promotion of continuing education and workplace learning.

Finally, the reframed questions were cast in terms of policy implications for adult education and retraining related to displaced workers. Needs were identified in the following areas: (1) recognition of non-earnings outcomes to widen the spectrum of planning and development of adult education and retraining, (2) formulation of a qualification framework to recognize work experience and keep experienced workers employable, (3) realization of a close monitoring system to match the demand and supply of skills, and (4) involvement of employers to support education and training and maintain an efficient and equitable access for employees.
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Knowledge-driven economies are associated with polarization and inequality rather than convergence and equality (Brown, Green, & Lauder, 2001, p.252)

Introduction and Purpose

The purpose of this study is to assess the role of adult education and retraining in assisting displaced Hong Kong workers adjust to rapid changes in the labour market. In it, I attempt to (i) measure the effects of adult education and retraining on the earnings and reemployment of a group of displaced workers; and (ii) analyze stakeholders’ perceptions of displaced workers in relation to the adjustment process. This chapter presents background on the issue of job displacement and discusses the implications of reshaping adult education and retraining policies to assist those displaced. I introduce the theoretical and empirical questions that guide the study and describe the structure of the thesis.

Background

Keen competition in the global marketplace has led to economic restructuring and reshaping of jobs in many industrialized countries. These changes are attempts to contribute to social and economic well-being but increased job displacement appears as a by-product of this process. Experienced workers are laid off because of plant closures, downsizing, contracting out, or firms converting to other types of business. While workers displaced in this manner experience many of the same difficulties as other unemployed workers, they also face the additional economic and adjustment pressures of unexpected job loss (Gibbons
& Katz, 1992; Leigh, 1995; Fisher, 1999; Foley, 2001). Their pre-layoff skills and experience, usually gained in declining industries, may have limited relevance to the new economic structure and available jobs (Fallick, 1996; Barnow & King, 2000). Those successful in finding another job are likely to be re-employed at wages lower than their pre-layoff remuneration level. Job displacement is not confined to primary and secondary industries but permeates the entire economy under the accelerated pace of global restructuring (OECD, 1998). In such an economy the adjustment of displaced workers to labour market changes becomes an important issue. This study focuses on the way adult education and retraining programs in Hong Kong have been designed to help displaced workers adjust to labour market changes.

The issue of job displacement and how displaced workers can be reemployed has emerged in recent years as a major concern for social and economic policy development. The need to identify and facilitate the adjustment of workers in declining industries is widely discussed in the literature (Addison, 1991; Kruse, 1991; Leigh, 1995; Fisher, 1999; Foley, 2001). The creation of organized retraining programs for displaced workers is one response to the growing number of workers experiencing job displacement and an urgent need for adjustment.

Supported by active labour market policies, worker retraining is expected to improve access to jobs and enable workers to develop the job-related skills required by expanding industries. Worker retraining must be differentiated from the general vocational training undertaken by youth entering the job market or adult workers upgrading their skills (Leigh, 1995; Rainbird, 2000). Worker retraining is arranged in response to a specific need for workplace adjustment at a particular time and place. Because it has to cope with
unanticipated local economic restructuring, it seldom comprises a regular curriculum or a long-term schedule.

In the context of today's changing economy, there is no single straightforward approach that will provide the best solution for displaced workers. Among many possible policy responses, the provision of publicly funded adult education and retraining for displaced workers is being adopted as a priority policy measure (OECD, 1998). However this approach is controversial because of the nature of displacement and concern over whether these issues can be addressed by retraining (Addison, 1991; Kruse, 1991; Johnston, 1994; Fallick, 1996; Philip, 2001).

The promotion of adult education and retraining, as a way of facilitating workers' adjustment to rapid labour market changes, is often articulated within a wider context of lifelong learning. According to the OECD, "Lifelong learning is a long-term, preventive strategy that involves a broadened conception of the target groups for public policy. It requires that high-quality initial education and training is available for all young people. For those adults with an adequate foundation of initial education and training, policies should ensure opportunities for upgrading the skills and knowledge needed to maintain employability and earnings growth potential. For those with deficiencies in initial education and training, policies need to provide for second-chance learning and the acquisition of the foundation for further learning" (OECD, 1997b, p.14).

The expansion of retraining options for displaced workers has been supported in many advanced economies and developed countries since the 1980s by shifting public expenditures towards active labour market policy. This growing trend also facilitates the
establishment of a stable and well-funded employment and retraining system by the public sector. Accompanying the search for ways that retraining programs can assist displaced workers, there is increasing pressure to develop useful mechanism of evaluating retraining initiatives (Addison, 1991; Leigh, 1995; Fallick, 1996; Barnow & King, 2000).

Apart from the concern for fiscal accountability, the changing role of the public sector is probably one of the key issues in the scenario. While the downsizing of the public sector continues, fears are raised about cutbacks to publicly funded adult education, training, and retraining. As government reduces its overall involvement in education on the whole, measures are taken to contract out the publicly funded provision and expand the self-financing provision with different scope and purpose. The economic imperative to be self-financing prompts programs to become largely market-driven and the ability to pay becomes the predominant means of access to learning opportunities. Although the need to relate adult education to the economy's emphases on creativity, flexibility, productivity and employability of the workforce is prominent, attempts to shift the policy direction to allow greater access to adult education is called into question. While the policy goals of adult education and retraining should address productivity, there must be equal emphasis on the development of an egalitarian society.

Particularly in the case of displaced workers, concern for equity is as important as that of productivity at both the individual and societal levels. There is a need for revitalization of the basic role of government and strategic interventions, particularly when displaced workers must pay a disproportionately large share of program design and development costs. Whilst the call for less government intervention across the entire economy is a prevailing policy orientation, it is debatable whether adult education can benefit from a higher degree
of government involvement (Griffin, 1996). It is also unclear to what extent adult education can improve productivity and contribute directly or indirectly to a more egalitarian society. Investment in human capital at all levels of society is also thought to be a question of generations, not of business cycles (Asplund, 1994). Too-frequent policy changes imply higher social costs of adjustment which will affect specific target groups in a disproportionate manner. The policy decision therefore depends to a great extent upon striking a balance between the responsiveness of adult education and the continuity of its policy (Rubenson, 1995). It is against this background that the study attempts to set the scene of policy analysis in relation to job displacement and adjustment through adult education and retraining.

Studies of job displacement have focused on the economics of employment and the effects of training and retraining in an attempt to gauge the efficiency of these types of programs (Addison & Portugal, 1989; Addison, 1991; Kruse, 1991; Gibbons & Katz, 1992; Leigh, 1995; Barrow & King, 2000; Foley, 2001). Questions are raised about whether these programs actually work and whether public resources should be used to support adult education and retraining for displaced workers. The argument is usually linked to labour market outcomes at the aggregate level, and the impact of education and retraining on the reemployment of displaced workers.

Assessments of costs and benefits of programs are frequently treated as departure points in policy discussions of this nature. In the absence of such data, other criteria are used for evaluation purpose including: (1) whether programs and services facilitate the transition of displaced workers to jobs in expanding industries and growth sectors within existing industries; (2) if program activities meet the needs of displaced workers; (3) whether
programs serve the entire spectrum of displaced workers, not just those easiest to place; (4) the degree to which training programs can provide marketable skills to program graduates; (5) if programs effectively utilize existing educational and training institutions; and (6) whether a broadening of job skills is encouraged. In essence, retraining is not designed to achieve competency at a particular narrowly defined job, but to enable workers to acquire broad-based employability skills. These skills include an ability "to think creatively and solve problems, work effectively in teams, adapt flexibly to rapid shifts in product demand, and engage in lifetime learning" (Leigh, 1995, p. 13).

In some cases, the measurement of positive outcomes, defined by earnings and reemployment, is used as justification for expansion of retraining programs for workforce adjustment. Less emphasis, however, is devoted to understanding the individual worker's perspective and how the adjustment process has been shaped by their particular social and economic backgrounds. The extent to which retraining policies are reshaped by changes in workplace requirements and the structure of labour markets is equally as important as the straightforward cost-benefit measures.

The social, economic and policy changes described above relate to the developed west and may not map directly onto the situation in Hong Kong. Nevertheless, as an economically dynamic Asian city, Hong Kong maintains close links with the international community and shares many similar responses to the trend of economic globalization. Previous western studies provide a valuable reference point from which to examine how adult education and retraining can assist displaced workers in adjusting to labour market changes in Hong Kong.
In Hong Kong, public policies addressing issues of job displacement and worker adjustment have developed in a fashion similar to those of the advanced western economies. Publicly-funded work-related programs of adult education and retraining began to be promoted in the mid 1990s to help displaced workers adjust to the changing labour market. These programs were reinforced in the late 1990s, when education reform became focused on lifelong learning, thereby broadening the scope of adult learning to include improved individual competitiveness. People of Hong Kong were encouraged to actively participate in various forms of continuing learning both for skill upgrading and all-round personal development. This change in education policy was unprecedented. It provided the context for increasingly prominent demands for more inclusive mechanisms that would facilitate displaced workers' access to adult education and retraining. At the same time, there were equal and offsetting pressures for a stringent review of adult education and retraining policies before any decision to commit further public resources was made. The study's empirical location lies between these conflicting sets of demands.

Theoretical Questions

In our changing society, the economic dimensions of adult education have become a cause for concern in the construction of policy for education and learning. Unlike other disciplines, however, such as psychology and sociology, economics has largely been neglected in the study of adult education. The economics literature often does not relate strongly enough to adult education to justify an extensive review (Peters, Jarvis & Associates, 1991). Economists often use methods and terminology that are hard to translate into a widely understood language (Levin, 1989). In consequence, currently available empirical work on the economics of adult education has come "primarily from research workers with [only] a loose connection to the adult education field" (Tuijnman, 1996, p.130).
Despite the increasingly profound effect of economic theories in policymaking, an understanding of the interplay between adult education and economics remains fragmented. The economic dimension has not been elicited in adult education as a specific knowledge base. Nor does the economics of education attempt to deal with tasks, and topics surrounding the needs of adult education. Addressing this gap directly, the study focused on the economic dimensions of adult education by introducing two major concerns: (1) the application of economic theories in adult education and, (2) the emerging knowledge base of economics of adult education.

Application of Economic Theories in Adult Education

Adult education is expanding rapidly in highly industrialized and less industrialized countries. Framed in the context of lifelong learning, its provision covers a potentially vast area touching on many fields and involves a growing amount of resources from both the public and private sectors (Belanger & Tuijnman, 1997). A major concern for the future development of adult education is the keen competition with other sectors for resources. However, its expansion cannot be justified by a general policy goal to promote responsiveness to lifelong learning needs nor by the belief of an ever-increasing demand from participants. In this situation, economic performance and variations become the main thrust shaping the future role of adult education.

Among other prominent approaches and concerns, the application of economic theories and studies is therefore essential to address the most immediate problems related to adult education and the world of work (Rubenson, 1992; Levin, 1993; Asplund, 1994; OECD, 1997b; Tuijnman & Schuller, 1999). However, due to its diverse nature and content, it is
difficult to formulate an impartial framework to analyze the field's economic impact. A basic question concerns the extent that outcomes can be recognized in economic terms when participants are learning for integrated reasons that will improve their life chances and quality. Any attempt to draw possible boundaries between economic and non-economic outcomes would be artificial and run the risk of achieving a less than meaningful analysis. The need to address a wider range of learning benefits seems necessary in the application of economic theories to adult education.

An Emerging Knowledge Base of Economics of Adult Education

A rich body of economic literature has provided diverse insights into the association of education and economic value. The early 1960s was a period marked by an emerging interest in expanding the focus of economic analysis to include increases in national income as well as traditional factors such as land, labour and physical capital. Investment in human capital through education and training has been promulgated as a major explanation for the unaccountable residual of the economic production function (Schultz, 1961; Becker, 1964). Economics of education at that time began to develop as a subfield with many of its interdisciplinary studies grounded in human capital theory.

Concepts of economics of education also apply to adult education but raise issues above and beyond those dealing with formal schooling explained by the front-end model of education. Major variations in conceptual frameworks encompass the impact of adult education on working life and the role of adult education in specific production activities and in various settings (Rubenson, 1992; Tuijnman & Schuller, 1999). Major stakeholders like employers, trade unions and provider organizations begin to play increasingly important roles in the economic analysis of adult education.
The promotion of a conceptual framework of lifelong learning in recent years has extended the analysis of returns to education beyond what human capital theory can accommodate. The measurement of learning outcomes must be more comprehensive and relevant when there are stronger demands for accountability and evaluation in the public policy arena. In addition to the benefits narrowly defined by market outcomes, recognition of the outcomes of social cohesion and inclusiveness also becomes important (McMahon, 2001). The contribution of social capital theories have opened up more space and increased awareness of the need for policy deliberations leading to sustained economic growth and well-being (Coleman, 1988; Putnam, 1995, 2001; Hall, 1999; Helliwell, 2001; Green & Preston, 2001; Woolcock, 2001). The notion of social capital, in this context, plays a complementary role to human capital (Schuller, 2001).

Economic theories informed by both human capital and social capital perspectives are having an increasingly profound effect on public policy formulations for sustained economic growth and well-being. This study takes those theories into account. In a more general sense, by focusing on the impacts of learning beyond initial formal education, the analysis will attempt to contribute to the knowledge base of economics of adult education.

Interest in exploring the economic returns to formal schooling is longstanding at the elementary, secondary, and higher education levels. Recently, the economic analysis of education has focused on the returns to human capital investment in the form of adult education. The study attempts to develop an analytical framework to identify the economic returns to adult education, particularly to the provision of retraining for reemployment. The attempt aims to widen the debate of the economic impacts of different forms of human
capital investment beyond the settings based on the front-end model. The analysis also contributes to education policy and planning for lifelong investment in human capital.

**Empirical Questions**

In Hong Kong, as elsewhere, market forces provide neither open access to education at the post-compulsory stage, nor maintain equal opportunities to work; the public sector provides learning opportunities for those in need. More important, the role of government and public policy is to contribute to and maintain the balance among a wide range of positive economic and social outcomes. The study aims to analyze the social and economic background of displaced workers and empirically explore who can access adult education and retraining. From these results, it should be possible to sketch a framework for public polices designed to achieve sustained economic growth and well-being in Hong Kong and to assess the implications of these policies.

The benefits of adult education and retraining extend beyond market outcomes. A country’s economic competitiveness is not solely explained by improvements in productivity but also by the degree of social cohesion. The extent to which the impacts on social cohesion and well-being can be synthesized is crucial to the purpose of this study. Key areas to be addressed include civic participation and active citizenship, civic cooperation, social trust, crime, industrial and inter-ethnic conflict, and health and psychological well-being (Green & Preston, 2000).

The inclusion of social cohesion as a “non-market” benefit challenges Hong Kong’s evaluation framework for adult education and retraining in labour market adjustment. The present set of criteria, including increased earnings and probability of reemployment,
provides a relatively narrow scope of assessment by measuring only market outcomes. However, there is no assumption that the inclusion of social cohesion will make adult education and retraining more cost-effective or meaningful. Indeed, the purpose of including social cohesion is to encourage more questioning and reflection in the process of formulating timely policies to successfully tackle the issue of job displacement.

Within this broad context, the study sought to measure the economic returns to adult education and retraining for displaced workers and to analyze how the individual experience challenges the assumption and practice of the existing provision. The following four broad questions guided the study:

(1) What is the social and economic profile of displaced workers in Hong Kong? (2) Are there measurable effects of adult education and retraining on earnings at the pre-displacement and reemployment stage? (3) What determines the probability of reemployment after retraining? (4) How do participants’ perceive the adjustment process and the effects of adult education and retraining?

Implicit in the policy goal of providing retraining to assist displaced workers is the perception that many of those who are displaced, can least afford it in terms of economic and social resources. In today’s information society, workers employed by declining traditional primary or peripheral industries are more likely to face job displacement and have fewer resources to fall back upon (Rainbird, 2000). Other important criteria, such as level of schooling, gender, and age may also affect the returns to workers’ human and social capital investment. In Hong Kong where there is no unemployment compensation, this is a central issue in policy debates on assistance to displaced workers. Therefore, by identifying pre-
displacement earnings and total family income before comparing displaced workers with the
general workforce, the study seeks to explore whether displaced workers can be classified as
belonging to a lower socioeconomic group in Hong Kong society.

There is a need to analyze the complexities of reemployment. The assumption that
retraining is solely for reemployment is problematic. Not all participants undergoing
retraining will be able to find a job upon completion. The research questions direct attention
to the extent that retraining contributes to the probability of reemployment. It is plausible
that other factors, such as participants' accumulation of human capital from earlier stages
and prior labour market experiences will also play important roles in determining the
probability of reemployment after retraining. The possibility that some participants in,
retraining programs may not be motivated to re-enter the job market cannot be ruled out.

The perspectives and views of displaced workers on the adjustment process are important
considerations when analyzing the extent that provision of adult education and retraining
assists in the process of job displacement. The opinions of other stakeholders including the
administrators of respective programs and employers will also contribute to the analysis.
The question links and contrasts policy analysis based on aggregate data and decision-
making based on individual experience and expectations. The analysis is important in
understanding how retraining policy is relevant for individual workers who have undergone
job displacement.
Structure of the Thesis

The remainder of the thesis is structured in the following manner. Chapter Two reviews the literatures on job displacement, retraining for workers and the application of economic theories in the context of adult education. I introduce the scope of the investigation of displaced workers; investigate whether perspectives of human resource development can explain the economic impact of education, training and retraining of adults; and provide a description of the issues of economic efficiency and equity that form the framework of the study.

Chapter Three presents an historical account of adult learning in Hong Kong with an emphasis on the social, economic and political factors that shape its development. I provide a broad description of the Employees Retraining Program as well as current and future labour market conditions in Hong Kong. Against this backdrop, the research will explore how labour market policies would be made more effective and how adult learning would contribute to human resource development.

Chapters Four to Six form a “unifying unit”. Chapter 4 details the research design and methods, and justifies the approach and instruments used for data collection. Both quantitative and qualitative research methods were employed: a questionnaire solicited data for a rate of returns analysis; discussion group and individual interviews invited a broad range of views of the major stakeholders. The purpose was to bridge a potential gap between the policy framework based on aggregate analysis and the concerns of major stakeholders from individual perspectives.
Chapter 5 reports the findings of the rate of returns analysis which highlight the effects of major variables and the specification of structural equation models. Variables include the socioeconomic position of the sample group of displaced workers; the earning differentials among the group before retraining; the earning differentials among the group who become reemployed; the determination of the probability of reemployment; and the specified path model for an overall framework for policy formulation on how education and training can predict earnings of displaced workers.

Chapter 6 analyzes the data collected from individual interviews with displaced workers in retraining programs, and discussion groups with other labour market stakeholders and analyzes the mechanism of adult education and retraining. Emerging themes are noted and categorized.

Chapter 7 concludes the thesis with a summary of the research and a discussion of the implications of the study. Suggestions are provided for ways to improve our understanding of an inclusive policy framework that focuses not only on explorations of benefits but also on the issues that facilitate or discourage the implementation of policies for adult education and retraining.
This chapter is divided into three parts. First, I present the human resource development approach and relate the literature to the economic impact of adult education and training. Second, I describe the issues of economic efficiency and equity that are central to policy analysis of this nature. Third, I review literature on displaced workers and training/retraining for reemployment.

**Human Resource Development and the Education and Training of Adults**

Human resource development (HRD) has a long-standing association with the economics of business operations, particularly in terms of organizational practice and profit maximization. Working with different paradigms and traditions, adult-education researchers and practitioners are showing great interest in analyzing HRD activities in the context of adult learning. A central concern is how adult learners can acquire the knowledge, skills and competencies—‘knowledge capital’—that will increase their capacity to perform at work. Some researchers focus on macro-economic returns and policy implications (Dahlberg & Tuijnman, 1991; Tuijnman, 1996). Others address access concerns and lifelong learning in the knowledge society (Burton, 1992; Rubenson, 1992; Timmermann, 1995; Rubenson & Schuetze, 2000). Some focus on the changing workplace and its skill requirements (Raggatt, Edwards & Small, 1996; Rowden, 1996; Swanson & Arnold, 1996; Brown, Green & Lauder, 2001). All recognize as a central characteristic that in the shift to the knowledge-based economy “firms are placing greater emphasis on their knowledge capital” (Edquist &
Riddell, 2000, p.3). The changing relationship between education and the economy has therefore alerted policy makers and researchers to the growing importance of adult education’s embedded emphasis on HRD.

In the adult education field, dominant HRD theories and conceptions are rooted in human capital theory (Schultz, 1961; Becker, 1964) and its competitors: screening theory (Spence, 1974) and labour market theory (Sheets, Nord, & Phelps, 1987; Fine, 1998). These theories address the generation of economic outcomes and related distribution issues in terms of economic efficiency and equity. Increasingly, theories of human capital are being supplemented by theories of social capital which focus on the non-economic benefits of education and training (Putnam, 1995; 2001; Brown, Green & Lauder, 2001; Schuller, 2001). Each of these theories contributes important perspectives to the analysis of human resource development in the present study.

Human Capital Theory

Tuijnman (2000) defines human capital as the “economically useful knowledge, skills, competencies, and attitudes held by individuals or, in the aggregate, as the stock of knowledge and skills present in whole populations” (p.397). Human capital theory emerged in the 1960s to account for the way skills and knowledge contribute to the quality of human effort and improve productivity (Schultz, 1961; Becker, 1964). The theory gained widespread attention because of its emphasis on labour quality and returns to investment in education. Schultz (1961), for example, pointed to the importance of on-the-job training and apprenticeships, formal education, study programs for adults, and migration for changing
job opportunities. Adequate health facilities and services were required to support the pursuit of human capital.

In recent decades, the human capital argument has provided the theoretical justification for policy decisions to increase investments in population quality, schooling, work experience, and health improvements. Concern for investment in education and training remains a priority on the knowledge economy's policy agenda.

Human capital theory posits the existence of quantifiable economic benefits to education. The relationship between education and productivity is considered to be straightforward. Economists interested in the human capital perspective argue that education and training can be treated as a form of investment which produces future benefits in the form of 'higher income' for both educated individuals and for society as a whole (Woodhall, 1987). For some, the attainment of higher income represented by salary increases is determined by an increase in productivity in the workplace (Mincer, 1974). The benefits can be measured by individuals as private returns and by the economy as social returns. Private returns take into account the increase in earnings, employment opportunities and improvement in life quality, while social returns focus on the effects of education on the labour market and aggregate economic growth.

Human capital theory has traditionally focused on the analysis of formal education. In this context, the measurement of human capital is often demonstrated by a positive correlation between individuals' educational attainment and earnings. Tuijnman (2000) points out, however, that this measurement is indirect and not robust in explanation. His reservations are related to the ambiguity of educational attainment and its weak representation of
knowledge and skills applied in the workplace. He argues that because requirements vary across countries, level of educational attainment is not a good indicator of skill development. "Educational attainment based on cycles of completed formal education neglects the knowledge and skills people acquire in the post-school years through nonformal or informal learning at home, at work, or in the community" (p.400). Educational attainment measures assume that knowledge and skills acquired through formal schooling keep their value over time but Tuijnman asserts that skills can be lost through obsolescence and disuse. "Educational attainment should be measured dynamically and not statically because knowledge and skill requirements in the economy and society evolve with time" (ibid).

When human capital theory is applied to adult education, participation is taken as a recurrent form of investment at a later stage of life. The knowledge and skills acquired can be applied in the workplace in the short term and refreshed later if needed. Adult education is broad enough to accommodate the formats of nonformal and informal learning. In this context human capital is not determined according to attainment or level of completion but rather by productivity related benchmarks of skills and competencies (Tuijnman, 2000; Schuller, 2001). In particular, participation in adult education and retraining takes into account the knowledge and skills acquired after formal schooling and in the workplace. Therefore, the measurement of the economic returns is even more comprehensive in the case of adult education than for formal education.

Although human capital theory has been widely used to justify the provision of education and training, its explanation of the complexities of the interplay between education and economics is constrained. Brown, et al., (2001) contend that human capital theory reduces individual workers to a bundle of technological skills that are fed into the economy, and
therefore, “while it successfully challenges the limited understanding of capital in classical economics, it perpetuates a mechanistic view of the individual workers” (p.13). Skill acquisition for workers is not just a technical concern but is also related to the social context. Brown, Green and Lauder (2001) further argue that the most serious weakness of human capital approaches is that:

The obsession with measurable outcomes has led them to ignore the process of skill formation. This has remained a black box revealing precious little about skill formation in motion...process has become more important because of the pace of economic innovation and changing skill requirements in knowledge-driven economies (p.25).

Alternative Perspectives

Neoclassical perspectives such as human capital theory reinforce welfare economics premised on the goal of Pareto efficiency and the essence of perfect market competition. In neoclassical models there is “little reference to history, institutions, or location; institutional factors are unquantifiable and, for the most part, are therefore ignored” (Ackerman, et al. 2000, p.14). In contrast, institutional economic theory stresses that institutions and institutional change are important forces shaping economic performance at any given period of time. Markets are not simply the outcome of rational action; they represent a system of interacting values and options for individuals, firms, the non-profit sector, the public sector, and the international movement of capital over time (Tool, 1993). Of the economic models that compete with human capital theory, institutional economics is one of the most important for the purposes of this study.

A framework informed by institutional economic theory encompasses three aspects of the institutional organization of adult education: (1) structure, (2) process, and (3) incentive. The
structural view provides a means to characterize the socio-economic system for the emergence of adult education. The process view recognizes the importance of time frame and the temporal order of different options which uncover social, political, and economic change related to participants in adult education. The incentive or disincentive view addresses means of social control whereby someone’s option to participate is regulated. The institutional perspective emphasizes the path-dependent relationships of variables used to analyze the economic context of adult education. Policy concerns relate particularly to influences on the planning process and the instrumental evaluation of good policy.

Screening theory and job-matching theory have emerged as alternative approaches to the views expressed in institutional economics for investigating the economic context of education. Screening theory, sometimes presented as signalling theory, does not take the relevance of education and productivity for granted (Spence, 1974). Rather, the investment in education is for qualifications that can be used as signals to potential employers about the skills an individual possesses. In other words,

people undertake an education not primarily because it makes them more productive at work but because the conferred qualifications and credentials can be used to inform employers that the person possesses certain scarce skills and other desirable traits that are likely to make him or her more productive in a given job than competitors who lack these specific characteristics (Tuijnman 2000, p.396).

From the screening theory perspective, adult education serves as a selection mechanism to enable employers to identify suitable potential candidates, but not necessarily as an investment to raise productivity at work.

Job-matching theory is similar to screening theory in recognizing the importance of credentials and qualifications, but differs in the way information is held by both employers
and workers. In this perspective, employers do not wait for the “signal” from potential employees because they already have the necessary information about the requirements of the job and are therefore able to match workers and jobs. Productivity will improve if there is an accurate worker-job match. Matching demand and supply of skills is crucial in determining the investment in education. The job-matching perspective explains why retraining programs are designed to ensure trainees possess the basic skills employers demand.

While screening theory and job-matching theory acknowledge the employment effects of educational qualifications and credentials, labour market theory questions their relevance (Sheets, Nord, & Phelps, 1987; Fine, 1998). In this perspective, the hiring decision is conditioned by imperfections in the labour market where segments and barriers to workers exist. These access constraints limit what improvement in productivity and earnings can be achieved. The question of open access to adult education and retraining will be further developed in a subsequent section on equity issues.

Another challenge to traditional perspectives on skill acquisition and performance improvement relates to the scope of HRD and the extent to which it could be more socially responsible. Bierema (2000) advocates holistic development of the individual as a first step in broadening the scope. “Although, holistic development is not necessarily linked to immediate or future job tasks it values the overall growth of the person, who will contribute her or his knowledge to the organization and wider community” (p.209). Wall (2000, p96) argues that the greater levels of social, political, and financial participation that a more holistic approach to HRD makes available, could potentially harness knowledge “in the
interest of all in society." A more inclusive perspective in the interpretation of HRD therefore seems to be indicated.

In sum, the dominance of human capital theory is challenged today by other labour market, institutional, and economic perspectives. Nevertheless, human capital theory contributes valuable insights into human resource development and leads to the widespread provision of workplace training, professional continuing education, and many other forms of education in the context of lifelong learning.

**Wider Benefits of Learning**

A variety of possible benefits to education have been identified and categorized according to whether they are: psychological or behavioural, cognitive or affective, vocational or non-vocational, and monetary or non-monetary (Solomon, 1987). The various classifications and nature of economic benefits can serve as a complementary and supplementary framework for the analysis of returns to education. Concern for assessing wider benefits of adult education has uncovered a complexity closely linked to at least two issues: consumption benefits and externalities. The first directs attention to whether consumption benefits are included in the assessment, and how they can be measured. Consumption benefits are non-monetary returns accruing to the individual from education occurring later in life (McMahon, 1987). They include positive effects on family health, purchasing efficiency, and home management skills. Among other concerns, the argument focuses on the relation between consumption benefits and the decision to invest in adult education. Since the scope of adult education is well beyond the production of credentials for
immediate use and monetary returns, the exclusion of consumption benefits will underestimate the overall returns to adult education.

The second question in measuring economic benefits relates to the concept of external benefits. Externalities happen when benefits are captured by others not involved in the investment in adult education. External benefits can be broadly grouped into three types: (1) benefits to society at large including the preservation of democratic institutions and reduced medical and health costs, (2) employment-related or neighbour benefits such as environmental improvement, (3) spill-over benefits from education that go to other political jurisdictions due to outflow of people (McMahon, 1987). In view of the multiple goals and the nature of adult education, benefits are sometimes deliberately assigned to parties other than the participant; programs for community development and family life education are typical examples. Therefore, the uncertainty identifying and measuring the external benefits flowing from any particular investment in adult education could ultimately result in an underinvestment in adult education as a whole.

McMahan (2001) argues that in order to measure consumption benefits and externalities, it is necessary to “identify and measure comprehensively a range of specific social outcomes from increased human capital formation through education, to distinguish direct and indirect effects, and to identify and make a first approximation or estimate of externalities” (p. 166). While the latter might suggest that education externalities are a simple matter of spill over effects from education in the community, McMahan contends that there are “a whole series of net measurable outcomes, many but not all of which are indirect effects operating through intervening variables, and some of which are direct effects on non-market outcomes” (ibid.). The measurement of social outcomes is a relatively under-explored area in current
conceptual and empirical work. From a policy perspective, they suggest that a certain level of public investment in education is desirable if non-market and indirect benefits are to be realized.

The Role of Social Capital

The impact of education and training on social outcomes relates largely to social cohesion and social well-being. Concern for the benefits of education and training extends beyond those factors accounting for economic growth and includes the contribution of social networks and civic traditions to a variety of economic and social outcomes. Key areas widely discussed in the literature include civic participation, social trust, crime, industrial and inter-ethnic conflict, and health (Putnam, 1995; 2001; Brown, Green & Lauder, 2001; Schuller, 2001). More important, social capital addresses a broad set of policy questions related to how education and training outcomes need to be balanced to enhance sustainable economic growth and social well-being (Helliwell, 2001).

The basic idea of social capital is that “one’s family, friends, and associates constitute an important asset, one that can be called upon in a crisis, enjoyed for its own sake and/or leveraged for material gain” (Woolcock, 2001, p.67). Importantly, these ties and relationships help “shape the realization of human capital’s potential, for the individual and collectively” (Schuller, 2001, p.90). Social relations are centrally dependent on the norms, networks and trust that allow agents and institutions to be more effective in achieving common objectives (Coleman, 1988). According to Schuller (2001), “the most common measures of social capital look at the participation in various forms of civic engagement,
such as membership of voluntary associations, churches or political parties, or at levels of expressed trust in other people” (p.91).

In many cases, a concern for social cohesion is likely to resonate in political and community circles (Helliwell, 2001). The goal of searching for social cohesion is important for social and economic policies and is often addressed within the theoretical framework of social capital.

The focus on relationships underpins the relevance of social capital to the issue of social cohesion. The more positive normative approaches stress the social benefits, sometimes in a simplistic communitarian fashion. Social capital is both a consequence of and a producer of social cohesion, though not necessarily in the static sense that this might appear to imply (Schuller, 2001, p.92).

As Woolcock (2001) argues “social capital is not a panacea, and more of it is not necessarily better” (p.80). However, the applications and interpretations of social capital theory have widened the scope of economic analysis of education and training to include informed policy decisions. Schuller (2001) points out that social capital cannot be instantly or even rapidly created; its accumulation and erosion is a process that can take several years. He provides four key reasons for the potential utility of social capital as a policy concept: (1) it helps to counterbalance reliance on policy concepts and instruments which are too narrow to deal effectively with the complexities and interrelatedness of the modern world; (2) the focus of social relationships allows the issue of social cohesion to be addressed; (3) it helps to insert a long term perspective into policy making; and (4) it reintroduces a moral dimension into policy thinking. The quality of relationships in any given social unit will determine its sustainability.
The increasing awareness of social capital does not rule out the role of human capital in the policy context but the relationship between the two, and the complementarities and tensions within this relationship, are worth exploring. Schuller (2001) identifies four key distinctions between human and social capital. (1) Human capital focuses on individual agents while social capital concentrates on relationships. (2) The measures of human capital are mostly the duration of schooling and qualifications while the measures of social capital concern attitudes, values, membership, and trust levels. (3) Outcomes of human capital investment are income and productivity as direct effects and health and civic activity as indirect effects. Outcomes of social capital investment are social cohesion, economic achievement, and further social capital. (4) Human capital suggests a direct linear model to generate returns while social capital demonstrates an interactive and circular model in most cases.

The interaction between human and social capital raises questions about trade-offs or conflicts between the two, as well as complementarities. For example, Schuller poses the following questions “To what extent do high levels of social capital encourage high levels of human capital, or substitute for them? Do low levels of social capital inhibit the accumulation of human capital? Conversely, do high levels of human capital encourage or undermine social capital?” (2001, p.99) Perhaps, the most important argument concerns the issue of skill formation to raise the competitiveness of the economy. While human capital aims at improving skills, the extent to which skill formation can enhance competitiveness is affected by the opportunities for skill diffusion in the economy. Skill diffusion is defined as the societal capacity for high skills. It focuses on two issues: the way education and training systems can keep abreast of the skill requirements necessary for leading-edge technology; and the transfer of such skills to small and medium-sized companies (SMEs). One of the fundamental problems related to high skill formation is “how small and medium-sized
companies can sustain industrial intelligence, R & D, training budgets, and learning for continuous improvement to keep up with best practice" (Schuller, 2001, p.162). Schuller further argues that changing employment relationships affect the willingness to provide on-the-job training. Hence, the question of social purpose is prominent in addressing the set of issues relating to skill formation and returns to the investment in education and training.

When the complementary roles of human and social capital are brought into the analysis of adult education and training, the exploration of benefits and policy implications can be seen in a much broader perspective that “takes account of the social benefits of learning activities, such as its contribution to personal development, better health, lower crime rates, better environmental outcomes, and so on” (Hasan & Tuijnman, 1997, p.233). These benefits, together with cultural and democratic enrichment, “may well be more important contributions of learning than those economic benefits that are easier to quantity” (ibid). Nevertheless, investment in learning generates solid economic returns as well – for example those measured in terms of earnings and employment differentials.

While theories and observations of human and social capital provide the essential background for analysis, studies addressing the key issues of economic efficiency and equity are important to this study and are reviewed in the next section.

**Economic Efficiency and Equity**

Various conceptions of HRD point out the need to maintain an optimum balance in policy between increased productivity and equitable distribution of economic returns. To accomplish this, HRD must be addressed from a more inclusive perspective that avoids
legitimating some of the existing social and economic inequalities while contributing to rapid economic restructuring and stringent international competitiveness. This is the role of adult education.

Brown, et al., (2001) suggest that “while there is scope to unite economic efficiency and social justice, it is important to recognize the possibilities as well as the limitations of skill formation policies” (p. 239). The potential exists for a greater share of the working population to develop themselves through employment, while deriving satisfaction from what they do and learning to work with others in new and constructive ways. One example is the entry of women into previously gendered areas of education, training and employment; others are the opening of tertiary education and training to previously excluded social groups and the development of lifelong learning (Brown, et al. 2001, p. 239).

In examining the economic returns to participation in adult education of a selected group of displaced health care workers, Philips (2001) highlights a series of key questions that address the issues of economic efficiency and equity. To what extent does participation in adult education influence earnings and upward occupational mobility? Does adult education stabilize the declining effects of youth education given that educational or vocational qualifications gained prior to displacement may not be recognized? These questions focus more on efficiency but Philips also highlights questions concerned with equity. How do political efficacy and cultural competence affect accessibility to adult education? How can workers learn in the workplace if they possess limited literacy skills? Is there any evidence of structural discrimination in the labour market which, when coupled with negative attitudes of employers towards displaced workers, could eventually defeat the efficiency of HRD for both individuals and society at large?
Studies presented in this broader framework point out that both efficient and equitable policy changes are needed to facilitate participation in adult education (Belanger & Tuijnman, 1997; Rubenson, 1998; Tuijnman, 2001). A growing concern is how well theoretical and empirical research can address the economic, cultural, and societal changes brought about by “globalization, demographic developments such as ageing and migration, the diffusion of information technologies, changes in industrial, occupational and qualification structures in segmented labour markets, unemployment and underemployment, the changing work environment, newly evolving family structures, and indicators of cultural and linguistic diversity” (Belanger & Tuijnman, 1997, p. 8).

To date, lifelong learning is a major response to facilitating inclusive HRD in individual firms and the aggregate economy. It is viewed as a strategy for addressing a range of social and economic objectives. Belanger and Tuijnman (1997) consider it a means for shaping future knowledge-intensive societies by “emphasizing the personal development of the individual, thus countering the risks to social cohesion and promoting the democratic traditions in society, and responding to the challenges posed by an increasingly global and knowledge-intensive production system” (p.8).

Currently, the need to design efficient and equitable lifelong learning strategies for worker adjustment is a prominent concern. To enable a more in-depth analysis, an analytical framework to explore economic efficiency and equity is described in what follows, together with various theoretical perspectives.
Economic Efficiency in Adult Education

The relationships between adult education and earnings are often mentioned whenever efficiency is measured. It is sometimes argued that the effects of adult education on earnings are more spontaneous than in the case of formal schooling. Some participants in adult education can begin to apply their knowledge and skills at work right away and do not need to wait until graduation. There is a relatively short time lag to gain the increase in productivity reflected by extra earnings. This is particularly relevant to the type of adult education found in on-the-job training. Retraining for displaced workers certainly falls within this category.

In certain studies examining longer term effects of education on earnings researchers are cautioned about ‘vintage effects.’ Vintage effects are associated with productivity and earnings differentials across successive generations of graduates or cohorts with a given level and type of education and result from a specific change in technology or socio-economic situation (Rosen, 1987). The explanation of ‘vintage effects’ may be important for displaced workers facing constant economic restructuring and job insecurity.

The issue of economic efficiency can be further examined by considering its internal and external aspects. Internal efficiency refers to the relationship between the inputs and outputs of an educational process within adult education institutions or in the adult education system as a whole. External efficiency is concerned with how the economy allocates its resources among adult education and other forms of investments to generate maximum economic returns.
The notion of internal efficiency relates directly to the costs and benefits of participation in adult education activities and determines the optimal allocation of resources. The measurement of rates of returns (ROR) to different types and levels of schooling has been widely adopted in mainstream economics of education. ROR are used to facilitate decision-making when allocating human capital investment among the elementary, secondary and post-secondary levels of the formal education system (Psacharopoulos, 1987). Adult education is rarely central to this type of analysis because of its marginal representation in overall education policy. And, given the great diversity in the sector, determining the investment in different types of adult education activities is a task fraught with ambiguity. In the present study, the only adult education programs included in the analysis are those registered with the Education Department in Hong Kong and publicly funded retraining programs for displaced workers. Ambiguity is reduced accordingly.

Another concern of internal efficiency comes from the increased commodification of adult education activities (Jarvis, et al. 1998, p.17). Commercial value is added in the process of organizing and delivering programs through brokers or by means of a franchise. Students pay higher fees than those charged by publicly subsidized programs for the value added by expertise, advertising packages, or uniqueness in the market. This may imply students earn a lower private ROR for these investments compared with the social ROR. But, this argument rests, to some extent, on how the incentive of students to participate in adult education is affected by this discrepancy.

External efficiency is closely linked to the boundary between adult education and other forms of human capital investment. Assessment of external efficiency will be biased if only the adult education provider organizations are included in the framework. The bias also
appears when adult education activities hosted by organizations such as hospitals and banks for their own specific target groups are not classified as adult education. When boundaries among different forms of education are blurred, inconsistent calculations of external efficiency will inevitably limit the scope and direction of policy making in the adult education sector.

It is difficult to address the economic efficiency of adult education when its diversity has to be dealt with. A wide range of variations arise according to different target groups, provider agents, and program purposes. When attempting to devise analytical frameworks, cautious approximations based on the practice of mainstream ('front-end') economics of education undoubtedly form part of the solution. However, the scope and concern for economic efficiency may extend beyond what the front-end model has previously implied.

The Meaning of Economic Equity in Adult Education

Equally important as concerns for efficiency are concerns over the extent to which adult education equalizes or disequalizes income distribution in the economy. The measurement of economic efficiency mainly answers questions about over-investment or under-investment in adult education. The measurement of economic equity challenges inequitable distribution of learning opportunities. Economic equity can be represented by equality in distribution and the inclusion of adult learning (Rubenson & Schuetze, 2000). In analyzing the equity of adult education, the extent to which adult learners can access learning opportunities and apply their knowledge and skills at work becomes problematic. To state that increased participation in adult education benefits both individuals and society would be an over-simplification. The underlying assumption that adult education for human resource
development is egalitarian can be called into question. Given the existing power structure of society, imperfections in both private and public policies, and friction in the labour market, equal accessibility to education by the entire workforce is still only an ideal case (Fine, 1998).

Imperfections in the labour market frequently obscure the relationship between adult education and economic equity. For example, while screening theory accepts that the accumulation of credentials plays a role in the job market, the contribution of adult education to the distribution of outcomes is often discounted. Labour market theories tend to reject the idea that outcomes emerge from individual worker’s investment in education (Reich, et al. 1973). The labour market is viewed not as an open structure with perfect competition but as a complex and dynamic set of institutional structures which constrains workers’ choices.

The labour market is segmented by trade and industry and, to a lesser extent, by occupations and demographics (Sheets, Nord, & Phelps, 1987; Fine, 1998). The segmentation process can create core and periphery sectors in the economy each with different labour market processes, employment, and earnings. Workers participating in adult education and retraining are similarly segmented by earnings differentials relating to sector, occupation, class, gender, ethnicity, age, and marital status. But from the perspective of labour market theories, the impact of adult education and training on economic equity is limited. In a segmented labour market, it is crucial to expand accessibility to all marginal groups of workers. Galbraith (2000) argues that institutional factors in the economy, which range from unemployment, inflation, rapid economic growth, exchange rate, to the minimum
wage, all contribute to patterns of inequality. There is need to improve education and training for all those who want secure employment (Foley, 1992)

Inequitable distribution of learning and earning opportunities are often embedded in discrimination. Gender inequity in the workplace, is a frequently cited example. Within a traditional capitalistic model, as Burge & Culver (1994) argue, “certain workers are trained for certain jobs as reflected by the status quo of the job sector. These jobs, and the education and training for them, are linked to gender just as much as they are to skills” (p. 54). A gendered economy restricts access to employment. According to Burge and Culver (1994) gender-based restrictions, unrelated to ability, rely on at least four structural barriers: sex-role stereotyping, feminization of poverty, a glass ceiling to promotion, and sexual harassment (p. 54-57). As women continue to enter or re-enter the workforce and stay there longer, it becomes increasingly important to examine whether future education and retraining opportunities reproduce patterns of gender or other forms of segregation and discrimination (Burger & Culver, 1994; Carter, 1994). Further argument is around that gender biases can impede the personal and professional development of individuals and increase economic inequality between the sexes. Less training leads to lower earnings and decreases subsequent job opportunities and increases the risk of unemployment.

The above discussions on issues of equity point to a basic question framing the social perspectives of adult education: how can labour market education in the form of retraining strike a balance between productivity and social justice? Does it legitimate, or enlarge existing social and economic inequalities among workers? Rubenson & Schuetze (2000) illuminate the difficulties of designing an equitable and efficient strategy “characterized not only by access to learning opportunities throughout life but also by the enhanced capacity of
all members of that society to take advantage of them” (p.373). In these circumstances, readiness to learn should not be taken for granted because not all adults are ready to make use of existing opportunities for education and training.

Readiness is related to two “long arms”: those of ‘the family’ and ‘the job’ (OECD, 1997c; Rubenson & Schuetze, 2000). Readiness to participate in organized forms of adult education and retraining can, in some circumstances, be predicted by social background: the ‘long arm of the family’. There is a link between an individual’s level of proficiency and the literate culture of their family. While the roots are established during childhood, readiness for learning is fostered by the education system. “The social and cultural factors that are behind the relationship between early literacy and family background also link the distribution of educational attainment and reading and writing habits across different socio-economic groups” (OECD, 1997c, p.93).

The ‘long arm of the job’ explains the extent of readiness to participate in adult education and retraining. An increase in employer-supported education and training accounts for an increase in the overall participation rate. Employers, in many cases, are responsible for learning resources and program development that accommodate learners’ needs within a limited framework. Sponsorship extended to employees for formal training and informal learning is important to facilitate workplace learning. To what extent the access to sponsorship is open and fair for all employees becomes a crucial equity concern.

Rubenson and Schuetze (2000) warn that as adult education becomes increasingly linked to work, lifelong learning strategies must “recognize the inequality inherent to receiving employer support for education and training...[because of] the likelihood that employer-
supported education and training is related to the size of the company, the employees' occupational status, and the engagement of literacy activities at work" (Rubenson & Schuetze, 2000, p.364). The OECD echoes this, and argues that "the likelihood of a worker receiving some support for education and training from the employer is related to firm size, nature of job and sector of employment" (OECD, 1997c, p.101).

As labour market demand for highly skilled workers and a high value-added workforce increases, unskilled or low skilled workers experience more difficulty in securing jobs or accessing learning in the workplace (Hinchcliffe, 1995). Rainbird (2000) analyzed changes in the nature of unskilled work and observed that the increasing tendency to subcontract unskilled service work reinforces barriers to employees' access to learning. Operating on the basis of reduced labour costs, employers are unlikely to invest in training for jobs with low skill content. When we look at the role of employers in providing workplace training, certain questions are raised. To what extent does learning occur in the workplace and what is the quality of that learning? Is learning content manipulated by the organizational environment to support learning outcomes? These are important considerations when designing or adapting workplace training as an instrument of human resources development for displaced workers (Marsick, 1987; Fenwick, 2000; Marsick & Watkins, 2001).

**Displaced Workers and Retraining for Reemployment**

Job displacement affects workers across occupations, industries, and economic cycles. The plight of displaced workers has drawn much attention from policy makers and the general public. According to Fallick (1996), "displacement is perceived to add to structural unemployment, disrupt lives, foil hard-earned expectations, waste human resources, and pile
the burden of economic adjustments on an unfortunate few” (p.5). Various benchmarks are used to identify displaced workers in different countries. For example, the first biannual Displaced Workers Survey in the United States of America in 1984, distinguished displaced workers from other unemployed workers based on the fact that they were separated from their jobs because of a plant closing, employer going out of business, or permanent layoff (Leigh, 1995). Fallick (1996) adds three further characteristics associated with worker displacement. First, reasons for displacement are structural. Rather than being discharged due to cyclical downturns or the idiosyncratic fortunes of individual firms, displaced workers are “pushed aside by changes in international trade, technology, the composition of final demand, or government regulations” (p.1). Second, displaced workers have limited opportunities to find a comparable job in another company or industry within a reasonable span of time. And third, displaced workers are strongly attached to the sector in which they were employed and have developed industry-specific skills. In other circumstances, they would have been unlikely to leave their industry, occupation or location. “They have made investments, and formed ties that make moving, especially onerous” (Fallick, 1996, p.5-6).

The above observations suggest that unlike other unemployed workers, displaced workers bear the cost of maladjustment in the process of economic re-structuring. Adjustment costs are a major component of displaced workers’ economic loss and some argue they should be compensated accordingly. “Society should compensate the losers for structural changes that benefit us in the aggregate, especially if those changes are due to changes in government policy” (Fallick, 1996, p.1).
Cost of Worker Displacement

The cost of worker displacement can be described at both individual and social levels (Hamermesh, 1987). The private cost of displacement relates to a future income stream that is unexpectedly lost or permanently unrecovered. The social cost of displacement can be measured by the foregone economic returns to investment in specific training. Both types of cost also include the actual value of resources lost during the process of adjustment to labour market change (Leigh, 1995).

Many factors affect the measurement of private displacement cost. Factors such as job tenure before layoff, spells of unemployment after layoff, educational attainment, and industry of reemployment have been extensively studied (Burke, 1986; Flaim & Sehgal, 1987; Hamermesh, 1987; Addison & Portugal, 1989; Kletzer, 1989, 1991, 1998; Addison, 1991; Jacobson, Lalonde, & Sullivan, 1993; Leigh, 1995, 2000; Stevens, 1997; Foley, 2001). This research indicates that workers with a longer period of job tenure before displacement pay a higher price in terms of greater wage loss and a longer time to reemployment. Displacement costs increase in relation to the span of unemployment after layoff (Hamermesh, 1987; Jacobson, Lalonde, & Sullivan, 1993; Stevens, 1997), and for workers with lower educational attainment (Hamermesh, 1987).

If displaced workers are successfully reemployed in another industry, the factors of job matching and shifting to the new industry become crucial to their future earnings. Wage losses are greater for displaced workers if new jobs are mismatched with their experience and specific training, or if workers are unable to shift to other new industries (Addison & Portugal, 1989; Kletzer, 1989). Therefore, displaced workers may suffer from reduced
employment rather than lack of employment. Workers displaced from full-time jobs face additional barriers in that they are less likely to find full-time work than are non-displaced workers (Fallick, 1996).

During periods of economic restructuring, job displacement is often concentrated by industry or occupation, with a greater number of jobs lost in declining industries and work positions that are less competitive in the market. However, it is difficult to predict which industries or jobs the market will favour, or in which regions displacement will occur. It is also difficult to predict the economic and personal costs of displacement. Fallick (1996) argues that the cost of worker displacement has little association with their demographic characteristics. Controlling for tenure, industry, occupation, and labour market conditions, the variables of race, gender, and age are not important in explaining the adverse economic impacts of displacement (Fallick, 1996; Kletzer, 1998).

The cost of displacement can be further analyzed by investigating the changing employment patterns of the labour market. Workers today are facing unprecedented challenges with respect to job displacement and their intention to re-enter the job market. In the knowledge economy, the employment pattern is characterized by a “skill bias” because technological change requires a more qualified workforce. In consequence, there is “a drop in the proportion of unskilled work in the job supply, a drop in the relative pay rates for such types of work and some insecurity in employment conditions” (Petit, 2000, p.191). While the “fears of jobless growth occurring as a result of rapid technological change appear to have been misplaced” (Wall 2000 p.86), the job market favours the highly-skilled. The issue of unemployment is common in labour markets around the world.
Although an unemployment crisis has not been evidenced, labour unions argue that the quality of work is deteriorating. Not only is the structure of the work place altering but the very nature of work is undergoing rapid change. Flexibility is a term used by employers; precarious is how workers to characterize such trends as “flexible hours (all forms of non-standard time including temporary, part-time, job-sharing, swing shifts, four 10 hour-day weeks); flexible pay (pay for knowledge), flexible jobs (multi-skilling or rather multi-tasking), flexible work sites (homework, and telework)” (Schenk & Anderson, 1995, p.14), which are all on the rise.

In response to the need for adjustment to labour market changes and to maintain the basic standard of living, more and more displaced workers are engaging in various forms of publicly funded assistance programs after job displacement. It is therefore important to explore the nature and variety of these programs in order to better understand possible outcomes and benefits of this response to displacement.

Retraining for Displaced Workers

The question of whether displaced workers should be singled out for special public assistance has been argued at length in the literature (Hamermesh, 1987; Leigh, 2000). A key point in this debate is whether the job loss could have reasonably been anticipated by affected workers. If the answer is “yes”, then informed workers will have already received a wage premium to work in less stable jobs and no special assistance should be offered.

However, as Leigh (2000) points out “job loss is especially likely to be unanticipated by workers affected by government policy changes such as liberalization of trade laws, deregulation of major industries, or reductions in defence spending” (p.230). These workers
are not paid a wage premium and should be entitled to compensation. Changes in government policy have a role to play here.

Many types of assistance and sponsored activities are available for displaced workers, but retraining for reemployment is perhaps the one most frequently mentioned. This form of assistance is usually delivered according to two broad categories: (1) services intended to speed up the job-search process, and (2) initiatives that provide compensation for earnings losses. The first category may include job-search assistance to expedite reemployment, reemployment bonuses to motivate job searchers, and relocation assistance to enable workers to accept employment in expanding industries elsewhere. The second category may include classroom training for displaced workers to provide job skills to qualify them for vacant jobs in expanding industries, wage subsidies for employers to encourage hiring of targeted workers, earnings subsidies for eligible workers to increase incentives to return to work, and training for self-employment to acquire necessary skills to set up their own businesses (Leigh, 2000).

While a wide range of activities have been organized for displaced workers, research has focused largely on publicly funded retraining programs, and how work and job search skills are acquired (Addison & Portugal, 1989; Howland & Peterson, 1988; Kletzer, 1989, 1991, 1998; Leigh, 1995, 2000; Stevens, 1997; Foley, 2001). Observations of employment patterns, mentioned above, also have important implications for the development of retraining programs. There is also a current shift in emphasis towards preparing adults to rapidly adjust to the changing demands of production rather than on the traditional approach of acquiring vocational skills. The industrialized nations of the OECD and the dynamic Asian economies have experienced accelerating economic restructuring in recent years,
resulting in tremendous changes in employment patterns. For many of these countries, unemployment is at unprecedented levels. Several factors contribute to this situation including an increasing number of people looking for jobs, a slow down of economic growth, changes in job contents and skill requirement (Rubenson, 1992; Levin, 1993; OECD, 1995, 2000).

The current economic crisis in most developed countries has manifested itself in economic stagnation, industrial decline and growing unemployment. The egalitarianism in society is challenged by an unfavourable distribution of wealth. Many advanced economies, including the U.S., reported a high degree of wage and income equality among the workforce in the 1990s (Bennici, Mangum & Sum, 2000, p.23). In response to this crisis, public policies on education and training in some countries tend to shift back to a narrow vocationalism emphasizing production of sufficient trained people to meet labour market demands and creation of jobs of different skill level and work quality. The value of a more holistic and humanistic education is less of a consideration.

While economic measures must be used to deal with skill bias and changes in employment patterns, adult education also has a vital role to play. Foley (1992) argues that adult educators must become more involved with employment and labour market issues. He points out that labour market education is mainly focused on two elements: (1) labour market training and vocational education which aims at tackling problems of inadequate skills arising from economic restructuring, and (2) job creation and job maintenance programs which deal with insufficient economic activity. Labour market education is regarded as unimaginative and unplanned inasmuch as it relies on a "front-end" approach which severely limits training opportunities for adult workers. Individuals, employers and
unions are not active in accepting responsibility for skills formation; government takes the sole initiative. In terms of job creation and maintenance a more coherent approach to articulate training and work has been sought for some time, with recent evidence suggesting that job creation programs for adults must combine work experience and vocational training, with an emphasis on workplace training.

In many cases, researchers argue for a more democratic, worker-centered and action-oriented teaching-learning approach to facilitate education and training for adults (Foley, 1992; Rubenson, 1998; Leigh, 2000). To assist the adjustment of displaced workers, attempts to form a worker-oriented culture to address industry restructuring and vocational training are drawing increasing attention. These efforts embrace different sorts of worker-oriented activities such as working and learning in groups, enterprise planning and management, job design, communication and occupational health and safety (Bennici, Mangum, & Sum, 2000).

Skill Development and Upgrading for Displaced Workers

Because learning is seen as central in any adjustment to restructuring of production, many entry points are available for adult educators to participate in labour market education. The broad scope of adult education can contribute to an expansion of the narrowly defined boundaries of vocational training for static job requirements. Broader notions of work skills and workplace learning must be encouraged to accommodate the adjustment needs of displaced workers. For example, if skill is defined as “the expertise, ability, or competence to undertake specific activities often acquired through formal instruction or work experience” (Brown, et al. 2001, p.23), then a basic objective of retraining is to up-skill and
cross-skill displaced workers to meet the changing needs of the labour market. But, displaced workers also need to acquire higher-order thinking skills, including an ability to combine existing knowledge and skills with new information to solve problems, negotiate interests or make predictions.

In assessing the basic skills required for reemployment in a knowledge-based economy, the notion of “literacy skills,” including prose, document, and quantitative literacy are widely discussed (OECD, 1997c). Prose literacy refers to the knowledge and skills needed to understand and use information from texts. Document literacy is the knowledge and skills required to locate and use information contained in various formats. Quantitative literacy is the knowledge and skills required to apply arithmetic operations. Broadly speaking, literacy skills frequently required in the workplace include an ability to “understand technical vocabulary, read schematic graphs, follow directions or procedures, grasp both main ideas and details, demonstrate problem-solving and critical thinking skills, demonstrate interpersonal and communication skills, and demonstrate math skills” (Askov & Gordon, 1999, p. 64).

The shifting meaning of “literacy,” combined with the increasing importance of literacy skills in the workplace can lead to changes in priorities, programs and provision of adult education and retraining for displaced workers. For example, in a recent study of worker training and job skills requirements in Hong Kong, workers rated their top five preferred skills as: spoken English, human resources management, basic computer skills including Chinese input method, customer service skills, and marketing management (Census and Statistics Department, Hong Kong, 2000).
The need to assist low-skilled workers to adjust to labour market changes is of growing importance. Specific policy measures can be put in place to help the middle-aged workers, with low-level skills, who will suffer from displacement. At the lower end of the skills spectrum, structural changes in the economy can have devastating effects on middle-aged workers. "These workers may have accumulated some human capital specific to their current employment. But when the industries for whom they work are in decline, or when the type of jobs they do are replaced by different ones, the human capital they possess will no longer be so valuable" (Suen and Tam, 2000, p.2). A detailed description of the retraining programs in Hong Kong is presented in Chapter 3.

When attempting to address the need for worker adjustment the focus is often placed on the labour-market's ever-changing appetite for skills. But there are major concerns about skill upgrading for displaced workers because "outdated skills are a big problem when workers are forced to look for new jobs as a result of displacement ... consequently, greater effort must be made to encourage the general public to engage in ongoing skill upgrading" (Foley, 2001, p.17).

As the externalization of employment and dislocation grow, few workers can count on one employer to provide lifetime job security. Instead, both job and economic security come to depend on the motivation and ability to learn in a lifelong pattern. Economic security, to the extent that it exists, is increasingly defined in terms of "employability security, whose sources are found in individual competencies and the capability for self-improvement through lifelong learning, including on-the-job training and formal training from employers" (Bennici, Mangum, & Sum, 2000, P.22). The need for displaced workers to upgrade their
skills is relevant not only for short-term reemployment, but also in the context of lifelong learning.

In today’s economy the concept of lifelong learning is central to the total system of education, training and retraining in which skill formation is embedded. When adult education and retraining are analyzed in the context of lifelong learning, a different view of the requirements of the education system emerges. According to Jarvis, et al. (1998) learning shifts from teacher-centered to student-centered; from face-to-face to distance delivery; and from education for the few, to learning for many. They note a change in emphasis from liberal to vocational education; from theoretical to practical application; from disciplinary, to interdisciplinary, to integrated knowledge. Learning becomes less about process and more about the programmatic and demand-driven acquisition of content. In summary, lifelong learning calls for a shift in emphasis towards learners and away from teachers, a focus on programs rather than curricula, and a need for integration of learning rather than specialization as consumer sovereignty comes to dominate the institutional provision of learning.

The promotion of lifelong learning for society as a whole has led to the creation of a new learning culture and orientation. These changes inevitably provide a broader scope for the policy and planning of education and retraining for displaced workers. Some may even trigger basic changes in the overall purpose of retraining. The need to support lifelong learning in addition to short-term job placement becomes of central importance in the formulation and analysis of public policies. “The lifelong learning mandate implies that job placement strategies for the unemployed should be evaluated not simply in terms of short-
term placement rates, but also by the criterion of whether they are likely to support lifelong learning experience” (OECD, 1997b, p.14).

To facilitate the adjustment of workers to changing labour market demands in the context of lifelong learning, OECD (1997b) recommends that certain policy initiatives be in place to keep track of the following: “(i) evidence on the importance of human capital and lifelong learning for labour market outcomes; (ii) the barriers to lifelong learning that can arise in the transition from initial education to work; (iii) major features of the situation of poorly qualified adults and the barriers to lifelong learning that they face; and (iv) the role that Labour Ministers and labour market policies can play in facilitating lifelong learning” (p.3).

Changes in Work Organization Practice

Globalization and technological advances have fundamentally reshaped organizational structures in the workplace. The current change in work organization is characterized by a shift from mass-production in manufacturing, and bureaucratic control in all sectors, towards more flexible forms of practices (OECD, 1999). “Taylorist” management techniques and “Fordist” production methods have been replaced by information technology and lean production methods. Work organization is moving towards a flexible firm aiming at high performance. Betcherman (1997) suggests that four main features characterize a flexible high-performance workplace: job design involving multi-skilling or multi-tasking, extensive use of teamwork, reduced hierarchical levels, and delegation of responsibility to individuals and teams.

One important factor that affects productivity is how changes in work organization practice facilitate or constrain workers’ skill upgrading. Firms can improve their performance with
the introduction of flexible and innovative practices in work organization and human resource management. The introduction of flexible practices increases the skills demand which may lead to higher productivity, profits, and wages, especially where competitors lag in introducing similar reforms. While the allocation of gains between profits and wages will depend on the bargaining power of workers, flexible forms of work organization certainly have the potential to increase employee compensation (OECD, 1999, p. 201).

The need to measure the influence of work organization practices on earnings is a concern of this study. If we use the OECD determination that “larger workplaces are more likely to have adopted flexible practices than their smaller counterparts” (OECD, 1999, p.181), then the size of work organization represented by the number of employees can be adopted as a proxy indicator of the incidence of flexible work practices. The relevant characteristics of firms are also related to the incidence rate of flexible work organization practices. Firms in different industries can approach productivity, education, and training in ways which challenge mainstream practice. It seems desirable, therefore, to deal with questions of how individual firms handle the need for education and organize competent workers to satisfy their profit targets (Eliasson, 1994). In others words, how individual employers are moving towards flexible practices and how they respond to the need for education and training of their employees constitute important aspects of the analysis.

On the other hand, despite assertions to the contrary, there is sometimes no straightforward answer to the question of whether flexible work organization practices improve labour market outcomes and hence increase the probability of reemployment of workers. According to the OECD, “it is difficult to find evidence of strong links between the presence of the practices and labour market outcomes” (1999, P. 183). Supporting the view that
flexible practice leads to the instability of employment relationships, it is sometimes argued that firms will seek to protect a core group of workers in whom they have made large investments (Mareden, 1996). If this proves to be the case, the labour market will be left with a larger peripheral workforce created by a move to flexible work organization practices. In this scenario, there is reason to expect that the reemployment of displaced workers will be adversely affected.

The introduction of flexible practices expands the scope of job training and increases the potential for workplace learning in various forms and patterns. According to the OECD, “employers with flexible practices in place are also more likely to provide job training” (OECD, 1999, p. 183). Notwithstanding the classical ‘poaching’ argument, workplace learning is related to the accumulation and application of know-how integral to the knowledge-based economy. Betcherman, et al., (2000) argue that workplace learning is where employees bring their expertise and experience to bear, “where new learning takes place, where organizational capital extends the sums of individual capital, and where the benefits of knowledge and innovation are transmitted to consumers through new and better products and services” (p.283).

Workplace learning emphasizes the application of job-related knowledge to solve immediate problems; the goal is not personal development or self-fulfillment. But while employers aim at profit-maximization, workers can obtain better private returns by using workplace learning to improve their personal capabilities. Considerable research exists on personal or professional development that helps individuals and groups to learn through understanding their daily informal interactions (Marsick, 1987; Gallie, 1991; Rowden, 1996; Fenwick, 2000; Rainbird, 2000; Marsick & Watkins 2001). The approaches recommended include
self-directed learning, coaching, mentoring and group learning. As a result, the workplace is becoming recognized as a learning environment conducive to the growth of individuals and groups through work. It is not entirely dedicated to manipulating desired behaviour according to prescribed objectives. Encouragement of experimentation, risk-taking, dialogue, initiative, creativity and participation in decision-making are all accommodated in this type of learning environment.

The growing importance of informal learning in the workplace is undoubtedly one of the most widely discussed research items related to the future trends of adult education and training in the framework of lifelong learning. The development of informal learning in the workplace is also affected by the rapid changes in the labour market. Tuijnman (2000) argues that informal learning in the workplace constitutes a large and increasing part of lifelong learning activities. He states “Factors impinging on the development [of lifelong learning] are the increase in job-turnover rates and the insecurity associated with flexible work contracts and the new forms of organizing employment in core and peripheral contingent labour markets” (p.15). The building of knowledge networks and the changing nature of work in learning organizations are additional factors.

Skills can be acquired, maintained and enhanced through formal, non-formal or informal learning. Although the present study does not focus on an in-depth examination of workplace learning, it does attempt to measure the extent to which workplace learning affects the outcomes of adult education and retraining for displaced workers. Displaced workers are usually associated with low skill levels and less than adequate formal schooling. Their human resource development is primarily articulated through their experience in the world of work. According to the OECD, the need to assess and recognize non-formal
learning is important for all adult workers, but particularly for adults with low levels of initial educational qualifications. These individuals "are in particular need of assessment and recognition mechanisms to validate what they have learned through on-the-job experience" (OECD, 1997a, p. 23). In this sense, the extent that workers can apply their knowledge and skills in the workplace relates to their experience and motivation to learn in that setting.

Different models reflect the influence of different economic, technological and social factors prevailing within European countries as well as different ideas about learning and development. Guile & Griffiths (2001) suggest that work experience can be taken as a proxy indicator for workplace learning, based on a connectivity model that links the two. Their model presents a new approach to work experience, based on the principle of connectivity, and displays "innovatory features which are relevant to future approaches to effective learning through work experience" (p.120). They strongly endorse the need to develop partnerships with workplaces to create environments for learning.

Outcomes of Retraining

Even when different types of learning and factors such as work organization practices are taken into account; retraining does not always guarantee reemployment or economic returns. Analyses of the pattern of changes in earnings and the probability of reemployment point to diverse results. Foley (2001) shows that while some displaced workers can find jobs after retraining, they may earn lower salaries. Larger earnings losses occur for displaced workers who change industries than for those reemployed in their old industries (Leigh, 2000). The OECD (1999) job study supports this view, suggesting that earnings gains from training are
higher only for some categories of workers. Ironically, these are the very categories that are less likely to be trained.

Given the constraints (limited public resource allocations; limited prior knowledge and skills on the part of displaced workers) the effect of retraining is debatable. Kletzer (1991, 1998) and Leigh (2000) point to two broad concerns: (1) how likely is it that displaced workers will be able to re-enter the job market in an economy which demands skills in information and communication technologies? (2) To what extent do displaced workers benefit from the transfer of human capital to new jobs and how do they adjust to the rapidly changing labour market?

Researchers have attempted to answer these questions by examining the education and retraining of displaced workers from various perspectives (Addison & Portugal, 1989; Addison, 1991; Kruse, 1991; Gibbons & Katz, 1992; Leigh, 1995, 2000; Fisher, 1999; Foley, 2000; Rainbird, 2000). The methodologies employed in these studies are different in emphasis and approach, and can be categorized into four major types. (1) Some researchers measure the outputs of retraining and compare the benefits from a wide variety of retraining programs organized for the labour market at large. (2) Others measure the outcomes of retraining and analyze the cost-effectiveness of specific retraining programs to investigate how far they go toward meeting policy goals. The first and second approaches emphasize the efficiency of resources allocation. (3) Another group of researchers analyze the distribution of educational outcomes with respect to equality. The question of whether retraining contributes to a more egalitarian agenda or simply legitimizes inequalities while job displacement perpetuates is the key issue of their studies. (4) Finally, some interpret job displacement and retraining from a critical perspective challenging the existing power
structure of the labour market and the predominant economic sectors. The emphasis here is primarily on developing a new understanding of job displacement and retraining beyond the economic, political, and ideological assumptions currently endorsed.

Summary

In the theories and observations discussed above, the importance of retraining for worker adjustment is highlighted. The relationships between retraining and the pattern of changes in earnings and reemployment are central to policy making in many cases. In the final analysis, the relationships are based on an assumption that the knowledge and skills possessed by displaced workers can improve productivity at work. The assumption is basically informed by the perspective of human resource development in the context of adult education.

Three areas of the research literature were reviewed in this chapter. First, the literature on human resource development indicates that the relationships between retraining and changes in earnings and reemployment are central to policy making for worker adjustment. The relationship is based on an assumption that knowledge and skills possessed by displaced workers can improve productivity at work. The assumption is informed by the perspective of human resource development in the context of adult education. The roots of human capital theory and the arguments raised by competing theories were reviewed and contrasted in the context of measuring economic impacts. In addition to the development of human capital, the contribution of social capital to sustained economic growth and well-being is highlighted in the literature, indicating the importance of understanding the social context in which the benefits of education and training are measured.
Second, the literature emphasizes the importance of addressing policy concerns, in the context of lifelong learning, to maintain an optimum balance between increased productivity and equitable distribution of economic returns. Research on issues of economic efficiency and equity demonstrate how adult education can contribute to the growth of HRD to support rapid economic restructuring without legitimating existing social and economic inequalities. To explain access to lifelong learning opportunities for all, the improvement of adults' readiness to learn is crucial.

Third, the literature on displaced workers indicates that economic loss through job displacement is related to the cost of maladjustment in the process of economic restructuring. In response to the need for adjustment to labour market changes, more and more displaced workers are engaging in various forms of publicly funded assistance programs following job displacement. In this context, publicly funded retraining programs focusing on work skills and job search skills are widely implemented in Hong Kong. There are also arguments in the literature that point to the scope of adult education and the needs for skill formation emerging in the context of lifelong learning. Another important observation is that changing work organization practices affect how workers can improve productivity by applying their skills and how they can continue learning in workplace.

This study drew on many of the theories and conceptions reviewed in the literature, and focused its analysis on the situation of Hong Kong. It is against this background that the following chapter presents the development of adult learning in Hong Kong and sheds light on how adult education and retraining is institutionalized and operated for the adjustment of displaced workers.
CHAPTER THREE
ADULT EDUCATION & TRAINING IN HONG KONG

This chapter provides a historical account of adult education and training in Hong Kong with particular reference to the social, economic and political forces that have shaped its course of development. It also provides a broad description of the Employees Retraining Program as well as an overview of present labour market conditions in Hong Kong, and projections into the future. The chapter argues that current developments are inextricably linked to the promotion of lifelong learning and the process of global economic restructuring.

Adult Learning in Hong Kong – From Past to Present

Like Hong Kong itself, adult learning in the territory has been shaped by the social, economic and political forces of the past and is being reshaped by the rapidly changing socio-economic development of the present, particularly as Hong Kong transforms itself to a more technology- and knowledge-intensive society. Although history does not yield any laws of adult learning, when past events are interpreted in context the historical perspective can help refine the theoretical background and knowledge base of adult education (Stubblefield & Keane, 1994). A brief overview of social, economic and political developments in Hong Kong will illustrate how the course of adult learning is shaped. As this study focuses on adult education for labour market outcomes, the development of other adult learning activities of a more general nature is not a major concern here. Some studies
address adult learning in a broader context that may contribute to the understanding of the change in Hong Kong (Shak, 1989; Boshier, 1997; Cribbin & Kennedy, 2002).

Prior to World War II

Under British administration, Hong Kong developed sluggishly, but gradually transformed itself from a small fishing village into an entrepot. Records of the day indicate few if any government initiatives to provide adult education for personal growth or social purpose. The earliest motives for adult education were religious in nature, reflecting the British pattern where missionaries pioneered the field. The churches and their sponsored schools were the institutions where adults could access learning, either formally or non-formally (Kelly, 1992). In the early 1920s, partly in response to the Eradication of Illiteracy Movement in China, the Young Women’s Christian Association (YWCA) began offering literacy courses for women. They also published a monthly magazine called “Women’s Voice” and established the first evening school. In the mid-1940s, the Evening Institute (as it was then known) operated classes in the rural areas to meet the specific learning needs of adults engaged in fishing and farming. During this period, programs classified as adult education were largely focused on literacy and basic vocational training to satisfy the needs of learners wishing to access jobs to earn their own living. Civic organizations, such as Kaifong Welfare Associations were the main advocates of these programs.

The 1950s and 1960s

The 1950s was largely a period of post-war reconstruction, both socially and economically. Following Chairman Mao’s 1949 ascension to power in Mainland China, the United Nations
imposed a trade embargo on Hong Kong. In the wake of those changes, Hong Kong began to develop into a manufacturing centre. This shift required an upgrading of workforce quality. The Education Department established an Adult Education Unit in 1954 as an educational response to the changing labour market and the skill demands of a manufacturing economy. To meet the requirements of specific trades and industries, the government launched a project to provide general education and training courses for industrial workers and those with no, or low, educational attainment.

The first publicly funded adult education centre began operation in 1955, and provided a variety of courses ranging from basic general and remedial secondary education, to recreation programs for individuals from all walks of life, but focused particularly on low-income groups in the community. People soon became aware of opportunities to improve their life situation by "second-chance learning." Adult education flourished during this time as other provider organizations, such as the Prison Department, the extra-mural departments of universities, voluntary agencies, language institutes and trade associations/ unions all began to actively participate in the delivery of adult continuing education programs. A Conference for Continuing Education Administrators was organized in 1967 to devise a plan for the development of adult education in the local context. However, the provision of adult education was considered marginal in relation to overall education policy and only limited resources were allocated from both public and private sectors. Therefore, education and training for workers largely centred on remedial education, simple vocational training, or leisure and general interest programs.
The 1970s

The decade of the 1970s ushered in profound economic growth throughout the territory and also marked a rapid increase in the provision of adult education. To a large extent, expansion was economically driven. In 1973, the Hong Kong Government carried out a major review of the demand for technical and further education and maintained that adult education was on an equal footing with its counterparts in the education system as a whole. In the same year, the government appointed the Hong Kong Training Council to establish ten industrial training committees and six hospitality and commerce committees to develop apprentice training for their own sectors. The Hong Kong Association for Continuing Education was founded to promote and coordinate adult education activities. Training courses for teachers of adults were first offered in 1975 and the Construction Industry Training Authority was established in the same year.

Economic growth brought with it a competitive labour market where people could get better jobs or receive higher pay by acquiring new skills or higher academic levels through adult education. Adult education thus moved beyond “second-chance” education to functions of social mobility and economic development. In response to community learning needs, the 1979 White Paper on the Development of Senior Secondary and Tertiary Education introduced part-time internal degrees at the universities and improvements to the Education Department’s adult education courses.

Other programs aimed at raising social awareness and concerns for broader issues such as relations with China, and justice and peace began to develop during this time. Though small in scale, the programs promoted an alternative development pathway for the field of adult
education. Some labour unions began their own programs for workers in the 1970s, thus providing a wider accessibility to learning.

The 1980s

The growth of adult education continued, with more input from the public and private sectors. In 1981, the government introduced the first subvention scheme to finance various types of adult education programs run by non-profit organizations. Programs of a social movement nature were included in the purview, but the scale of implementation was relatively small.

To a large extent, economic development was responsible for the gradual opening of China to the world. As a trading and financial centre, Hong Kong assisted China’s economic take-off and played a bridging role between China and the rest of the world. The signing of the Sino-British Joint Declaration in 1984, providing for the return of sovereignty to China in 1997, challenged the future stability and prosperity of the territory. The military incident at Tiananmen Square in 1989 led to a crisis of confidence and prompted a rush for migration. But because migrants needed academic credentials and vocational/professional skills to improve their chances overseas, the crisis impacted positively on the growth of adult education. Further, the resulting brain drain created many different opportunities in the labour market and enabled upward mobility at a faster pace, again increasing demand for continuing education and training. Growth of adult education during this period was also augmented by international collaborations between the major players in the field and their overseas counterparts, such as that between the Asian and South Pacific Bureau of Adult Education and the International Council of Adult Education. Another prominent
The phenomenon of the period was the increase in employer-sponsored training programs. The goal was primarily to improve productivity by providing specific training to workers. To coincide with this developmental trend, the Vocational Training Council was established in 1983.

Expansion of university degree-granting programs in various types of extra-mural studies also marked this period of growth. The first external degree program jointly operated with an overseas higher education institution denoted a new chapter in the development of adult learning in Hong Kong. The formation of the Hong Kong Open Learning Institute (now the Open University of Hong Kong) in 1989, using the UK’s Open University concept, further improved people’s access to higher education. Since then, a complete educational ladder for academic qualifications from literacy through university has been established for “second-chance” learners.

The 1990s and Beyond

Steady economic growth in Hong Kong extended into the 1990s and peaked in the first half of the decade, with the territory positioning itself as an international financial centre with a concentration on high-value-added industries. In 1997, during this period of extended economic growth, Hong Kong reunified with Mainland China ending over 150 years of colonial status. However, the economy of Hong Kong was rocked by the Asian economic crisis soon after the Hong Kong Special Administrative Region Government assumed governance.
As the social, political and economic contexts changed substantially over the 1980s and 1990s, so too did the booming adult education field. Increasing numbers of providers offered adult learners maximum possible diversity and choice. At the close of the 20th century and the beginning of the new millennium, Hong Kong was ready for a radical shift in the education agenda. The call for a new agenda was only partly a response to the economic downturn following the hand-over of sovereignty. More importantly, it was a response to the challenge of keeping abreast of the rapid changes taking place in the wake of economic restructuring in an increasingly competitive global economy. The government launched consultations on its education reform initiative in late 1998 and continued through 2000. The reform was unprecedented in terms of magnitude and depth, with lifelong learning featured as the master concept and guiding principle. Adult and continuing education was thus moved from the periphery almost to the centre of the education arena.

To realize the aim of lifelong learning, the reform called for a society-wide mobilization, involving contributions from government, educators, and all sectors of the community as well as the learners themselves. This mobilization would involve literally every single person in Hong Kong and bring forward a more humanistic approach to education. The reoriented philosophy of learning articulated the andragogical notion that participants themselves would be responsible managers of their own learning. The predominant role of adult education in creating a new learning culture and facilitating the growth of a learning society was finally acknowledged.
The Hong Kong Labour Market: An Overview

While the policy of retraining aims at providing a skilled and flexible workforce in Hong Kong, the demand side of the local labour market has also undergone rapid changes. The economy of Hong Kong is characterized predominantly by a policy of free enterprise. Unemployment has seldom been considered a major concern of social and economic policy particularly during years of steady growth. However, labour market conditions have been changing rapidly as a result of the economic restructuring that began in the early 1980s. Since then, Hong Kong's economy has been moving away from local manufacturing and towards service-oriented activities. The incidence of worker displacement is a developing trend, due to the closing of plants and factories. Much of the traditional manufacturing sector has relocated to Mainland China, which can provide a cheaper labour force and more favourable terms for investment.

The Hong Kong economy is now heading for further structural change, moving towards more knowledge-based and higher-value-added activities. These developments are influenced by two major macro-economic trends: liberalization of global trade and investment; and rapid development in information and communication technologies (ICTs). China's impending entry to the World Trade Organization is expected to speed up such developments.

Displaced workers are disproportionately affected in this employment shift. Because unemployment compensation is meagre, most displaced workers are forced to shift to other trades and industries, which offer lower wages and less favourable working conditions. According to the Labour Department (2000), middle-aged workers are most affected. In
1999, this group—over half of which has low educational attainment—accounted for one quarter of Hong Kong’s labour force. They are over-represented in manufacturing industries and in craft, production, and menial occupations, precisely the areas in most jeopardy as Hong Kong shifts more to a knowledge-intensive and service economy. Although many non-skilled or low-skilled jobs still exist in the service sector, there is a growing concern for declining employment prospects of this age group. The accelerated obsolescence of labour market skills and the use of new and knowledge-intensive methods of production change the relationship between age and productivity. A person of forty years is no longer seen as being in the prime of working life.

Labour market conditions today can be further characterized by at least two other distinctive developments. First, collective bargaining power has been vigorously promoted by labour unions. Historically, the British colonial administration kept unions’ civic engagement and political participation relatively low. There was generally low awareness of the social role of unions compared to their participation in economic enterprise. Yet labour issues are one of the exceptions as public pressure increases for ways to assist workers adjust to rapid changes in the workplace. A second development is the polarization of jobs. As in other advanced economies, the application of technology has both “de-skilling” and “up-skilling” effects. In terms of new jobs created, while the percentage that require upper-level skills may be increasing, in absolute terms more new jobs are available at the lower end of the skills range.

Socio-political developments in Hong Kong have also helped shape the labour market. The 1997 transfer of sovereignty from Britain to China, and the subsequent trend towards democratization, alerted many people to the importance of participation in socio-political
decision making. The future stability and prosperity of Hong Kong is the major concern. The territory’s future depends on the realization of the "one country, two systems" concept and support from the Mainland as well as international communities. At the same time, increasing participation in workplace decision-making by labour unions and political parties may lead to a new orientation in the work culture of Hong Kong.

Another developmental trend relates to projected population growth. The apex of the population pyramid has widened whilst its base has slightly narrowed, indicating that the proportion of older people has increased substantially. As the labour supply is determined by the size of the working-age population and the degree of their participation in the labour market, the continued ageing effect of the population has changed the labour market structure considerably, resulting in faster growth of the working-age population than the growth of the labour market.

An additional complication is that the economic downturn since late 1997 has greatly undermined the Hong Kong economy. The resulting displacements caused the unemployment rate to hit a record high of 6.3 percent in 1999, leading to further unprecedented slowdowns. Tackling the issue of unemployment through active labour market policies has become the most pressing issue for government.

Hong Kong’s economy changed substantially as low-skilled manufacturing jobs moved across the border to the Mainland to take advantage of lower production costs. Job displacement was essentially an issue of the 1990s, in the sense that this was the decade when the most rigorous economic restructuring took place and the largest number of workers was displaced. The socio-economic imperatives generated by the economic
restructuring and globalization of the 1990s have reshaped the attitude of government. The role of an exemplar of the free market economy for its non-intervention is challenged. The question is to what extent the field of education and training is now seen as one of the government’s responsibilities. Ashton (2002) argues that Hong Kong should adopt a more proactive approach to build up its training system and suggests that there are many lessons to be learned from some innovative practices in other Asian economies. “It is no longer competing in UK and Western markets to sell low textiles and plastics. Now as part of China it is competing in the world financial markets with other international competitors such as Singapore” (p.357). In view of these changes in the economic situation, the need to set up the provision of skills required by employers in a more proactive manner should be addressed.

There are signs that past policies of total non-intervention start to give way to the active labour market policies. Hong Kong Government has recently reviewed the manpower requirements to 2005. Although the approach of manpower projection may be partial in analyzing the demand and supply of the labour market, it provides a basic understanding of the future needs for education and training.

Manpower Projections to 2005: The Future Labour Market

In the light of Hong Kong’s further economic restructuring, which is likely to be accelerated by the rapid development in ICTs, global trade and investment, and China’s impending initiation into the World Trade Organization, the Hong Kong Government has conducted a detailed assessment of manpower requirements against supply to 2005 based on a comprehensive projection framework (Education and Manpower Bureau, 2000).
According to the Education and Manpower Bureau (EMB), the total manpower requirement, covering all jobs based in Hong Kong, is projected to grow at an annual rate of 2.4%. Consequential to the continuing shift towards knowledge-based activities, there will be a further shift in the composition of manpower requirements in favour of higher-skilled, better educated, and more experienced workers. Analyzed by occupational category, the manpower requirement for managers, administrators, professionals and associate professionals is projected to grow distinctly faster than that of lower-skilled workers. Analyzed by economic sector, those industry groups with a relatively high knowledge content, such as computing equipment, telecommunications, and Internet services, are expected to show the most rapid growth in manpower requirements, while those in the local manufacturing sector is projected to continue to decline.

Hong Kong’s labour supply is predicted to increase from 3.11 million in 1999 to 3.38 million in 2005, representing an average annual increase of 1.4%. Growth is projected at all educational levels and improvements in educational attainment continue to affect the composition of the workforce. The increase in manpower requirements is expected to be more visible among more highly educated workers, congruent with Hong Kong’s progressive transformation into a knowledge-based economy. An increase in demand is expected for university-educated workers to meet the job requirements for professionals and associate professionals. Workers with lower-secondary education and below are expected to experience more difficulty in getting jobs. The number of workers with university degrees and other forms of post-secondary education is projected to grow as more and more young people pursue further studies at tertiary education and vocational training institutions. The number of workers with upper-secondary education and below is projected to show much
slower growth. This growth trend is mainly due to the provision of nine-years of compulsory education, up to junior secondary level, for the entire population and the government’s recent policy measures in augmenting tertiary and post-secondary education provision. It is also projected that across economic sectors, new jobs will demand higher skilled and higher educated workers to a greater degree than in the past, reflecting the shift towards more knowledge-based and higher value-added activities.

Wide-ranging consultations conducted in parallel with the projections gathered information on training needs and employment prospects for major economic sectors, occupation categories, and educational attainment levels. These consultations indicate that the local labour force will face greater challenges in this evolving economic environment. Those most affected are likely to be older workers with lower educational attainment and fewer skills as a result of being confined to rather narrow job perspectives. More focused and concerted government effort on training, retraining and placement is therefore required to enable older workers to overcome adaptation difficulties and re-orient to new jobs. For prospective entrants into the labour force, adequate education and training opportunities are needed so as to equip them to meet the changing manpower requirement in the market. For existing workers, upgrading through continuing education and further training is necessary.

The projection exercise comprises not only data analysis, but also the conduct of household and business establishment surveys plus consultation visits to a wide range of concerned entities. The views expressed by participants indicate a community-wide concern for enhancing the effectiveness of active labour market policies. As a result, there is an increasing demand for more active policy initiatives from the public sector. Some of the policy recommendations emerging from this exercise can be highlighted as follows:
**Policy Recommendations**

1. *Economic policy and fiscal policy*

   The survey findings suggest that the government should facilitate economic diversification and the setting up of regional bases by multi-national corporations; promote the growth of businesses with better prospects; and support the development of certain labour-intensive sectors, which could not be relocated elsewhere.

2. *Manpower and training policy*

   Government is advised to formulate long-term manpower policy and conduct manpower projections to identify future trends in labour supply and demand. Moreover, the government should equip the local workforce with the necessary skills to meet the demands of a dynamic economy and seize emerging opportunities. Assistance could be provided by promoting the concept of on-going training and retraining and lifelong learning; allocating more financial resources to training and retraining; granting subsidies or pecuniary rewards to worker/employers for attending/organizing training programs; promoting and organizing practical job-attachment programs so as to enrich the experience of workers, especially for first-time job-seekers; working in partnership with employer/trade associations and trade unions to plan and organize training and retraining programs and enhancing employment services for job seekers. Liberation of the immigration policy is suggested so that more talents/professionals or imported workers from outside Hong Kong could be admitted for employment.

3. *Employment and social protection*

   The government could strengthen its employment and social protection by enhancing the protection of employment rights and benefits; promoting consultation and communication between employers and employees and providing counselling services
to help vulnerable workers solve their family problems and overcome the stress brought about by unemployment or work pressure.

4. Educational policy

It was a common view that the education system should aim at preparing young people for a dynamic and knowledge-based society and economy. Review and reform of the curriculum of tertiary institutions is required.

5. Coordination of policies

In order to better coordinate the policies, a central commission should be set up to map out a long-term development strategy and industry-based commissions should be established.

Challenges for the Government

The policy recommendations flowing from the manpower projection exercise and the subsequent broad-level consultation indicate a demand from the community at large for the government to play more active roles in various areas. To a certain extent, the government’s vision in manpower planning has changed to accommodate a more open and flexible system of education and training. The shift of orientation towards active labour market policies is quite different from the non-interventionist approach adopted so far for other areas.

Many concrete suggestions were made during the projection planning process, such as diagnosing labour market problems; helping currently unemployed middle-aged persons to re-enter the labour market; supporting and strengthening the work of the retraining in helping unemployed workers; avoidance of policies that would substantially raise the cost of doing business; expanding education opportunities and improving the quality of education; introducing a system of vocational learning certification for trainees; encouraging or
requiring employers to provide annual training leave for their employees, and increasing the public's awareness of the importance of self-improvement. The question then is to what extent the public sector can facilitate these changes? The concern is not simply resource allocation but also of the identification and networking of stakeholders. It is against this background that the retraining scheme to help displaced workers adjust to labour market changes was launched and continues to grow.

Employees Retraining Program in Hong Kong

The Employees Retraining Program (ERP) has been a specialized area of adult education provision in Hong Kong since the early 1990s, when economic restructuring first accelerated. It provides skill-oriented training for displaced workers in declining industries with the aim of preparing them for reemployment in other industries with a more promising future. In 1992, a statutory Employees Retraining Board (ERB) consisting of representatives from government departments, labour unions, trade associations, training bodies, and other concerned community groups, was established to manage the ERP. The range and diversity of courses have rapidly expanded in recent years in response to the promulgation of an active labour market policy. In the period from April to July, 1999, when the present study took place, the ERP in Hong Kong served 26,379 learners (Appendix 1).

Purpose and Nature

The ERP targets local workers aged 30 or above, who have not attained Secondary Three in formal schooling. They either have been or are about to be displaced by economic
restructuring. Learners are reoriented to new jobs and acquire new vocational skills through specifically designed courses. The mode of studying largely follows the classroom format in most cases, with some informal elements, such as practical sessions, and workplace visits. Over the years, the ERP has undergone an ever-expanding range of developments. The organizational and structural features of the ERP are as follows:

Provider Organizations

Since the statutory Employees Retraining Board was formed mainly for planning, development and management of the program at the policy level, the courses are provided by various types of organizations on a contract basis. The provider organizations in Hong Kong are so diverse in nature that adult education can be regarded as either their central function, secondary function, allied function or subordinate function (Apps, 1990). Given this background, learners face a wide range of learning opportunities but risk uncertainties in program quality.

Since 2000, the development of the retraining policy of the ERB has focused on standardization of program provision and ongoing operation. The provider organizations have been tightly monitored in all aspects, with little autonomy in program development. The only channel for the provider organizations to realize local initiatives is to provide sound justifications, well grounded in research and based on labour market needs.

Accessibility

At the piloting stage of the ERP, potential learners registered with the provider organizations directly, but the vetting of applications was done by the Labour Department. A mechanism
was set up by the Labour Department, which gave information and advice to learners and made referrals during the application and enrolment phases. This mechanism was passed onto the provider organizations after successful piloting. Screening, as a pre-admission control, is often necessary to verify the eligibility of applicants in terms of employment status, demographic information, and more importantly, to ascertain applicants' intentions to re-enter the job market. As well, applicants are restricted from repeating the skills training course within a given period of time to ensure equal opportunities for displaced workers from various sectors to participate.

**Target Groups**

Participants are mainly workers facing displacement or displaced from their industries/occupations who anticipate difficulties in re-entering the job market because of age, gender, or physical health. Examples are homemakers who are only available for half-time jobs, new arrivals facing adjustments to the local economy, and mature workers. Priority is given to single parents. However, the accelerated change of economic restructuring and the shortage of manpower in some industries have driven the program to expand the scope of retraining for more people. As there are other vocational training schemes for young workers, the age limit (30 years) has not been removed from the ERP.

**Learning Approach of Employees Retraining Program**

The learning approach of ERP varies according to the different categories of courses. The vocational training type of practice is predominant in the skill-oriented program category. For career education and counselling, a relatively learner-centered approach is adopted. For
the tailor-made training category, the approach varies considerably according to the job
nature and employers' requirements.

**Skill-oriented Training**

Program design and curriculum development are derived from an analysis of job
specifications for specific occupations. Learners are given prescribed course objectives
usually stated in behavioural terms. Available resources usually include educational
materials consisting of units of curriculum or small step exercises for easy reinforcement
and measurement. Additionally, there are also practical sessions in a simulated workplace.
Throughout the learning process, participants are guided by feedback. At the end of a
course, learners are assessed according to demonstrated competence rather than the
time/duration spent on tasks or other performance criteria. The approach is competence-
based and identifies the skills required to perform in a specific occupation. However, there
are certain pitfalls associated with this approach, including: (1) the accurate identification of
competence in a specific occupation across industries is sometimes questionable, and (2) the
time lag and availability of job specifications for curriculum developers. Most importantly,
critics of this approach have pointed to the lack of concern for learners. These programs are
largely classroom-based and teacher-oriented. Learners' participation is limited and there is
little in the way of autonomous or independent ways of "returning to learning" for those who
have been away from the classroom for some time.

**Career Education and Counselling**

Compared with the skill-oriented training, career education and counselling programs adopt
a more humanistic approach to learning. Although the major target group of the ERP is
individuals with relatively few job skills, who have been restricted to a narrow range of manual operations in declining industries, and who need to make a fresh start through retraining for jobs in growing sectors, there are other categories of participants. Many job seekers have been unemployed for a considerable period of time and have lost touch with the job market. They may not be active job seekers and only attend the program for the training allowance. They are not available for, or motivated to seek work. Under these circumstances, a more learner-centered approach seems desirable. Participants are encouraged to identify their own learning needs. The frame of reference is the experiences of learners, in both their private and work lives. The instructor takes the role of facilitator and maintains a supportive learning atmosphere for individual and group interaction. The concept is close to the theory of andragogy and its application in human resource development. Although there are basic elements of job searching techniques or career counselling incorporated in the curriculum, learners participate in the modification of course objectives and class agendas. The notion of total human development is emphasized during the learning process.

*Tailor-made Training for Employers*

At the inception of the ERP, an employer-sponsored workplace training provision was made available featuring direct subsidy from the ERB in the form of a corporate training allowance, based on a commitment by employers to hire trainees from the program. Most of the learning techniques for on-the-job training appear in this program. However, due to the difficulty in assessing training outcomes, and the extent of employers' contributions to training, this provision was replaced by the tailor-made training program for employers shortly after its introduction. The salient features of the latter program are employers'
involvement in designing the curriculum and the changing nature of the ERB's assistance to
the human resource development of the employers.

The approach for this category is basically competence-based, with an emphasis on work
ethics and company culture, depending on the nature of the industry and employers' concern.
For manual jobs, the focus is on practice and shaping. Learners are required to demonstrate
a predetermined level of mastery of skills upon completion of training. Other jobs such as
those in the service sector may involve workers' values and attitudes more. Developing
workers' problem-solving ability is more important in some cases than the manipulated
change of behaviour. Employers may make use of the ERP to fill current vacancies, to cope
with changing skills and knowledge, or to provide equal employment opportunities for
different groups of people. The variation of employers' concerns therefore shapes the
learning approach in different ways.

Pertinent Questions

Concerns for how the retraining scheme can contribute to the total education and training
system are widely discussed in both the public and private sectors. Questions are raised
about the efficiency of ERP in terms of costs and benefits. Cost-benefit calculations can
focus on the probability of reemployment, earnings premiums attributed to retraining, and
other externalities of economic benefits attached to retraining. The present study began with
this background and attempted to analyze the rates of returns of ERP.

Apart from the need to evaluate different rates of returns, there are questions focusing on
how well ERP contributes to active labour market policies under the economic
transformation in Hong Kong and the extent to which the public sector is expected to help displaced workers find jobs. Strategies include restructuring the labour market; subsidizing training and retraining costs; providing relevant training and retraining courses or facilities; providing more information about the labour market; motivating employers to hire more displaced workers, and issuing certificates of skills for relevant courses. For the private sector, questions relate to the extent to which employers and other stakeholders are expected to facilitate these changes or become more socially responsible. The private sector looks at the meaning and structure of ERP to understand how retraining as a personal development and social process is embedded in the objective of sustained economic growth and well-being.

The dimension of meaning generates an insightful query: “who can benefit from ERP”? Explicitly stated, the ERP program is meant to adjust workers to the job market and improve their job competence. However, running parallel to the ERP is a policy to legitimize the importation of skilled workers in particular segments, where the local supply is considered inadequate. Also, Hong Kong has no minimum wage legislation, so learners face keen competition in the job market once they complete the ERP. In some cases, retraining might be seen as a liability as learners are sometimes marginalized by employers due to their association with the ERP. They tend to be stereotyped as 'middle aged' and 'transferred from other irrelevant work positions', which implies that they are less-productive workers. While the benefits of the ERP to displaced workers are somewhat uncertain and, therefore, controversial, there is no systematic effort by the public or private sectors to provide any alternatives to help displaced workers adjust to changing work demands as economic restructuring accelerates.
On the other hand, the benefits for employers and provider organizations are more clearly defined. As employers continue to lay off workers, and relocate factories or manufacturing units across the border to Mainland China for cheaper labour, they shift the cost of adjustment, to a greater or lesser degree, to workers. Also, for provider organizations, an increasing amount of contracted programs in retraining will help them identify learning needs and formulate strategic plans aiming at greater expansion and higher status for their training centre.

The question of structure concerns who manages, and who has access to the ERP. Despite the long-standing infrastructure of adult education provision in Hong Kong, ERP is administered by an independent board, which has no formal relationship with the Education Department. The structure and function of ERP is determined by the interplay of social, economic, technological and political forces rather than by educational goals for reemployment. Regarding accessibility, the recruitment channel is largely monitored by the Labour Department, which refers participants to respective provider organizations. Learners are often given a ready-made, prescribed program based on the chance of job placement. Their learning interests and abilities may not be the major concerns. It is clear that, learners—the focus of the whole process—have hardly any opportunity to participate in program selection or reduce their learning dependence.

Summary

In this chapter, the development of adult learning in Hong Kong has been described in the context of economic, social and political changes. Among other forms of learning activities available for displaced workers, the Employees Retraining Program has been used by
government as a way to improve labour market conditions and ease job displacement. Despite the fact that the decision to launch the program is connected to a host of social and economic factors, it is a direct response to the discovery of new objectives and values of lifelong learning, where the contemporary paradigm of adult learning currently resides. The findings of the manpower projection survey suggest that, besides active labour market policies, the most critical resource to rely on is people's talent and energies and the key to manpower development is education and training in the context of lifelong learning.

The rationale for active labour market policies is the widely accepted principle that it is preferable to help the unemployed get back to work, rather than provide them with income support and thereby risk prolonged unemployment. However, the record of such policies is less than anticipated, particularly in terms of raising the employment and earning prospects of participants in Hong Kong, and improving the functioning of the labour market more generally (OECD, 1996).

Against this background, the current study attempted to explore further how retraining could contribute to active labour market policies for displaced workers. The study focused on two aspects: (1) to what extent retraining can be made more effective taking into account the rates of returns; and (2) how well retraining can address issues of equity and sustained economic growth. The research design and methods of data collection adopted to address these questions are presented in the next chapter.
CHAPTER FOUR
RESEARCH DESIGN AND METHOD

This chapter provides details of research design and methods of data collection. I begin with a discussion of the design of the study and identify the study sites and participants. Next, I focus on rates of returns and define the variables used in the analysis. Finally, I describe the interviewing strategy used to collect data from group discussions and individual participants.

Introduction to the Design and Method

The design of the study attempts to broaden the scope of analysis in a way that will provide a comprehensive background for policy discussions on adult education and training (AET). The research consists of two parts: (1) an analysis of rates of returns on AET focusing on the effects of key variables; and (2) an analysis of stakeholders’ views of the programs and outcomes based on group discussions with employers and program administrators and interviews with individual participants. The design and method are further elaborated to indicate the distinctiveness of the two approaches and their relationships and show how they enrich the analysis (Figure 1). The rate of returns analysis focuses on the measurement and prediction of retraining’s possible economic outcomes; the interpretation of participant views focuses on understanding participant expectations and retraining and reemployment as a process.
The first approach will indicate how well the present study can identify statistically significant associations between variables and develop better models in the future. There are three areas of interest: (1) earnings effects analyzed by the multiple linear regression of respective earnings functions, (2) probability of reemployment predicted by the logistic regression, and (3) relationships between retraining and reemployment explained by the path
analysis of structural equation modeling. The second approach raises questions about the assumptions underlying these relationships. The extent to which alternative views can be elicited to facilitate problem-posing and reframing of issues becomes a major area of interest.

Data Collection

In order to implement this design, it was necessary to: (a) identify retraining centres as potential research sites, (b) identify and select administrators and placement officers to participate in the study and, (c) identify and select individual participants for interviews. Despite extensive efforts in human resource development, Hong Kong has not maintained a large-scale database to keep track of adult education programs and outcomes in the region. Given this limitation, there was no suitable dataset available that could facilitate the analysis of rates of returns or interpretation of individual views. Therefore, the present study had to collect primary data.

Development of Instruments and Protocols

Prior to selecting study sites and participants for the study a survey instrument and interview protocols were developed and pilot-tested. In constructing the survey questionnaire, (Appendix 3), I followed Fowler (1995, p.151) and attempted to design questions that: - (1) participants could reasonably be expected to answer, (2) clearly defined all of the key terms and concepts so people knew what question they were answering and all answered the same question and, (3) provided a friendly, yet professional context in which people could see that answering the questions accurately was the best way to serve their own interests.
Part A of the survey solicited trainee’s demographic and background information. Part B asked for job information prior to retraining. Part C invited trainees to provide information about their situation at the start of retraining. Part D reported their job status six months after retraining. Part D was completed by a placement officer or centre administrator. The questions asked for a fixed response, rather than multiple choice or Likert-like responses.

Because the participants were mainly workers with a very low level of English proficiency, the questionnaire distributed to respondents was translated into Cantonese. Simple and concise language was used so as to avoid any misinterpretation of the original meaning of the items due to the language inadequacy of respondents. In order to keep the questionnaire short, the total number of questions was limited to thirty.

Pilot Study

Before questionnaires were administered a pilot study was conducted. The questionnaire was piloted with two classes of participants (n=40) in one retraining centre using opportunity sampling to select participants. The pilot study was done during class time as previously arranged with the retraining centre. Participants were fully briefed on the task prior to administration of the questionnaire. Participation in the pilot study was voluntary and there was no obligation, nor intention that pilot study participants would participate further in the study. Results of the pilot study indicated that modifications to the structure and wording were required. Respondents indicated that changes were needed to improve the linking of questions. Subsequent modifications were made to the wording of certain items
to make them more concise, using simple terminology and indicating linkage between the questions where required. These changes are outlined below:

Modifications to Survey Questionnaire Following Pilot Test

1. *Item number 5 Number of years engaged in paid work* is relocated from *Part B* to *Part A*.

2. *Item number 20* is relocated from *Part C* to *Part D* and the wording is changed from *Unemployment period* to *the number of months to get reemployment after completion of retraining*.

3. The heading of *Part D* is rephrased from *Trainee’s Job Information Obtained after Retraining*, to *Trainee’s Job Information Obtained Six Months after Retraining*.

4. *Item number 18, The level of the vocational skill training that the trainee undertook* is added onto *Part D*.

5. The response items of *Items 8, 9, 21 and 22* are reconstructed based on the categories stipulated by the Labour Department.

6. The wording of *Item number 23* is changed from *Did the field of retraining match with the job*, to *Did the field of retraining match with the field of work*.

7. The initial construction of the response items of *Item number 13 and 26* concerning firm size is too broad. It is improved by breaking down the response items into smaller categories.

8. For *Item number 3, response item number 5, Post-secondary education and above* is collapsed due to the fact that the great majority of the respondents are well below this education level.
Each of the questionnaires was accompanied by a cover memo from the researcher stating the purpose and potential value of the survey. In order to reduce response distortion, I relied once again on Fowler (1995, p.30), and assured the participants of the confidentiality of their responses and explained how that would be protected. A promise of anonymity was included in the cover memo, and participants were given the option of not completing the questionnaire at the last moment, even if they had agreed to participate in the study well before. Finally, as Part D of the questionnaire was to be completed by placement officers or centre administrators six months after the questionnaires were completed, a separate memo was prepared as a reminder and dispatched as the date drew near six months later.

Selection of Research Sites

A total of 147 retraining centres offered the Employees Retraining Program (ERP) in Hong Kong in 1998 (Appendix 2). Among this number, were centres run by NGOs specializing in social work services but concurrently offering adult education programs in other selected areas. Labour unions also ran a small number of centres. I selected 10 sites that had advertised retraining class commencement in the major local newspaper in April, 1998, and visited them to observe their different features, and familiarize myself with all aspects of their operation. Following this, I stipulated two basic criteria to guide the selection of study sites and subsequent collection of data: (1) only those centres offering retraining programs related to more than one specific trade or industry would be selected as research sites. If only one type of program was available, a centre may be too industry specific, creating possible bias. (2) centres selected for the study must have demonstrated that the role of adult education and training was central to their operation. This criterion was verified by
reviewing mandates and any information brochures and finally by determining if the centre was registered with the Education Department.

Invitations were extended to 31 centres that appeared to meet the selection criteria for potential research sites. Of these, 24 centres indicated a willingness to participate in the study. Upon review of the responses, two centres were found to be too narrowly focused and were eliminated, leaving 22 centres as research sites for the study. The centres were located in different districts of Hong Kong including the newly developed towns, thereby providing a relatively wide coverage of the various geographic locations. Data collection began in September 1998.

Study Participants

Participants in this study were trainees/course participants of the Employees Retraining Program in Hong Kong, which serves approximately 100,000 individuals per year. During the period from September, 1998 to March, 1999, a total of 521 trainees who were currently undergoing, or had undergone training in one of the 22 selected sites agreed to participate in this study. Participants volunteered in response to invitation posters and notices posted in the centres. No additional selection criteria were stipulated for individual participants; I accepted all who volunteered.

The distribution of questionnaires and collection of responses were divided into two steps. First, full sets of questionnaires (see Appendix 3 for a copy of the questionnaire), were distributed during class to the 521 participants by the course instructors and collected upon completion. Thirty minutes was allocated for completion of the questionnaire, a time judged...
appropriate through pilot testing. Participants were asked to complete questions requesting personal background, jobs held prior to retraining, and to provide additional information about their situation at the start of retraining (Part A to Part C of the questionnaire). The completed sections of the questionnaires (Part A to Part C) were returned to the researcher, while part D was kept at each site for six months after which, in the second step, placement officers or centre administrators made follow-up telephone calls to verify participants' employment status then added this data to Part D of the survey before returning the section to the researcher.

Final Checking of the Data Set

Of the 521 original questionnaires distributed, a total of 481 questionnaires were returned by the deadline of October 31, 1999. Although every effort was made to encourage the return of the 40 missing questionnaires, including the provision of a one-month grace period, this number did not increase. One of the possible reasons for the non-return of some questionnaires was the unexpected withdrawal from the course by participants. According to Ader and Mellenbergh (1999), individuals who do not respond can be classified into three groups: (1) individuals who simply refuse to cooperate; (2) people who relocate and are no longer traceable; and (3) people who are physically or mentally not able to cooperate (p.127-128). According to centre administrators and placement officers a major reason for "non-response" was that some participants were impossible to contact. They had changed their phone number or left Hong Kong for Mainland China for an extended period. Thus, no job information could be provided for these individuals.
Of the 481 questionnaires returned, 35 responses were disqualified because they were incomplete. Of the 35 incomplete responses, 25 had not completed Item number 7, regarding monthly family income. One possible reason for non-completion of this item might be that some respondents did not know their household income. Due to privacy of financial matters among family members, this is a common phenomenon among Chinese families. Reasons for non-completion of other items might be that respondents did not want to disclose certain data that they considered private or sensitive, such as the level of education and monthly income. A total of 446 questionnaires were complete and useable, indicating an adjusted complete and useable response rate of 86%. Of these, analysis of Part D indicated that a total of 223 respondents (50%) of participants managed to find another job within six months of completing retraining.

In the following section I construct a profile of the displaced workers in the study and analyze their earnings from employment prior to retraining. The profile is divided into four parts representing: (1) demographic data; (2) labour market experience; (3) income and other related features; and (4) socioeconomic status of displaced workers.

**Participant Demographic Data**

Slightly more than three-quarters (76.7%) of participants in the sample were women with low levels of formal schooling (Table 1). A survey conducted by the Employees Retraining Board in Hong Kong in 1999 shows a similar pattern of gender representation as the study sample; the distribution of ERP participants by gender was 26.7% men and 73.3% women (Appendix 1a).
Table 1: Distribution of participants by age, sex and level of schooling, at the time they began retraining

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<th>female</th>
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<td>21</td>
<td>23</td>
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<tr>
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<td>41</td>
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</tr>
<tr>
<td>Primary education</td>
<td>25.1</td>
<td>112</td>
<td>21</td>
<td>91</td>
</tr>
<tr>
<td>Junior secondary education (grade 9)</td>
<td>33.2</td>
<td>148</td>
<td>27</td>
<td>121</td>
</tr>
<tr>
<td>Secondary education (grade 11)</td>
<td>7.2</td>
<td>32</td>
<td>14</td>
<td>18</td>
</tr>
</tbody>
</table>

n = 446

By way of comparison, the labour force participation rate during 1999, for the total resident population of Hong Kong over the age of 15 was 60.9%. The participation rate by gender was 48.7% for women and 73.8% for men (Appendix 8). This suggests that the over representation of women workers in the sample of displaced workers in the study is one of the important demographic characteristics of these individuals.

There were 30.7% of respondents in the study aged 40-44 years and only 9.9% below the age of 30. Regarding participants’ level of schooling, 33.2% completed junior secondary education, 25.1% completed primary and 9.9% had less than six years of formal education. There were 7.2% who are at the higher end of the scale, completing secondary education and 24.6% at the lower end with no formal schooling.
The reported formal educational attainment of the sample is substantially lower than that of the overall Hong Kong workforce. Only 40.4% of study respondents completed primary junior or secondary education, compared with 69.5% of the Hong Kong population, and a level that is assumed to be a starting point of retraining. Of the remainder, 24.6% reported having no formal education, compared with 8.9% of the Hong Kong population. The nine-year compulsory free education provision started in 1978. People who are now aged 40 years or older might have had to work for a living instead of going to school for formal education at that time. The large disparity between the group of study participants and the general labour force is noted as a factor.

Labour Market Experience

The distribution of respondents according to the industries in which they were employed before job displacement, indicates that 39.9% were employed in declining or downsizing industries such as primary production, textile and manufacturing (Table 2). The largest single group of workers (18.1%), were employed mostly in the textile/garment industries, a sector in decline. Only 11% were employed in expanding industries such as transportation/communication and finance/insurance. In the knowledge-based economy, this will form the major business sector in Hong Kong. The smallest group (3.6%) worked in the finance/insurance industries, a sector undergoing rapid expansion. Employment patterns by industry indicate a high possibility of displacement in declining industries.
Table 2: Distribution of respondents by industry before displacement

<table>
<thead>
<tr>
<th>Industry</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary production/mining/energy/construction</td>
<td>11.8</td>
</tr>
<tr>
<td>Textile/garment</td>
<td>18.1</td>
</tr>
<tr>
<td>Other manufacturing</td>
<td>10.0</td>
</tr>
<tr>
<td>Import/export</td>
<td>6.7</td>
</tr>
<tr>
<td>Wholesale/retail</td>
<td>14.7</td>
</tr>
<tr>
<td>Hotel/catering</td>
<td>11.2</td>
</tr>
<tr>
<td>Transportation/storage/communication</td>
<td>7.4</td>
</tr>
<tr>
<td>Finance/insurance</td>
<td>3.6</td>
</tr>
<tr>
<td>Community/social/personal services</td>
<td>4.2</td>
</tr>
<tr>
<td>Others</td>
<td>12.3</td>
</tr>
</tbody>
</table>

n = 446

The length of time that displaced workers were unemployed varied from one month to over one year (Table 3). Those unemployed for more than a year accounted for 37.7% of the sample, while those unemployed for less than six months accounted for 48.4%. The distribution does not show a specific pattern or indicate whether unemployment is biased to shorter or longer periods. The unemployment rates for the Hong Kong population are included for comparison.

Table 3: Percentage distribution of respondents by unemployment period

| Unemployment Period | My sample (%) | Hong Kong pop.(%)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 3 months</td>
<td>23.5</td>
<td>50.6</td>
</tr>
<tr>
<td>4 – 6 months</td>
<td>24.9</td>
<td>19.7</td>
</tr>
<tr>
<td>7 – 9 months</td>
<td>8.7</td>
<td>10.2</td>
</tr>
<tr>
<td>10 – 12 months</td>
<td>5.2</td>
<td>6.0</td>
</tr>
<tr>
<td>More than 1 year</td>
<td>37.7</td>
<td>13.9</td>
</tr>
</tbody>
</table>

n = 446  N = 207,500
In terms of length of employment prior to displacement, the sample showed that the largest group (21.3%) worked for more than ten years. The smallest group (3.8%), were those with nine to ten years of work experience. The distribution suggests that workers with more than ten years of work experience face a greater chance of job displacement (Table 4).

Table 4: Percentage distribution of respondents by years of work experience

<table>
<thead>
<tr>
<th></th>
<th>My sample (%)</th>
<th>Hong Kong pop.(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>10.5</td>
<td>12.4</td>
</tr>
<tr>
<td>1 – 2 year(s)</td>
<td>16.6</td>
<td>13.3</td>
</tr>
<tr>
<td>3 – 4 years</td>
<td>19.1</td>
<td>14.5</td>
</tr>
<tr>
<td>5 – 6 years</td>
<td>20.6</td>
<td>18.9</td>
</tr>
<tr>
<td>7 – 8 years</td>
<td>8.1</td>
<td>9.8</td>
</tr>
<tr>
<td>9 – 10 years</td>
<td>3.8</td>
<td>6.2</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>21.3</td>
<td>24.9</td>
</tr>
</tbody>
</table>

n = 446 N = 3,342,500

Income and Socioeconomic Status

The largest group of participants (29.1%) reported monthly pre-displacement household incomes ranging from $8,000 to $11,999 (Table 5). The mean household income was $12,776.91 and the mean $10,000. The second largest group of 24%, reported an income range of $12,000 to $16,999. The third largest group of 20%, reported an income range of $4,000 to $7,999. Only 0.4% of respondents reported an income of less than $4,000. In contrast, the household monthly median for the entire region was $17,000 (Appendix 11). Regarding monthly salaries earned before job displacement, the mean salary was $7,197 and the median was $6,500, contrasted with the median of $11,418 for the entire Hong Kong

1 Income is reported in Honk Kong Dollars. One Canadian dollar is equivalent to five Hong Kong dollars.
workforce (Appendix 10). These disparities are socio-economically significant. The vast majority (85.2%) were employed in a full-time position, while the remainder (14.8%) worked on a part-time basis. The majority of respondents (86.5%), have resided in Hong Kong for at least seven years. The “new immigrants” in the group (i.e. those with less than seven years residence) accounted for 13.5% of the sample.

Table 5: Percentage distribution of respondents by monthly family income before displacement from their last job

<table>
<thead>
<tr>
<th>Income Range</th>
<th>My sample (%)</th>
<th>Hong Kong pop. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $4000</td>
<td>0.4</td>
<td>7.9</td>
</tr>
<tr>
<td>$4000 - $7999</td>
<td>22.0</td>
<td>9.8</td>
</tr>
<tr>
<td>$8000 - $11999</td>
<td>29.1</td>
<td>15.9</td>
</tr>
<tr>
<td>$12000 - $16999</td>
<td>24.0</td>
<td>15.7</td>
</tr>
<tr>
<td>$17000 - $21999</td>
<td>19.3</td>
<td>12.6</td>
</tr>
<tr>
<td>$22000 and above</td>
<td>5.2</td>
<td>38.1</td>
</tr>
</tbody>
</table>

n = 446 ~ N = 6,720,700

The displaced workers who participated in retraining were compared with the general workforce of Hong Kong in 1998, in terms of educational attainment and socioeconomic status. The indicators of the latter criterion included earnings, monthly family income and number of years living in Hong Kong. Other demographic variables like age and participation in adult continuing education courses were also of interest in the comparison. The comparison provided an essential understanding of the background of 446 displaced workers in the sample and aimed to explore the extent of the disadvantages they were facing.

In sum, the displaced workers participating in this study were characterized as a group of middle-aged, less-educated persons. They earned less than the median wage from their
previous job before displacement and maintained a below average family income in today’s Hong Kong society.

Analysis of Rates of Returns

In order to measure the rates of returns of adult education and retraining for the group of displaced workers, survey questions were designed to seek background information related to initial education, work experience, adult education before displacement, retraining for specific labour market outcomes and continuing education after re-employment (see Appendix 3). The questions were based on reviews of theories and seminal examples relating to the measurement of economic outcomes of education and training. To measure the human capital investment over different stages of individuals’ lives requires a flow concept from formal schooling for children and youth, through adult education before job displacement, then retraining for reemployment and finally, continuing learning after reemployment (Figure 2).
Areas of Particular Focus

The research focused on five particular areas when analyzing the rate of returns to education and retraining: (1) the socio-economic status of displaced workers, (2) earnings among workers before retraining, (3) earnings among workers after completion of retraining, (4) the probability of reemployment within six months of completion of retraining, and (5) reemployment earnings determinants.

Socio-economic Status of Displaced Workers

The characteristics of the study group were compared to those of the general workforce of Hong Kong with respect to: their labour market experience, income, educational attainment and, socio-economic situation. The focus here was on the background and demographic
characteristics of the group of displaced workers. The major concern was to obtain information about their last position and their earnings from employment before displacement. I attempted to determine the extent that their adjustment to the structural change was related to the accessibility to initial education and adult education before job displacement. I also tried to gauge to what extent they differed in terms of educational attainment from the general workforce in Hong Kong. I investigated whether factors such as age, gender, and family income would account for social and economic inequality. The background analysis was crucial to confirming whether the group of displaced workers could be classified as “under-privileged.” Since the welfare assistance policy was very often related to retraining in the context of serving the under-privileged, I was interested in finding out if the economic and social situation of this group supported this view.

Earnings among Displaced Workers before Retraining

Human capital investment is examined through an analysis of the earnings function. The indicator of earnings has been widely used to measure human capital but, according to Tuinjman (2000), there are also other indicators such as the unit of production and work position advancement that can be used. The selection of earnings as an indicator facilitates comparisons between studies that examine the rate of returns to different types and levels of education and training in Hong Kong.

In studies measuring returns to education, it is important to know what variables predict the earnings differentials among the group while they were still in their last jobs before displacement. To what extent does initial formal schooling and/or participation in adult education explain significant differences in earnings? The analysis of earnings at the stage
of pre-displacement is expected to provide an understanding about the transfer of human
capital from one stage of employment to another. The techniques of analyzing the earnings
function according to the neo-classical theory of human capital investment are widely used
in studies of economics of education, especially when attempting to estimate the rates of
returns to different factors. The basic thrust of this method is well summarized by Mincer
(1974, 1989). He suggests a "log-earnings regression" approach to study the earnings
effects of education, as well as the effects of experience.

The earnings differentials among displaced workers were analyzed by the earnings functions
using the multiple linear regression method.

\[ \text{Log } \text{EARN} = \text{SCH} + \text{ADED} + \text{EXP} + \text{AGE} + \text{SEX} + \text{FAMINCOME} + \text{HOUSING} + \]
\[ \text{STAYHK} + \text{SECTOR}(i)_{i=1}^{3} + \text{INDUSTRY}(i)_{i=1}^{n-1} + \text{JOBSTATUS} + \text{FIRMSIZE} \]

\[ \text{-------earnings function (1)} \]

**Summary of definitions of variables**

EARN represents monthly earnings including most types of compensations

SCH(i), where i=1 to 4 indicator variable for educational levels of less than 6 years of education, primary
education, secondary 3 and secondary 5, omitted category being no formal
schooling

ADED indicator variable for participation in the institutionalized adult education
EXP     number of years engaged in pay-work
AGE     indicator variable for age
SEX     indicator variable for gender
FAMINCOME     monthly family income
HOUSING     indicator variable for living in public housing
STAYHK     indicator variable for living in Hong Kong for at least seven years
SECTOR(i), where i=1-3     indicator variable for the public sector, non-profit-making and private sector, the omitted category being the self-employment
INDUSTRY(i), where i = 1 to n-1     indicator variable for the i\textsuperscript{th} industry in n groups of industry based on the categorization in the Hong Kong census
OCCUP(i), where i = 1 to n-1     indicator variable for the i\textsuperscript{th} occupation in n groups of occupation based on the categorization in the Hong Kong census
JOBSTATUS     indicator variable for working full-time versus part-time
FIRMSIZE     no. of employees in the company of the last job
Workers Earnings from Their First Job Following Retraining

In the next phase, the group of workers that were reemployed within six months after retraining was analyzed. In reality, only some trainees were “successful” in re-entering the labour market and there was a possibility that they would receive lower wages than in their previous job. Thus, it was important to investigate what factors predicted the earnings differentials among those who managed to get back into the labour market. Did factors like initial education and participation in adult education before job displacement count? How much did the level of retraining count? To what extent would the labour market condition affect these differentials? At this stage, the analysis focused on measuring human capital in terms of the economic returns to adult education and retraining for reemployment. Multiple linear regressions were used in the analysis to capture effects of adult education and retraining by controlling other variables.

The earnings differentials among trainees at the beginning of their first job after retraining was analyzed using the multiple linear regression method. The analysis followed three separate steps. First the regression of earnings was on the human capital and labour market variables before job displacement (earnings function 2). The purpose was to analyze whether human capital was transferable from the last job or not, at least for the reemployed group of workers. Second, the regression was on the human capital and labour market variables after re-employment (earnings function 3). The purpose was to identify whether the human capital investment in retraining and continuing education related to the new employment had any payoffs. Finally, the regression took into account the variables of both stages (earnings function 4). The purpose was to measure the overall impact of human capital investment at different stages, ranging from initial formal education, to adult
education and training before job displacement, then during retraining and finally,
continuing education related to the new job. By the regression of three earnings functions
respectively, the flow of human capital and the earnings effects at different stages was
revealed.

\[
\text{Log NEWEARN} = \text{SCH} + \text{ADED} + \text{EXP} + \text{AGE} + \text{SEX} + \text{FAMINCOME} + \text{HOUSING} + \\
\text{STAYHK} + \text{SECTOR}(i)_{i=1}^{3} + \text{INDUSTRY}(i)_{i=1}^{n-1} + \text{OCCUP}(i)_{i=1}^{n-1} + \\
\text{JOBSTATUS} + \text{FIRMSIZE}
\]

----------earnings function (2)

\[
\text{Log NEWEARN} = \text{SCH} + \text{ADED} + \text{EXP} + \text{AGE} + \text{SEX} + \text{FAMINCOME} + \text{HOUSING} + \\
\text{ADEDLEVEL} + \text{ADEDTYPE} + \text{ADEDCON} + \text{MATCH} + \text{WAIT} + \\
\text{JOBPLACEMENT}(i)_{i=1}^{4} + \text{PEER} + \text{SECTOR}(i)_{i=1}^{3} + \text{STAYHK} + \\
\text{NEWOCCUP}(i)_{i=1}^{n-1} + \text{NEWINDUSTRY} + \text{NEWJOBSTATUS} + \text{NEWFIRMSIZE}
\]

----------earnings function (3)

\[
\text{Log NEWEARN} = \text{SCH} + \text{ADED} + \text{EXP} + \text{AGE} + \text{SEX} + \text{FAMINCOME} + \text{HOUSING} + \\
\text{STAYHK} + \text{SECTOR}(i)_{i=1}^{3} + \text{INDUSTRY}(i)_{i=1}^{n-1} + \text{OCCUP}(i)_{i=1}^{n-1} + \text{JOBSTATUS} + \\
\text{FIRMSIZE} + \text{ADEDLEVEL} + \text{ADEDTYPE} + \text{ADEDCON} + \text{MATCH} + \text{WAIT} + \\
\text{JOBPLACEMENT}(i)_{i=1}^{4} + \text{PEER} + \text{NEWOCCUP}(i)_{i=1}^{n-1} + \\
\text{NEWINDUSTRY}(i)_{i=1}^{n-1} + \text{NEWJOBSTATUS} + \text{NEWFIRMSIZE}
\]

----------earnings function (4)
Summary of definitions of new variables

NEWEarn represents hourly earnings including most types of compensations at the starting of employment

ADEDLEVEL represents the elementary and intermediate levels of vocational skill training

ADEDTYPE indicator variable for taking vocational skill training versus job access orientation

ADEDCON indicator variable for participation in other continuing education course(s) after retraining

MATCH indicator variable for matching the field of retraining with the field of work

JOBPLACEMENT(i) where i=1 to 4 indicator variable for various kinds of job placement services including by oneself, training bodies, union and the Labour Department. The omitted category is other ways of placement service.

WAIT represents the number of months to get reemployment after completion of retraining

NEWOCCUP( i ), where i = 1 to n-1 indicator variable for the i\textsuperscript{th} occupation in n groups of occupation based on the categorization in the Hong Kong census

NEWINDUSTRY( i ), where i = 1 to n-1 indicator variable for the i\textsuperscript{th} industry in n groups of industry based on the categorization in the Hong Kong census
Probability of Reemployment

The analysis shifted to explore what determined the possibility of reemployment within six months after completion of retraining. Apart from a simple ratio analysis and the comparison of results of retraining at large in Hong Kong, the factors that determined re-employment were explored. The results are important for evaluation purposes, no matter what the debates of master policy are, or at what specific program level. The technique of logistic regression was used to facilitate the analysis. Logistic regression is reliable in this case since the chance of re-employment is a clearly defined dependent variable and the probability is counted on the basis of a true dichotomy. The logistic regression method was used here to estimate the probability of the occurrence of an event for a dichotomous variable. In this case, the dependent variable of REEMPLOY was a dichotomy that had only two values, 0 for unemployed and 1 for reemployed. While the predicted value could be interpreted as probability by the multiple regression method, the logistic regression technique could overcome this constraint.

The probability of getting reemployment was analyzed by logistic regression of the hypothesized equation predicting reemployment.
EEMPLOY = SCH + ADED + EXP + AGE + FAMINCOME + ADEDLEVEL +
ADEDTYPE + ADEDCON + WAIT + SEX + SECTOR(i) \[i = 1 \text{ to } 3\] + STAYHK +
OCCUP( i ) \[i = 1 \text{ to } n-1\] + INDUSTRY( i ) \[i = 1 \text{ to } n-1\]

In addition, it was important to explore how well the model used for logistic regression
would fit the data. In order to fully explain the relationships between dependent and
independent variables, a path analytical model was set up to display important structural
relationships.

Path Model of Reemployment Earnings Determinants

The predictive power of some variables on reemployment and earnings was further explored
by path analysis based on a model built around and justified by the theories, conceptions and
approaches of measuring human capital investment (Schultz, 1961; Becker, 1964). The
intention was to formulate a more vigorous framework for the examination of direct, indirect
and total effects on each dependent and independent variable. Although the multiple
regression models used in the previous sections were specified and based on the theoretical
framework of human capital investment, the earnings functions were by definition additive
and did not permit any relational specification of variables. The path analysis therefore was
able to strengthen the understanding of direct and indirect effects among the variables.

In order to examine whether the data would provide support for the effect of education and
training for reemployment and earnings, a path analytic model testing the direct and indirect
relationships between variables was cautiously analyzed in terms of the goodness-of-fit.
The Specified Model is depicted in Figure 3.
The path analytic model was specified a priori on the basis of the theoretical framework suggested by seminal examples (Figure 3). While the variables were explained by the structural relationships among them, the model was regarded as a structural equation model.

To conclude the above discussions on the use of different statistical techniques, one final point must be made about causation. The explanatory power of causal relationships between dependent and independent variables should not be taken for granted. Schumacker and Lomax (1996, p.39), point out that “A specified model might actually establish causal relationships among the variables when: 1) temporal ordering of variables exists; 2) co-
variation or correlation is present among variables; 3) other causes are controlled for and; 4) variables are measured on at least an interval level.” Obviously, a model that is tested over time, with certain variables manipulated to assess the change in other variables, more closely approaches their idea of causation. The reservation of establishing causal relationships among variables and recognizing the effects of earnings and reemployment was noted in the discussions of limitations of the present study.

**Interpretation of Stakeholders’ Views of Programs**

The design of the present study also focused on an interpretation of the individual participant views of the programs. The views of individual workers and other stakeholders helped broaden the scope of the issues being addressed. I also thought that this might provide valuable insights into the rate of returns analysis and identify gaps in understanding about the impact of adult education and retraining. The purpose of adopting this approach was to enable a reframing of important issues and the posing of new questions that would enrich policy discussions.

Compared with the rate of returns analysis with respect to the flow of human capital investment over different stages of lives, the individual perspective would be more diverse (Figure 4).

There were at least two key areas of interest: (1) the existence of other “non-market” outcomes in addition to economic returns and, (2) the change in learning culture embedded in a knowledge society. Besides finding reemployment within a short period of time, individual workers may also look for non-economic outcomes such as better social
relationships or personal development. To what extent the changing roles of government and employers affected the learning culture of today’s knowledge society also became a concern for workers trying to improve their competitiveness.

**Figure 4: Flow of human capital investment extended to non-economic outcomes**

Interviews

In November 1999, shortly after the returns of completed questionnaires, retraining centres were asked to help arrange interviews with survey participants, administrators, and potential employers. From this process, 25 trainees/course participants, 12 employers, 4 placement officers, and 4 centre administrators volunteered to participate in interviews (Table 6).
Interview questions were pilot tested in group discussions at two of the centres with individuals currently enrolled in the retraining program but who would not be participating in the study. The purpose was to obtain feedback from stakeholders that would help with the construction of the final range of questions. A total of 46 course participants, 6 placement officers, and 9 administrators cooperated in the pilot testing. Subsequently, a total of 37 individual interviews and 1 focus group were set up with the study volunteers. At the request of participants, 10 individual interviews were carried out face-to-face and 27 were conducted by telephone.

Table 6: Interviewees

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Focus group</th>
<th>Individual Interviews (face to face)</th>
<th>Individual Interviews (telephone)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employers</td>
<td>/</td>
<td>5</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Trainees/Course Participants</td>
<td>/</td>
<td>5</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Placement Officers</td>
<td>4</td>
<td>/</td>
<td>/</td>
<td>4</td>
</tr>
<tr>
<td>Centre Administrators</td>
<td>4</td>
<td>/</td>
<td>/</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>10</td>
<td>27</td>
<td>45</td>
</tr>
</tbody>
</table>

Areas of retraining of the course participants ranged from property management, office assistant, customer service assistant, building supervisor, domestic helper, to basic clerical training courses. Of the 25 volunteers, five individuals had enrolled in other adult education courses to take further training in General English and Commercial Knowledge.

The twelve employers invited for individual interviews were selected on the basis that they had maintained frequent contact with the retraining centres. Some had hired ERP trainees and some had not. They represent 4 large firms (with more than 500 employees) and 8 small and medium-sized firms (with fewer than 500 employees). The nature of the businesses
represented included information technology, fast food restaurant, printing, real estate, wine merchant, travel agency, banking, charity, auditing and accounts. All ERP centre administrators were invited to participate, but administrators from only 9 retraining centres agreed to participate. There was a similar result with the placement officers, with representatives from 6 centres responding positively to the invitation. At the time scheduled for the focus group, 4 administrators and 4 placement officers were able to participate.

Individual interviews were conducted at times that met the schedules or the preference of individual participants. Interviews were guided by a number of core questions relevant to the individuals or groups concerned and, which attempted to elicit stakeholder perspectives on retraining, employment, and lifelong learning in the knowledge society. Separate questions were constructed for displaced workers (Appendix 4), administrators (Appendix 5), placement officers (Appendix 6), and employers (Appendix 7). I drew on five basic principles put forth by Fowler (1995, p.4) when setting questions to obtain answers that could be easily categorized and measured. I attempted to ensure that: (1) questions could be consistently understood; (2) questions were consistently administered or communicated to respondents; (3) acknowledgment of what constitutes an adequate answer was consistently communicated; (4) all respondents had access to the information needed to answer the question accurately and; (5) respondents were willing to provide the answer called for in the question. Participant responses were subsequently coded and put into meaningful numeric categories.

Interview questions were broad in nature and open-ended. I agree with Fowler (1995, p. 177-178) that there are a number of reasons why the use of open-ended questions are appropriate for this type of study: (1) the range of possible answers greatly exceeds what
reasonably could be provided by a multiple choice questionnaire; (2) some questions are better answered in a narrative form because the response cannot be reduced to a few words; (3) when the reasoning behind a conclusion, a behaviour, or a preference is of interest, the best way to learn about it is to base it on the respondent's own words; (4) the diversity of possible answers and the potential complexity of some scenarios make a series of fixed response questions artificial and cumbersome. The best approach seemed to be to begin by asking respondents to explain in their own words how they came to be in their particular situation.

Conducting the Interviews

A difficulty arose during the interview phase of the study when attempting to fix the schedule for participant interviews. As the interviewees were all working adults and a majority of them had a hectic schedule, it took quite a while to make the contacts and sort out the interview schedule. Arrangements for interviews had to be particularly tactful so as not to appear too pressing. Retraining centres were helpful in facilitating face-to-face interviews, often providing rooms for the purpose.

The interviews were conducted in a friendly, yet professional manner using standard interview techniques: (1) participants were all asked the same questions, (2) if the respondent's answer to the initial question was not complete, subsequent questions were used to probe for clarification and elaboration, (3) interviews were tape recorded to provide an audio record of what the respondent said, (4) the interviewer maintained a neutral, nonjudgmental stance with respect to the substance of answers, and in the occasional case
where interviewees expressed discomfort with having the interview tape recorded, the researcher took extensive notes, and regularly asked for clarification of what was said.

Setting up focus group interviews takes extra time and effort, but it is believed that the best procedure for obtaining people's opinions and feelings is through a structured, interactive group conversation in which information is solicited by the moderator (Lederman, 1990). I originally intended to conduct a number of focus groups as part of data collection. However, due to time constraints and the difficulty in arranging the groups, I decided that the study would be better served by conducting larger group discussions using classes of participants from two of the centres (n=30, and n=32). This provided an opportunity to involve the groups in discussion about the research and have them respond to questions and issues about retraining programs. This proved advantageous. The discussions were led by the instructor from the centre and the researcher, who provided a brief overview of the research before opening the discussion. Members of these two discussion groups participated actively in the discussions, and we were able to obtain a range of opinions from participants about specific issues through encouraging them to express different points of view with the opportunity to clarify, extend, and provide examples.

Following the large group discussions, one focus group, comprised of four centre administrators and four placement officers, was conducted to discuss the process of retraining and clarify the role of the centres in assisting displaced workers find reemployment. The open exchange and different perspectives that were expressed by this group helped strengthen present convictions about the process of retraining. The focus group was also interested in the role of retraining centres in relation to the labour market.
Limitations

The study had certain limitations related to timing, and sample design. In regards to timing, the study began in 1999 at approximately the same time that the Asian currencies crisis struck Hong Kong, causing the economy to undergo unprecedented changes. The needs of displaced workers for adult education and retraining during that period of time were not merely related to the adjustment of labour market changes but also reflected the overall reduction in wealth. The unemployment rate reached a record high. There may be some reflection of this crisis in the individual views on job displacement or reemployment performance due to the tensions and pressures of the time.

Second, the sample of displaced workers in this study might be considered to be biased to a particular type of worker. While the participants were all facing changes in the world of work, some were simply not prepared to participate in research of this kind. The group who agreed to participate in this study represented those who assumed that adult education and retraining might help them in one way or another. Results indicated that they tended to associate earnings premiums, and possibilities of reemployment to learning through adult education and retraining. Although there was no selection bias in the sampling procedure, the participants might not represent the entire group of displaced workers in Hong Kong. The findings and policy implications should therefore be interpreted against this background.

Third, the causation suggested in the analysis must be interpreted with caution. Despite adherence to appropriate statistical techniques, there might be competing explanations to the effects of adult education and retraining. Also, the sample of displaced workers that participated in this study was a specific group. Their characteristics might differ from an
“ordinary” group of adult learners who came from all walks of life. This homogeneity confirmed that the policy implications illustrated in the study should explain adult education and training for reemployment purpose and not be over-elaborated to apply to an analysis of the sector in general.

Fourth, the present study adopted an instrumental and pragmatic view of adult education and retraining and did not take into account emerging critical perspectives on retraining. According to Herschbach (1994) and Lakes (1994), critical perspectives are necessary to allow individuals to recognize the importance of constructively defining their work lives. The shaping of a critical perspective requires worker reflexivity about the refashioning of work. The process of retraining should not be directly related to the task of imparting static vocational skills that assist workers to become more technically competent, but should help workers develop a critical way of thinking and learning for work.

Summary

In this chapter, the research design and data collection methods were described, and the development and testing of data collecting instruments were detailed. A profile of the displaced workers participating in the study was constructed. The process of data analysis consisted of investigating the rates of returns to retraining and exploring stakeholders’ views of programs of adult education and retraining for displaced workers. Two complementary approaches helped to broaden the scope of the study. First, the research procedure analyzed the effects of policy variables represented by human capital investment and labour market conditions and depicted structural relationships among them. Next, participant views were
investigated using group discussions and individual interviews to obtain individual perspectives of displaced workers.

In the next chapter I present the analysis of earnings of displaced workers, and explore the key variables, framework, and specification of a path model.
In this chapter, I present the results of the rate of returns analysis. I begin by investigating the earnings of displaced workers before retraining and after reemployment, and determine the probability of reemployment. The specified path model is examined next, to provide an overall framework of how education and training can structurally relate to earnings of displaced workers. Finally, findings of the analysis are discussed that shed light on issues related to economic efficiency and equity.

To reiterate, the participants in this study were participants of the Employees Retraining Program in Hong Kong. During the period from September, 1998 to March, 1999, a total of 521 displaced workers who were currently undergoing, or had recently undergone training in one of the 22 study sites agreed to participate in this study by completing the survey questionnaire. The results presented below represent the 446 respondents who completed and returned questionnaires that were usable in the study.

**Earnings of Displaced Workers before Retraining**

The earnings of displaced workers are analyzed by the earnings function (1) listed below. A correlation matrix between the key variables of formal educational attainment is also analyzed to provide a better understanding of the statistical relationships of these predicting variables (Appendix 12). Using multiple linear regressions, the change in earnings is
explained by independent variables representing the human capital investment of workers, socioeconomic background, job nature, and employers' characteristics respectively.

\[ \text{Log EARN} = \text{SCH} + \text{ADED} + \text{EXP} + \text{AGE} + \text{SEX} + \text{FAMINCOME} + \]
\[ \text{HOUSING} + \text{STAYHK} + \text{SECTOR}(i)_{i=1, 3} + \text{INDUSTRY}(i)_{i=1, n-1} + \text{JOBSTATUS} \]

\[ \text{----------earnings function (1)} \]

The predicting variables representing human capital investment include level of formal schooling attained, working experience, and adult continuing education. The predicting variables representing socioeconomic background include gender, type of housing, monthly family income, and whether respondents are new immigrants. Predicting variables representing the job and labour market are whether respondents work full-time or not, the sector and industry of their employers, and the firm size.

A final review of the variable of firm size indicated that some respondents included non-full-time staff, while others did not. To eliminate measurement errors and avoid ambiguity in explanation, the variables were removed from the regression at this round. The effects of various predicting variables are presented in Table 7.

The human capital investment variables that generate statistically significant earnings effects are primary education, secondary education to standard five, and work experience. Workers having primary school standard earn 12.5% less than those with no formal schooling. Workers having secondary five standard earned 0.5% less than those with no formal schooling. Contradicting human capital theories, the negative earnings effects for the group
of displaced workers seem to indicate that there were no economic returns to their investment in formal education. Two possible explanations suggest themselves. One relates to the quality of initial formal schooling during earlier stages of life. The additional years of schooling do not appear to contribute to an increase in knowledge and skills or improvement of productivity. The other is that relatively low educational attainment is of little interest to employers who look for credentials as a labour market signal.

On the other hand, the returns to adult education are significant. Participants in adult education earn 9.3% more than non-participants, suggesting that it is adult education that counts for the wage premium. No matter what level of formal schooling is attained, participation in adult education can help improve the wage situation. With respect to the impact of other forms of learning in the workplace, each year of work experience accounts for a 6.6% increase in earnings. In general, for this group of displaced workers, results do not indicate any economic returns to human capital investment in the initial stages of education but confirm the earnings premium for those who participate in adult education and training and learning at work.

Compared to the returns to human capital investment, the socioeconomic variables demonstrate stronger effects in relation to housing type and family income. Workers living in a self-owned property—a possible indication of their general wealth—earn 21.4% more than those in rented housing. The family income level of workers also accounts for 48.2% increase in earnings. Male workers earn 30.3% more than female workers. The results reflect the gender bias of job requirements and the remuneration system in Hong Kong.
Labour market variables display very limited results. Sectoral and organizational differences do not demonstrate statistically significant effects. Only two industries (transportation and finance) demonstrate earnings premiums (13.1%, and 13.2% respectively). The full-time variable accounts for a 17.2% increase in earnings over those working on a non full-time basis. There is no standard difference of working hours between full-time and non full-time jobs. As a result, it remains unclear to what extent this earning effect relates to the difference of working hours.

Table 7: Earnings among Displaced Workers

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Log Monthly Earnings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.303</td>
<td>8.521</td>
<td>.000***</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.028</td>
<td>.755</td>
<td>.450</td>
<td></td>
</tr>
<tr>
<td>Less than 6 years' schooling (0=No formal education)</td>
<td>-.092</td>
<td>-2.109</td>
<td>.036*</td>
<td></td>
</tr>
<tr>
<td>Primary education (0=No formal education)</td>
<td>-.125</td>
<td>-2.907</td>
<td>.004**</td>
<td></td>
</tr>
<tr>
<td>Secondary 3 (0=No formal education)</td>
<td>-.084</td>
<td>-1.977</td>
<td>.049</td>
<td></td>
</tr>
<tr>
<td>Secondary 5 (0=No formal education)</td>
<td>.005</td>
<td>.123</td>
<td>.902</td>
<td></td>
</tr>
<tr>
<td>Schooling in HK</td>
<td>.023</td>
<td>.446</td>
<td>.656</td>
<td></td>
</tr>
<tr>
<td>Years of work experience</td>
<td>.066</td>
<td>1.833</td>
<td>.068</td>
<td></td>
</tr>
<tr>
<td>Housing type</td>
<td>.214</td>
<td>4.749</td>
<td>.000***</td>
<td></td>
</tr>
<tr>
<td>Monthly family income</td>
<td>.482</td>
<td>9.981</td>
<td>.000***</td>
<td></td>
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<tr>
<td>Job status</td>
<td>.172</td>
<td>4.827</td>
<td>.000***</td>
<td></td>
</tr>
<tr>
<td>Public sector</td>
<td>-.016</td>
<td>-.391</td>
<td>.696</td>
<td></td>
</tr>
<tr>
<td>Non-profit-making organization</td>
<td>.030</td>
<td>.707</td>
<td>.480</td>
<td></td>
</tr>
<tr>
<td>Private sector</td>
<td>.000</td>
<td>-.004</td>
<td>.997</td>
<td></td>
</tr>
<tr>
<td>Participation in adult education</td>
<td>.093</td>
<td>2.676</td>
<td>.008**</td>
<td></td>
</tr>
<tr>
<td>Stay in HK for at least 7 years</td>
<td>.033</td>
<td>.704</td>
<td>.482</td>
<td></td>
</tr>
<tr>
<td>Primary production</td>
<td>-.016</td>
<td>-.369</td>
<td>.712</td>
<td></td>
</tr>
<tr>
<td>Textile</td>
<td>-.019</td>
<td>-.417</td>
<td>.677</td>
<td></td>
</tr>
<tr>
<td>Other manufacturing</td>
<td>.017</td>
<td>.405</td>
<td>.686</td>
<td></td>
</tr>
<tr>
<td>Import/export</td>
<td>.048</td>
<td>1.225</td>
<td>.221</td>
<td></td>
</tr>
<tr>
<td>Wholesale/retail</td>
<td>.009</td>
<td>.205</td>
<td>.838</td>
<td></td>
</tr>
<tr>
<td>Hotel/catering</td>
<td>.028</td>
<td>.652</td>
<td>.515</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>.131</td>
<td>2.900</td>
<td>.004**</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>.132</td>
<td>3.568</td>
<td>.000***</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>-.012</td>
<td>-.319</td>
<td>.750</td>
<td></td>
</tr>
</tbody>
</table>

Adj. R²: 0.56  no. of cases: 446  *P<0.05  ** P<0.01  *** P<0.001

Earnings among Displaced Workers after Re-employment

In the previous earnings function, the effects of various predicting variables representing human capital investment, socioeconomic background, and the job market were examined for the entire group of displaced workers. Among the 446 workers participating in this study, 223 had been able to find employment within six months after completion of retraining. The placement rate was 50%. In order to explore the impact of retraining for these 223 workers re-entering the job market, the earnings among trainees at the beginning of reemployment were analyzed by the three earnings functions (2-4) listed below.

Prediction by Variables before Job Displacement

By multiple linear regression of the earnings function (2), the change in new earnings was first explained by the independent variables representing respectively the human capital investment of workers, their socioeconomic background, nature of the job, and employers' characteristics. The predicting variables are those “background variables” describing their situation before job displacement. The intention is to find out to what extent earlier-stage predicting variables could pass their impact onto the earnings of respondents in their first reemployment position after training.
\[
\text{Log NEWEARN} = \text{SCH} + \text{ADED} + \text{EXP} + \text{AGE} + \text{SEX} + \text{FAMINCOME} + \text{HOUSING} + \\
\text{STAYHK} + \text{SECTOR}(i)_{i=1}^{3} + \text{INDUSTRY}(i)_{i=1}^{n-1} + \text{OCCUP}(i)_{i=1}^{n-1} + \\
\text{JOBSTATUS} + \text{FIRMSIZE}
\]

------------earnings function (2)

The effects of various predicting variables are presented in Table 8.

The ability of human capital variables to explain the earnings of workers in their first period of reemployment is limited. Neither formal schooling nor participation in adult education accounts for the earnings for this group of workers.

On the other hand, the predicting variable of work experience accounts for a 23.1% increase in earnings. More experienced workers get their premium on the first job of reemployment. At the same time, full-time workers earn 21.5% more than part-time workers, if other things are controlled.

For the socioeconomic variables, the higher family income level does not account for any premium. Male workers earn 20.8% more than females. In terms of age, each year accounts for 15.1% loss in wage. Sex and age discrimination still existed in the first job of reemployment.
Table 8: Earnings among reemployed trainees explained by variable before job displacement

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable: Log New Monthly Earnings</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.208</td>
<td>3.393</td>
<td>.001***</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.151</td>
<td>-2.574</td>
<td>.011*</td>
<td></td>
</tr>
<tr>
<td>Less than 6 years' schooling</td>
<td>-.049</td>
<td>-.268</td>
<td>.789</td>
<td></td>
</tr>
<tr>
<td>Primary education</td>
<td>-.075</td>
<td>-.359</td>
<td>.720</td>
<td></td>
</tr>
<tr>
<td>Junior secondary</td>
<td>.098</td>
<td>.463</td>
<td>.644</td>
<td></td>
</tr>
<tr>
<td>Secondary 5</td>
<td>.180</td>
<td>.871</td>
<td>.385</td>
<td></td>
</tr>
<tr>
<td>Schooling in HK</td>
<td>.036</td>
<td>.374</td>
<td>.709</td>
<td></td>
</tr>
<tr>
<td>Years of work experience</td>
<td>.231</td>
<td>4.137</td>
<td>.000***</td>
<td></td>
</tr>
<tr>
<td>Housing type</td>
<td>-.032</td>
<td>-.431</td>
<td>.667</td>
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</tr>
<tr>
<td>Monthly family income</td>
<td>.009</td>
<td>.101</td>
<td>.920</td>
<td></td>
</tr>
<tr>
<td>Primary production</td>
<td>-.118</td>
<td>-1.506</td>
<td>.134</td>
<td></td>
</tr>
<tr>
<td>Textile</td>
<td>-.130</td>
<td>-1.513</td>
<td>.132</td>
<td></td>
</tr>
<tr>
<td>Other manufacturing</td>
<td>.007</td>
<td>.096</td>
<td>.923</td>
<td></td>
</tr>
<tr>
<td>Import/export</td>
<td>.084</td>
<td>1.250</td>
<td>.213</td>
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</tr>
<tr>
<td>Wholesale/retail</td>
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<td>-.532</td>
<td>.595</td>
<td></td>
</tr>
<tr>
<td>Hotel/catering</td>
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<td>.159</td>
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</tr>
<tr>
<td>Transportation</td>
<td>-.065</td>
<td>-.763</td>
<td>.446</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>-.057</td>
<td>-.946</td>
<td>.345</td>
<td></td>
</tr>
<tr>
<td>Community/social service</td>
<td>.002</td>
<td>.031</td>
<td>.976</td>
<td></td>
</tr>
<tr>
<td>Professional/technical</td>
<td>.038</td>
<td>.578</td>
<td>.564</td>
<td></td>
</tr>
<tr>
<td>Executive/management</td>
<td>.073</td>
<td>.730</td>
<td>.466</td>
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<td>Clerical</td>
<td>.027</td>
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<td>.732</td>
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<td>Service</td>
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<td>-.351</td>
<td>.726</td>
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<td>Sales</td>
<td>-.047</td>
<td>-.582</td>
<td>.561</td>
<td></td>
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<tr>
<td>Machine operator</td>
<td>.060</td>
<td>.723</td>
<td>.471</td>
<td></td>
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<td>Job status</td>
<td>.215</td>
<td>3.125</td>
<td>.002**</td>
<td></td>
</tr>
<tr>
<td>Monthly income</td>
<td>.275</td>
<td>3.277</td>
<td>.001***</td>
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<td>Public sector</td>
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<tr>
<td>Non-profit-making organization</td>
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<td>.164</td>
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<tr>
<td>Private sector</td>
<td>.145</td>
<td>1.518</td>
<td>.131</td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
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<td>-.661</td>
<td>.509</td>
<td></td>
</tr>
<tr>
<td>Participation in adult education</td>
<td>.012</td>
<td>.201</td>
<td>.841</td>
<td></td>
</tr>
<tr>
<td>Stay in HK for at least 7 years</td>
<td>-.055</td>
<td>-.632</td>
<td>.528</td>
<td></td>
</tr>
</tbody>
</table>

Adj. $R^2$: 0.49  no. of cases: 223

*P<0.05  ** P<0.01  *** P<0.001
Prediction by Variables after Re-employment

By multiple linear regression of the earnings function (3), the change in new earnings is explained by independent variables representing respectively the human capital investment, socioeconomic background, job nature and employers' characteristics. The prediction is based on the variables describing the current situation after reemployment.

A set of new predicting variables are also included representing the level and type of courses offered by the retraining provision, availability of job search help, the training subsidy from employers, taking of continuing education after completion of retraining, and the matching of the field of work and retraining.

\[ \text{Log \ NEWEARN} = \text{SCH} + \text{ADED} + \text{EXP} + \text{AGE} + \text{SEX} + \text{FAMINC} + \text{HOUSING} + \text{ADEDLEVEL} + \text{ADEDTYPE} + \text{ADEDCON} + \text{MATCH} + \text{WAIT} + \text{JOBPLACEMENT}(i)_{i=1 \to 3} + \text{PEER} + \text{SECTOR}(i)_{i=1 \to 4} + \text{STAYHK} + \text{NEWOCCUP}(i)_{i=1 \to n} + \text{NEWINDUSTRY}(i)_{i=1 \to n-1} + \text{NEWJOBSTATUS} + \text{NEWFIRMSIZE} \]

-------------earnings function (3)

The effects of various predicting variables are presented as follows (Table 9).
Table 9: Earnings among reemployed trainees explained by variable after reemployment

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable: Log New Monthly Earnings Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
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<td>3.140</td>
<td>.002**</td>
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<tr>
<td>Age</td>
<td>-.015</td>
<td>-.355</td>
<td>.723</td>
</tr>
<tr>
<td>Less than 6 years' schooling</td>
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<td>.248</td>
</tr>
<tr>
<td>Primary education</td>
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<td>.891</td>
<td>.374</td>
</tr>
<tr>
<td>Junior secondary</td>
<td>.222</td>
<td>1.383</td>
<td>.168</td>
</tr>
<tr>
<td>Secondary 5</td>
<td>.194</td>
<td>1.239</td>
<td>.217</td>
</tr>
<tr>
<td>Schooling in HK</td>
<td>.084</td>
<td>1.246</td>
<td>.214</td>
</tr>
<tr>
<td>Years of work experience</td>
<td>.117</td>
<td>2.867</td>
<td>.005**</td>
</tr>
<tr>
<td>Housing type</td>
<td>-.140</td>
<td>-2.333</td>
<td>.021*</td>
</tr>
<tr>
<td>Monthly family income</td>
<td>.158</td>
<td>2.564</td>
<td>.011*</td>
</tr>
<tr>
<td>Participation in adult education</td>
<td>-.017</td>
<td>-.390</td>
<td>.697</td>
</tr>
<tr>
<td>Stay in HK for at least 7 years</td>
<td>-.146</td>
<td>-2.236</td>
<td>.027*</td>
</tr>
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<td>Unemployment period</td>
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<td>-.829</td>
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<td>Peer support</td>
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<td>Retraining type</td>
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<tr>
<td>Level of retraining</td>
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<td>.730</td>
</tr>
<tr>
<td>Access retraining by himself/herself</td>
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<td>1.142</td>
<td>.255</td>
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<td>Training body</td>
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<td>.621</td>
<td>.535</td>
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<tr>
<td>Union</td>
<td>.105</td>
<td>.820</td>
<td>.413</td>
</tr>
<tr>
<td>Labour Department</td>
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<td>.901</td>
<td>.369</td>
</tr>
<tr>
<td>Match</td>
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<td>-.454</td>
<td>.650</td>
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<tr>
<td>New job status</td>
<td>.526</td>
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<td>New firm size</td>
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<td>Continuing education</td>
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<td>.730</td>
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<tr>
<td>Training subsidy</td>
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<td>2.737</td>
<td>.007**</td>
</tr>
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<td>Primary production</td>
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</tr>
<tr>
<td>Textile</td>
<td>-.020</td>
<td>-.266</td>
<td>.790</td>
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<tr>
<td>Other manufacturing</td>
<td>-.214</td>
<td>-1.973</td>
<td>.050*</td>
</tr>
<tr>
<td>Import/export</td>
<td>-.092</td>
<td>-1.461</td>
<td>.146</td>
</tr>
<tr>
<td>Wholesale/retail</td>
<td>.048</td>
<td>.496</td>
<td>.621</td>
</tr>
<tr>
<td>Hotel/catering</td>
<td>-.070</td>
<td>-.898</td>
<td>.370</td>
</tr>
<tr>
<td>Transportation</td>
<td>.030</td>
<td>.614</td>
<td>.540</td>
</tr>
<tr>
<td>Finance</td>
<td>.059</td>
<td>.621</td>
<td>.536</td>
</tr>
<tr>
<td>Community</td>
<td>-.076</td>
<td>-.736</td>
<td>.463</td>
</tr>
<tr>
<td>Professional/technical</td>
<td>.049</td>
<td>.914</td>
<td>.362</td>
</tr>
<tr>
<td>Executive/management</td>
<td>-.146</td>
<td>-1.941</td>
<td>.054</td>
</tr>
<tr>
<td>Clerical</td>
<td>.109</td>
<td>1.786</td>
<td>.076</td>
</tr>
<tr>
<td>Service</td>
<td>-.067</td>
<td>-.880</td>
<td>.380</td>
</tr>
<tr>
<td>Sales</td>
<td>-.020</td>
<td>-.293</td>
<td>.770</td>
</tr>
<tr>
<td>Machine</td>
<td>-.041</td>
<td>-.854</td>
<td>.394</td>
</tr>
</tbody>
</table>

Adj. $R^2$: 0.738  
no. of cases: 223

*P<0.05  ** P<0.01  *** P<0.001

There are no significant earnings effects on major human capital variables, such as level of formal schooling, adult education and training, and retraining after job displacement. The
only two exceptions are for experienced workers who can have 11.7% earnings premiums per year and for those receiving a training subsidy from employers who can have 20.9% premiums.

In terms of the demographic and socioeconomic condition, those living in private housing earn 14% more than those in public housing. New arrivals earn 14.6% more than those living in Hong Kong for at least seven years. One possible reason for the earnings premiums of new arrivals is that most of them were from China where there is no discrimination against race or ethnicity.

The job market variable indicates that full-time workers earn 52.6% more than part-time workers. Comparing the difference of earnings for full-timers in the analysis of their last job before displacement, for 17.2%, the returns to full-time employment improve.

The industry of ‘other manufacturing’ is a declining industry in Hong Kong. Workers reemployed by this industry earn 21.4% less.

The regressions of the earnings function (2) and (3), display quite consistent prediction. Nevertheless, the analysis of the latter earnings function has a higher $R^2$ of 0.738. In order to explore a more complete model, the regression of the earnings function (4) is explained in the next section.
Prediction by Variables before Job Displacement and after Re-employment

By multiple linear regression of the earnings function (4), the change in new earnings is explained by independent variables before job displacement and after reemployment. The prediction is based on variables describing both the previous and current situation.

\[ \log \text{NEWearn} = \text{SCH} + \text{ADED} + \text{EXP} + \text{AGE} + \text{SEX} + \text{FAMILYincome} + \text{HOUSING} + \text{STAYHK} + \text{SECTOR}(i)_{i=1,3} + \text{INDUSTRY}(i)_{i=1,10} \]

\[ + \text{OCCUP}(i)_{i=1,10} + \text{JOBSTATUS} + \text{FIRMSIZE} + \text{ADEDLEVEL} + \text{ADEDTYPE} + \text{ADEDCON} + \text{MATCH} + \text{WAIT} + \text{JOBPLACEMENT}(i)_{i=1,4} + \text{PEER} + \text{NEWOCCUP}(i)_{i=1,10} \]

\[ + \text{NEWINDUSTRY}(i)_{i=1,10} + \text{NEWJOBSTATUS} + \text{NEWFIRMSIZE} \]

--------- earnings function (4)

The effects of various predicting variables are presented in Table 10. The ability to explain the earnings of workers at their first job of reemployment by the human capital variables is limited. Formal schooling and adult education prior to retraining do not account for earnings. The provision of retraining also does not explain any earnings premium. Neither the nature nor level of training accounts for the earnings. The only variable with significant earnings effect is the training subsidy. Trainees with a training subsidy to attend continuing education earn 23.3% more than others.

The effect of work experience still prevails. The earnings premium is 12% each year. The variables of job market also display some effects. Those who previously worked in the non-profit sector show a premium of 18.3% over those in other sectors. It is possible that they are able to maintain an effective channel for job market information and can access good
jobs with help from connections previously established in the non-profit sector. The variable of job market indicates that full-time workers earn 53.3% more than part-time workers. Comparing with the difference of earning 17.2% more for full-timers in the analysis of their last job before displacement, the returns to full-time employment improve.

As far as the bias of sex and age is concerned, the negative effect of age is not significant. However, the gender bias still exists. Women workers earn 14.7% less than their male counterparts.

Table 10: Earnings among reemployed trainees explained by variable before job displacement and after reemployment

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable: Log New Monthly Earnings</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.147</td>
<td>2.800</td>
<td>.006**</td>
</tr>
<tr>
<td>Age</td>
<td>-.051</td>
<td>-1.072</td>
<td>.285</td>
</tr>
<tr>
<td>less than 6 years' schooling</td>
<td>.179</td>
<td>1.177</td>
<td>.241</td>
</tr>
<tr>
<td>Primary education</td>
<td>.112</td>
<td>.651</td>
<td>.516</td>
</tr>
<tr>
<td>Junior secondary</td>
<td>.184</td>
<td>1.071</td>
<td>.286</td>
</tr>
<tr>
<td>Secondary 5</td>
<td>.227</td>
<td>1.361</td>
<td>.175</td>
</tr>
<tr>
<td>Schooling in HK</td>
<td>.111</td>
<td>1.399</td>
<td>.164</td>
</tr>
<tr>
<td>years of work experience</td>
<td>.120</td>
<td>2.486</td>
<td>.014*</td>
</tr>
<tr>
<td>Housing type</td>
<td>-.117</td>
<td>-1.823</td>
<td>.070</td>
</tr>
<tr>
<td>Monthly family income</td>
<td>.161</td>
<td>2.346</td>
<td>.020*</td>
</tr>
<tr>
<td>Primary production</td>
<td>-.079</td>
<td>-1.279</td>
<td>.203</td>
</tr>
<tr>
<td>Textile</td>
<td>.038</td>
<td>.542</td>
<td>.588</td>
</tr>
<tr>
<td>other manufacturing</td>
<td>.029</td>
<td>.523</td>
<td>.601</td>
</tr>
<tr>
<td>Import/export</td>
<td>-.017</td>
<td>-.287</td>
<td>.775</td>
</tr>
<tr>
<td>Wholesale/retail</td>
<td>-.023</td>
<td>-.296</td>
<td>.768</td>
</tr>
<tr>
<td>hotel/catering</td>
<td>-.032</td>
<td>-.518</td>
<td>.605</td>
</tr>
<tr>
<td>Transportation</td>
<td>-.027</td>
<td>-.394</td>
<td>.694</td>
</tr>
<tr>
<td>Finance</td>
<td>-.050</td>
<td>-1.034</td>
<td>.303</td>
</tr>
<tr>
<td>Community/social service</td>
<td>.041</td>
<td>.822</td>
<td>.412</td>
</tr>
<tr>
<td>Category</td>
<td>Coefficient</td>
<td>Coefficient</td>
<td>Coefficient</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Professional/technical</td>
<td>.006</td>
<td>.118</td>
<td>.906</td>
</tr>
<tr>
<td>Executive/management</td>
<td>-.097</td>
<td>-9.79</td>
<td>.329</td>
</tr>
<tr>
<td>Clerical</td>
<td>.052</td>
<td>.782</td>
<td>.435</td>
</tr>
<tr>
<td>Service</td>
<td>-.025</td>
<td>-.326</td>
<td>.745</td>
</tr>
<tr>
<td>Sales</td>
<td>-.033</td>
<td>-.499</td>
<td>.619</td>
</tr>
<tr>
<td>Machine operator</td>
<td>.014</td>
<td>.219</td>
<td>.827</td>
</tr>
<tr>
<td>job status</td>
<td>.048</td>
<td>.779</td>
<td>.437</td>
</tr>
<tr>
<td>Public sector</td>
<td>.063</td>
<td>1.115</td>
<td>.267</td>
</tr>
<tr>
<td>Non-profit-making organization</td>
<td>.183</td>
<td>2.311</td>
<td>.022*</td>
</tr>
<tr>
<td>Private sector</td>
<td>.114</td>
<td>1.532</td>
<td>.128</td>
</tr>
<tr>
<td>Firm size</td>
<td>-.032</td>
<td>-.616</td>
<td>.539</td>
</tr>
<tr>
<td>Participation in adult education</td>
<td>.001</td>
<td>.022</td>
<td>.983</td>
</tr>
<tr>
<td>Stay in HK for at least 7 years</td>
<td>-.198</td>
<td>-2.633</td>
<td>.009**</td>
</tr>
<tr>
<td>Unemployment period</td>
<td>-.013</td>
<td>-.251</td>
<td>.802</td>
</tr>
<tr>
<td>Peer support</td>
<td>-.027</td>
<td>-.473</td>
<td>.637</td>
</tr>
<tr>
<td>Retraining type</td>
<td>.054</td>
<td>1.006</td>
<td>.316</td>
</tr>
<tr>
<td>Level of retraining</td>
<td>-.043</td>
<td>-.735</td>
<td>.464</td>
</tr>
<tr>
<td>Access to retraining by himself/herself</td>
<td>.232</td>
<td>1.038</td>
<td>.301</td>
</tr>
<tr>
<td>Training body</td>
<td>.141</td>
<td>.638</td>
<td>.524</td>
</tr>
<tr>
<td>Union</td>
<td>.074</td>
<td>.515</td>
<td>.608</td>
</tr>
<tr>
<td>Labour Department</td>
<td>.093</td>
<td>.818</td>
<td>.414</td>
</tr>
<tr>
<td>Match</td>
<td>-.019</td>
<td>-.342</td>
<td>.732</td>
</tr>
<tr>
<td>New job status</td>
<td>.533</td>
<td>10.142</td>
<td>.000***</td>
</tr>
<tr>
<td>New firm size</td>
<td>.021</td>
<td>.257</td>
<td>.797</td>
</tr>
<tr>
<td>Continuing education</td>
<td>.068</td>
<td>1.158</td>
<td>.249</td>
</tr>
<tr>
<td>Training subsidy</td>
<td>.233</td>
<td>2.198</td>
<td>.029*</td>
</tr>
<tr>
<td>Primary production</td>
<td>.001</td>
<td>.013</td>
<td>.990</td>
</tr>
<tr>
<td>Textile</td>
<td>-.024</td>
<td>-.296</td>
<td>.768</td>
</tr>
<tr>
<td>Other manufacturing</td>
<td>-.192</td>
<td>-1.662</td>
<td>.098</td>
</tr>
<tr>
<td>Import/export</td>
<td>-.079</td>
<td>-.183</td>
<td>.239</td>
</tr>
<tr>
<td>Wholesale/retail</td>
<td>.076</td>
<td>.718</td>
<td>.474</td>
</tr>
<tr>
<td>Hotel/catering</td>
<td>-.069</td>
<td>-.837</td>
<td>.404</td>
</tr>
<tr>
<td>Transportation</td>
<td>.010</td>
<td>.188</td>
<td>.851</td>
</tr>
<tr>
<td>Finance</td>
<td>.082</td>
<td>.802</td>
<td>.424</td>
</tr>
<tr>
<td>Community</td>
<td>-.073</td>
<td>-.654</td>
<td>.514</td>
</tr>
<tr>
<td>Professional/technical</td>
<td>.071</td>
<td>1.215</td>
<td>.226</td>
</tr>
<tr>
<td>Executive/management</td>
<td>-.092</td>
<td>-1.107</td>
<td>.270</td>
</tr>
<tr>
<td>Clerical</td>
<td>.086</td>
<td>1.333</td>
<td>.184</td>
</tr>
<tr>
<td>Service</td>
<td>-.039</td>
<td>-.483</td>
<td>.630</td>
</tr>
<tr>
<td>Sales</td>
<td>.006</td>
<td>.082</td>
<td>.935</td>
</tr>
</tbody>
</table>

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Probability of Re-employment

Apart from the analysis of earnings for the entire group and those who can get reemployment, the probability of finding reemployment among the group of 446 displaced workers is important to the policy consideration. The probability is analyzed by a logistic regression of the equation listed below. The chance of finding reemployment is explained by independent variables representing respectively the various types of human capital investment of workers before and after displacement, work history, effort to consult other job placement services using own resources, length of unemployment, family income, socioeconomic background, job nature, and employers’ characteristics.

\[
REEMPLOY = SCH + ADED + EXP + AGE + FAMINCOME + ADEDLEVEL + ADEDTYPE + ADEDCON + WAIT + SEX + SECTOR(i)_{i=1 to 3} + \text{STAYHK} + OCCUP(i)_{i=1 to n-1} + INDUSTRY(i)_{i=1 to n-1}
\]

The estimation process did not cover all the independent variables of the equation because the Log Likelihood decreased by less than .01% at iteration number 4. The estimation is limited to the variables of sex, different levels of education, schooling in Hong Kong, work experience, housing type and monthly family income, participation in adult education and unemployment. The results of the estimation are shown as follows (Table 11).
Compared to those with no formal schooling, workers with formal schooling demonstrate better chances of re-entering the job market. The standardized coefficients of 1.5965, 0.9288, and 1.8041 are reported statistically significant for the levels of less than six years, primary education, and secondary standard five respectively. However, more experienced workers may have greater difficulties in re-entering the job market. Each year of work experience will have a negative coefficient of .0516 for being reemployed. From the previous sections of analyses of earnings, the experienced workers have premiums of earnings on their last job before displacement or their first job after retraining. In this section, it shows that they have less probability to be reemployed. The unemployment period demonstrates that each month after retraining reports a positive coefficient of .1501 on finding reemployment.

Table 11: Probability of reemployment

<table>
<thead>
<tr>
<th>Variables</th>
<th>Standardized Coefficients Beta</th>
<th>S.E</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>-0.1237</td>
<td>0.2589</td>
<td>0.2285</td>
<td>1</td>
<td>0.6327</td>
<td>0.000</td>
</tr>
<tr>
<td>Age</td>
<td>0.0685</td>
<td>0.0773</td>
<td>0.7862</td>
<td>1</td>
<td>0.3752</td>
<td>0.000</td>
</tr>
<tr>
<td>Less than primary education</td>
<td>1.5965</td>
<td>0.4746</td>
<td>11.3172</td>
<td>1</td>
<td>0.0008</td>
<td>0.1230</td>
</tr>
<tr>
<td>Primary education</td>
<td>0.9288</td>
<td>0.3072</td>
<td>9.1430</td>
<td>1</td>
<td>0.0025</td>
<td>0.1077</td>
</tr>
<tr>
<td>Secondary 3</td>
<td>0.4787</td>
<td>0.2756</td>
<td>2.0177</td>
<td>1</td>
<td>0.0824</td>
<td>0.0407</td>
</tr>
<tr>
<td>Secondary 5</td>
<td>1.8041</td>
<td>0.5335</td>
<td>11.4338</td>
<td>1</td>
<td>0.0007</td>
<td>0.1238</td>
</tr>
<tr>
<td>Schooling in HK</td>
<td>0.1933</td>
<td>0.2791</td>
<td>0.4795</td>
<td>1</td>
<td>0.4887</td>
<td>0.0000</td>
</tr>
<tr>
<td>Years of work experience</td>
<td>-0.0516</td>
<td>0.0186</td>
<td>7.7205</td>
<td>1</td>
<td>0.0055</td>
<td>-0.0964</td>
</tr>
<tr>
<td>Housing type</td>
<td>-0.1685</td>
<td>0.2803</td>
<td>0.3613</td>
<td>1</td>
<td>0.5478</td>
<td>0.0000</td>
</tr>
<tr>
<td>Monthly family income</td>
<td>-2.6E-05</td>
<td>2.772E-05</td>
<td>.9058</td>
<td>1</td>
<td>0.3412</td>
<td>0.0000</td>
</tr>
<tr>
<td>Job status</td>
<td>0.3128</td>
<td>0.3127</td>
<td>1.0005</td>
<td>1</td>
<td>0.3172</td>
<td>0.0000</td>
</tr>
<tr>
<td>Participation in adult education</td>
<td>0.2156</td>
<td>0.2177</td>
<td>0.9810</td>
<td>1</td>
<td>0.3220</td>
<td>0.0000</td>
</tr>
<tr>
<td>Unemployment period</td>
<td>0.1501</td>
<td>0.0515</td>
<td>8.4909</td>
<td>1</td>
<td>0.0036</td>
<td>0.1027</td>
</tr>
</tbody>
</table>
The coefficient of logistic regression does not represent the probability of respective independent variables predicting the occurring of the dependent variable. The calculation of probability is shown below.

\[
Z = -1.1440 + 1.5965 \text{ (Less than primary)} + .9288 \text{ (Primary education)} + .4787 \text{ (Secondary 3)} + 1.8041 \text{ (Secondary 5)} - .0516 \text{ (Years of work experience)} + .1501 \text{ (Unemployment period)}
\]

Applying this to a displaced worker with less than six years of initial education, with ten years of work experience, and who has been unemployed for ten months, we find:

\[
Z = -1.1440 + 1.5965 \times 1 - .0516 \times 10 + .1501 \times 10 = 1.4375
\]

The probability of reemployment is then estimated to be

\[
\text{Prob (reemploy)} = \frac{1}{1 + e^{-1.4375}} = 0.8081
\]

The Chi-square of 62.322, with 13 degrees of freedom shows that the model does not fit the data very well. Some improvements to the model can be made based on the theoretical framework developed in Chapter 2. Therefore, the structural relationships and predicting power are further explored through a path analytical model.
Developing a Path Model of Re-employment Earnings Determinants and Structural Relationships

The analyses above indicates a differentiated extent of effects of the human capital variables, socioeconomic variables, and job market variables in relation to earnings and the probability of becoming reemployed. In order to examine whether data of this group of displaced workers provides support for the hypothesized effect of education and training for reemployment and earnings, a path analytic model is used to test the direct and indirect relationships between variables.

The independent variables include family income (X1), interacting term of family income and educational level (X2), and educational level (X3). The dependent variables are work experience (Y1), adult education and training (Y2), and reemployment earnings (Y3). This path model is a recursive system where the dependent variables depend only on independent variables and previous dependent variables. Figure 5 shows altogether there are eleven paths in the model and the relationships are specified as follows:

\[ Y_1 = X_2 \cdot X_3 \]
\[ Y_2 = X_2 \cdot X_3 \cdot Y_1 \]
\[ Y_3 = X_1 \cdot X_2 \cdot X_3 \cdot Y_1 \cdot Y_2 \]

In this model the variables are directly observed and the structured equations are analyzed by LISREL which estimates all the path coefficients.

The covariance matrix, depicted in Table 12, is used as the input file for the LISREL program. The LISREL estimates are first illustrated (Table 13) and the path coefficients presented (Figure 5). There are five paths not statistically significant and can therefore be

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dropped from the model. The paths are: (1) from the interacting term of family income and educational level to reemployment earnings; (2) from the interacting term to work experience; (3) from work experience to adult education and training; (4) from adult education and training to reemployment earnings; and (5) from family income to adult education and training. The other eight paths explain the relationship between the six independent and dependent variables.

Table 12: Covariance matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>Covariance Matrix:</th>
</tr>
</thead>
<tbody>
<tr>
<td>X3:</td>
<td>7.619</td>
</tr>
<tr>
<td>Y1:</td>
<td>-1.205</td>
</tr>
<tr>
<td>X1:</td>
<td>1.487</td>
</tr>
<tr>
<td>Y2:</td>
<td>63.872</td>
</tr>
<tr>
<td>Y3:</td>
<td>31.263</td>
</tr>
<tr>
<td>X2:</td>
<td>13.685</td>
</tr>
</tbody>
</table>

X3: initial formal education  
Y1: work experience  
X1: family income  
Y2: adult education and training  
Y3: earnings of reemployment  
X2: interacting term of initial formal education and training
## Table 13: LISREL estimates

**LISREL Estimates (Maximum Likelihood)**

<table>
<thead>
<tr>
<th>Equation</th>
<th>Coefficient 1</th>
<th>Coefficient 2</th>
<th>Coefficient 3</th>
<th>Coefficient 4</th>
<th>Coefficient 5</th>
<th>Errorvar.</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$Y_1 = -0.43 X_3 + 0.15 X_2$, Errorvar. = 27.42,</td>
<td>(0.19)</td>
<td>(0.081)</td>
<td>(2.62)</td>
<td></td>
<td></td>
<td>10.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$-2.19$</td>
<td>1.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Y_2 = 0.41 Y_1 - 10.71 X_3 - 0.91 X_1 + 10.76 X_2$, Errorvar. = 240.19,</td>
<td>(0.20)</td>
<td>(0.59)</td>
<td>(0.59)</td>
<td>(0.24)</td>
<td>(22.95)</td>
<td>44.18</td>
<td>10.46</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.03</td>
<td>-18.24</td>
<td>-1.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Y_3 = 1.26 Y_1 - 0.15 Y_2 + 1.03 X_3 + 2.71 X_1 + 2.22 X_2$, Errorvar. = 575.85,</td>
<td>(0.31)</td>
<td>(0.10)</td>
<td>(1.44)</td>
<td>(0.92)</td>
<td>(1.19)</td>
<td>(55.03)</td>
<td>10.46</td>
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<td></td>
<td>4.02</td>
<td>-1.42</td>
<td>0.71</td>
<td>2.95</td>
<td>1.87</td>
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Figure 5: Path analyses of education and training for earnings of displaced workers

* $p < .05$

Chi-square = 0.56, df = 1,
Adjusted Goodness-of-Fit Index: 0.98
Goodness of Fit Statistics
Degrees of Freedom = 1
Minimum Fit Function Chi-Square = 0.56 (P = 0.45)
Adjusted Goodness of Fit Index (AGFI) = 0.98
 Parsimony Goodness of Fit Index (PGFI) = 0.048
The independent variable of family income (X1) demonstrates a direct effect on reemployment earnings (Y3). However, it does not demonstrate a significant direct effect on adult education and training (Y2) and through which there is also no significant indirect effect on reemployment earnings (Y3).

The independent variable of family income interacting with educational level (X2) does not demonstrate a significant direct impact on adult education and training (Y2). On the other hand, the variable (X2) produces a significant direct effect on work experience (Y1) and through which it demonstrates a significant indirect effect on reemployment earnings (Y3). The variable (X2) produces a significant direct effect on adult education and training (Y2) but through which it does not demonstrate significant indirect effect on reemployment earnings (Y3).

The independent variable of educational level (X3) has no significant direct effect on reemployment earnings (Y3). However, the variable (X3) has significant direct effect on work experience (Y1) and through which it demonstrates a significant indirect effect on reemployment earnings (Y3). The variable (X3) produces a significant direct effect on adult education and training (Y2) but through which it does not demonstrate significant indirect effect on reemployment earnings (Y3).

In the analysis of direct effects on reemployment earnings, the contribution of adult education and training is not as significant as the position of work experience which acts as a good mediating variable. The implication of the difference in mediating effects between work experience and adult education is far reaching. Does it imply that for this group of displaced workers adult education and training is not as work-related and productive as
previous work experience? The argument does not just focus on how well workers can apply skills learned from previous jobs to their new work positions. In a broader sense, it questions the possibility of the transfer of human capital from one stage to another.

**Major Results Highlighting Important Policy Concerns**

The above analysis of different sets of rates of returns indicates that the relationships between retraining and labour market outcomes for this particular group are not straightforward. At least four results highlight important concerns for adult education and retraining policy.

First, economic returns to adult education can be recognized in at least two ways. For the entire group of workers before job displacement, participation in adult education accounts for a 9.3% earnings premiums over their last job. This rate of returns is relatively high compared to returns to other forms of capital investment in Hong Kong over the years. Also, those workers with lower formal education tend to participate more in adult education. This relationship contributes to increased earnings of the lower income group and enhances economic and social mobility to a certain extent. On the other hand, for the reemployed group right after retraining, previous adult education does not account for significant earnings premium. There is no evidence that their prior investment in human capital can be transferred to the post displacement stage. Since there were economic returns to adult education in their last jobs before displacement, the extent to which workers can benefit from their prior investment is of great interest.
As displaced workers tend to accumulate specific knowledge and skills in the industries they served in the past, it is often difficult for them to apply those skills in a new job. Adult education may help provide generic knowledge and skills, such as the use of ICTs, that equip people to learn in the knowledge-based economy. It follows that program planning and development of adult education for some specific target groups has to be carefully examined. Moreover, the sector of adult education should interact with the initial education system to facilitate the transfer of human capital to the later stage of life.

Second, the importance of prior work experience to explain earnings premiums is reported in predictions at various stages. For the entire group, work experience accounts for 6.6% of the earnings premium. For the reemployed group right after retraining, it accounts for 11.1% of the earnings premium. It also demonstrates significant mediating effects of earnings in the path analysis. It is reasonable to state that in this particular group its effects are more significant than most of the variables related to initial education, adult education, training and retraining. While the human capital investment is not transferable to the post displacement stage, the contribution of work experience is more significant at the later stage. In this sense, it is crucial to examine how the notion of work experience is related to adult education and retraining.

There is a complementary role between work experience and the investment in other forms of education and training that contributes to possible effects of earnings. In this sense, several key questions should be addressed to strengthen this complementary role: (1) To what extent are different forms of learning in the workplace encouraged for all and not limited by the narrow scope of on-the-job training for those with potential? (2) How can learning outside the workplace be promoted in connection with policy initiatives for the
general well-being of the society? (3) How can work experience be recognized as an
element of qualification by employers and other concerned stakeholders? Apart from the
importance of this complementary relationship, another concern is that experienced workers
will encounter greater difficulties in seeking reemployment. There could be many possible
reasons for this, such as: (1) higher demands and expectations due to their past job positions,
(2) limited supply of higher paying jobs or “better jobs” for displaced workers after
retraining, and (3) the association of “experienced” and “aged” in making hiring decisions
by some employers. It becomes necessary to provide experienced workers with not just the
ordinary type of placement assistance but, also with specific job searching skills to target the
right employers. Otherwise, they will compete with less experienced workers and the
economic returns to work experience will soon disappear.

Third, the earnings difference between men and women is significant. For the entire group,
women earn 30% less than men before job displacement. For the reemployed group right
after retraining, women still earn 14.7% less. The rate of returns analysis here shows that
retraining may contribute to reduce the disparity in earnings between women and men
workers. Yet, the gender bias in terms of earnings is far from an acceptable level of equal
labour-market opportunities. On the other hand, even though women receive lower pay,
there is no higher probability for them to re-enter the job market after retraining.

Given the low participation rate of women in the entire workforce of Hong Kong, it is
questionable to what extent retraining can help improve this situation simply by market
forces of increased supply. Several key issues must be addressed: (1) How can retraining
programs ensure that training outcomes are not prescribed by potential employers with a
gender bias? (2) To what extent have changing labour market requirements moved women
to low paying jobs? (3) How can government intervene to tackle problems of gender equity?

Fourth, the participation of employers is found to be increasingly important. For the reemployed group of workers right after retraining, employers’ sponsorship for learning accounts for 23.3% of the earnings premium. Sponsorship of employers is a key factor in predicting earnings. In contrast, participating in continuing education does not explain any significant increase in earnings. These results imply that continuing learning without employers’ sponsorship does not ensure economic returns.

The results discussed above not only highlight important concerns for policy making related to adult education and retraining, but they also provide necessary background for further explorations along this line in Hong Kong.

Summary

In this chapter, the data sets of 446 displaced workers and the subsequent 223 workers from this group who were successfully reemployed have been analyzed by various quantitative methods, ranging from multiple linear regressions to a path model. The results depict a general picture, at an aggregate level, of the relationships between reemployment, earnings, and adult education and training.

The results examined by analyses of rates of returns point to at least four areas that require further consideration for policy formulation: the transfer of human capital investment...
throughout the lifetime, work experience and learning, gender equity in the labour market, and the role of employers.

The rate of returns analysis has highlighted concerns and policy implications. In the next chapter, I present the results of stakeholder interviews and analyze individual perspectives and views on retraining programs and their outcomes.
CHAPTER SIX
STAKEHOLDERS PERCEPTIONS OF PROGRAMS AND OUTCOMES

In this chapter, I analyze data about the changing Hong Kong labour market collected from individual interviews and discussions with displaced workers and other stakeholders. I discuss how stakeholders' views contribute to an understanding of the structure of programs and the outcomes of retraining. Policy implications based on the reframing of issues, are presented and new questions are posed.

In the previous chapter, the rate of returns analysis provided the necessary background and identified key policy variables, as well as a framework and model for the measurement of outcomes. The focus now shifts to the exploration of individual perspectives on the process and outcomes of retraining. Participant responses were categorized and synthesized according to a number of broad themes. These include: workers' intentions to re-enter the job market, outcomes and shortcomings of retraining programs, barriers to adult education and training, perceptions of the changing demand structure of the workplace, perceptions of discrimination, need for training following reemployment, understanding the need for lifelong learning, and suggestions for changes to future retraining policy.

Intention to Re-enter the Job Market

The need to expedite reemployment is frequently one of the most important policy goals of retraining programs for displaced workers. Yet, the findings indicated that some workers may not seek work, nor support this prescribed outcome. While many learners responded
positively when describing how they acquired adequate knowledge and skills through retraining to allow them to find new jobs, there were alternative views about the intention to re-enter the job market. Most of these views related to tension between reemployment and family obligations. A mother expressed her thinking directly “Honestly, I am not eager to get employment” [LRN 3]. In her situation, she felt her family commitments were more important. Another woman indicated a similar position “I am lucky that my husband can support the whole family and I am not the sole breadwinner. I don’t have to press myself to find jobs” [LRN 21].

One middle-aged woman spoke about her complicated reactions to the retraining program. On one hand she was not drawn to the reemployment aspects, on the other she appreciated the opportunity to learn new skills because these provided a new avenue of communication with her children.

I am now 52 years old and have been a housewife for half of my life. Some might ask why should I join the retraining program? Honestly I don’t have a very pressing need for employment. I would like to learn more, especially computer (skills). I could share what I learnt from the program with my son. I feel that I have a better relationship with my children since joining the program. They now see me as a role model because I’ve demonstrated that I am a hardworking and conscientious student [LRN 8].

This woman went on to explain that she often found it difficult to balance her dual roles. "I have to manage my household chores in a very efficient way and plan my time well, otherwise, I may not be able to have enough time to prepare my lessons and do my homework.” She felt fortunate that her children were grown and were less demanding of her time. “They share some of the housework and take care of themselves. This leaves me more time for my study.” She also had the support of her husband, even though he was
reluctant to show this overtly “My husband has given me a lot of encouragement and support as well, but he never praises me. I know that he supports me, because he will help me make the Chinese soup if I’m too occupied with my course work” [LRN 8].

The woman’s role in the family is important when making decisions about re-entering the job market. Sometimes there are economic pressures that are specific to women.

I have been a full-time housewife for twenty years. I had to re-enter the job market because my father was ill and I needed more money to support the family. The Employees Retraining Program helped me a lot in bridging the gap. I was not confident at all, but now I can manage my work pretty well [LRN 7].

Other stakeholders held strong views that retraining should be for reemployment and there should be no exceptions. These views reflected the norms and social rigidities of some employers and program administrators who tended to focus retraining only on reemployment within the shortest period of time. However, applicants were not always attuned to these restrictions. One administrator explained the difficulties of rejecting these applicants.

In running a program, it is difficult to reject those who do not want to get jobs. There are also some individuals with mental problems and some who are unrealistic about the world of work. They do not know that the ERP only offers basic training, and they have to take further training to upgrade themselves. There are also geographical difficulties for some people who are willing to work [ADM 4].

One employer argued that training individuals who had no intention to returns to work was a waste of resources. He raised the issue of establishing a screening system for entry.

There should be a pre-course assessment to see if applicants are suitable. We should not just take in anybody who may not be willing to get jobs or does not have the ability to complete the course. We should try not to waste the retraining resources [EMP 2].
Some workers believed, correctly, that their prior experience in related industries would increase their chances of reentering the job market. “I have previously worked in industries like retail, service and business, so my chance of getting jobs is better” [LRN 7]. An administrator reinforced this view and explained that “those who have similar prior work experience will have a better chance of getting jobs, but those who have no similar prior experience will have a tough time” [ADM 3].

Experience of surviving prior economic downturns and recessions helped some workers face the problems associated with job displacement and assisted them to prepare for reemployment. This particular type of experience motivated them to learn to perform well even in unstable and rapidly changing environments. A mature worker shared his experience over the past two or three decades.

I have experienced several economic downturns in Hong Kong. Every time there is an economic recession, it’s difficult to find jobs. I don’t think this time is particularly serious. It’s just that the competition is keener than it was before, the society and economy keep changing, qualifications inflate, and the job market and job requirements are getting more and more diverse. I think all of these things count when you are looking for a new job [LRN 18].

In some cases, a longer work history does not necessarily translate into greater job stability. Painful experiences about sudden job loss were mentioned.

I’ve worked as a clerk for over ten years. When I lost my job a year ago, I felt so depressed and frustrated. I was 53 years old and had no idea what sort of opportunity was available or what chance I could have to find another job. The economic downturn in the past few years made the situation even worse. You know, the feeling that you have nowhere to go and there is nothing for you, is really terrible [LRN 9].

A similar experience was recounted by another worker.
I felt so terrible when I heard that my company had to downsize. I was one of those unlucky ones being laid off because my salary was too high. I had worked for the company for twenty-five years as an Assistant Manager. I felt very depressed and stressed because I am the major breadwinner of the family and still have to repay the mortgage [LRN 4].

Another worker expressed cautious optimism that his previous experience would help him find another job regardless of his age.

My department closed down a year ago. I had an offer of transferring to another department, but I declined it because I am not interested in that kind of work. That was my first job and I worked in that same department for 18 years and had a very strong emotional tie to it, so I was really unhappy to have to leave. I am now 45 years old. Although it’s not easy to find another job, I still stay optimistic [LRN 21].

Some employers demonstrated a positive attitude toward assisting workers to re-enter the job market, and provided opportunities for additional training.

We do not have special selection criteria for the ERS [Employees Retraining Scheme] learners. We actually offer quite a comprehensive training program to them. The training program is in collaboration with the ERB [Employees Retraining Board]. As this project involves public money (I think the ERB has used up quite a lot of public money), we have to recruit the ERS learners as far as possible. It’s a matter of ethics [EMP 12].

Another employer suggested that while they played an active role in training, trainees should be motivated to adapt to the new workplace, adopt the culture, and helped achieve the employers' future goals. For that to happen, “the employees themselves have to be self-aspired and motivated, for this to work” [EMP 11]. Not all stakeholders agreed with the employers' contention that the onus was on workers to adapt to the workplace. They expected that the retraining program would help in this regard, and that reemployment would be one of the outcomes of the program.
Outcomes and Shortcomings of Retraining Program

During discussions with training-program participants, certain expectations and frustrations emerged around the question of how useful they found the program. The understanding of the usefulness of the retraining program was different depending on the learners’ perspective. Positive outcomes related primarily to the acquisition of transferable skills and social capital. Negative outcomes related primarily to concerns about mismatching. These two categories of responses are discussed below.

Acquiring Transferable Skills & Social Capital

When interviewees were asked to what extent retraining helped displaced workers find jobs, there was a range of responses. Many spoke about the transferable work skills they learned in the program. For example, one participant stated with confidence “after completing the retraining course, I am more equipped with work skills” [LRN 5]. This perception was shared by another learner who commented “what is taught on the course is very useful, in particular the work skill component” [LRN 6]. The combination of prior experience and new skills was considered especially powerful. “I get a lot of job satisfaction from my present job, because I can apply my previous experience and also what I learned from the program, to my work” [LRN 10]. More importantly, retraining was seen by some as a stepping stone in career advancement.

I was promoted to the post of head of the section within six months after I joined the company. I think it is probably because of the management skills that I acquired in my previous job. Of course, the retraining program also helped me a lot. It was useful and challenging. The tutors also gave us a lot of encouragement and support [LRN 9].
These views supported the functional purpose and relevancy of the retraining program as stipulated in the retraining policy objectives. Work-related skills mentioned included computer training, accounting, and English language courses. Many spoke of the renewed confidence they felt as a result of acquiring new skills and training in job-search techniques. “I have more confidence in myself. The interviewing techniques that I learned from the program are very useful and practical” [LRN 5]. Another learner returned from an overseas country and undertook retraining in Hong Kong. She found the training she received to be “quite comprehensive. It allows me to manage my work pretty well, and I have a lot of job satisfaction” [LRN 4].

While work-related skills and finding reemployment were important, they were not the only ‘useful’ skills mentioned by participants. Some pointed to personal development and improvements in relationships with children. One female participant said, “I haven’t studied for a long time. I really treasure the opportunity of studying again. The Employees Retraining Program is a golden opportunity for me. It helps me in tutoring my children as well [LRN 2]”. Another woman shared a similar idea. “I appreciate the retraining program a lot because it allows me act as a good role model for my children” [LRN 3]. The beneficial outcomes described by some participants closely related to the social relationships and well-being explained by social capital. Participants tried to establish mutual support mechanisms and build better social relationships. One learner stated that “I got a lot of emotional support from my peer group while I was on the program. We still have contact and sometimes we exchange job information. Some of us even joined the evening classes together” [LRN 11]. A similar response was expressed by another participant “I have met a lot of good mates on the program. We exchange course and job information” [LRN 12]. The peer support built up during the process of retraining could be strong enough to
contribute to the improvement of chances for employability, and may extend to the building of friendships. "We were on the same program and luckily we could join the same company together. We are now working in the same department and support one another in many ways." [LRN 15]. Thus the far-reaching impact of stronger social relationships extended well beyond the program itself. For instance,

Our group still has regular gatherings even though the program is over. Sometimes we exchange job information because some of us are still looking for jobs. Sometimes we share our frustrations at work. I have a lot of emotional support from the group mates [LRN 13].

In the participant responses above, the benefits of adult education and retraining were expressed in terms of acquiring work-related skills, while at the same time obtaining other types of satisfactions and development. As they were developing human capital in the form of workplace skills, they were also developing social capital in the form of networks of support. However, not all stakeholders perceived the program positively. They pointed out that the perceived mismatch of jobs with participants' prior experience discounted the programs usefulness. Mismatching appeared to be a growing concern and was considered by some stakeholders to be a major shortcoming of the program.

Mismatching

Trying to find appropriate jobs for retrained workers in a changing labour market was considered by some stakeholders to be a moving target. A placement officer claimed

There is often a mismatch between the retraining programs and the requirements of employers. It is mainly due to the diverse job requirements. The problem is evident even within the same job category. For example, domestic helpers: if the trainee works as a tea lady for a company, her job requirements will be quite different from working as a maid for a traditional Chinese family. It is hard to incorporate all the desired elements into one single program, which usually has a preset length. The
best way, perhaps, would be to develop a series of courses for different types of skill enhancement [PO 2].

Another placement officer acknowledged to difficulty of matching course design, employers’ expectations and learners’ abilities. “Learners with differing abilities are placed in the same course, making teaching and training extremely difficult. Employers’ expectations are also quite varied. It is impossible to squeeze all the “requirements” into one program” [PO 1]. The frustration expressed by the placement officers related to the difficulty in ensuring that curriculum design kept pace with changing labour market demands.

On the other hand, an administrator expressed concern about the mismatch between the bargaining power of learners and the social rigidities they might encounter. Simply put, the labour market was so structured that employers had more power than employees.

Very often, the training body would first screen the learners to find the right person that matches the employers’ requirements before sending him/her over for job interview, therefore it is not likely that the learners would fall below the employer’s expectation. However, it is very often the other way round, the learners are not happy with the terms/salary that are offered especially with the low pay, long hours work, etc. But they cannot afford to bargain [ADM 3].

The issue of mismatch became more complex if the interest of provider organizations was taken into account. Due to shortage of funding, training bodies had to take in a large number of learners and provided them courses of short duration. According to one administrator this was an unsatisfactory state of affairs that failed to meet employers’ expectations “and leads to mismatching of work-skills and work requirements” [ADM 1].

The professional standard of training providers was also a concern. Much of the retraining provision has been undertaken by social work agencies. Because these agencies may not
possess the necessary expertise, according to one administrator, “it is hard for them to improve the number of programs provided as well as the quality” [ADM 4]. Although few individual learners spoke out directly on this issue many agreed with the administrator’s comments. These concerns called into question not only the social responsibility of provider organizations, but also their ability to deliver quality service.

Some argued that extending the job placement service would help solve the mismatch dilemma. When analyzed in the social context, however, this type of support did not provide a straightforward solution. It was increasingly difficult to simply classify mismatching as a matter of technical efficiency given the evidence of political and social interactions in the mechanism. Placement officers complained of the difficulties they encountered in the placement of workers. “The pressure could come from learners or potential employers. Quite a number of the participants don’t have a clear picture of themselves and hold an unrealistic expectation of getting employment” [PO 3].

Another placement officer pointed out that it was not only the learners expectations at play here “Many employers don’t have a good understanding of the Employees Retraining Program (ERP) and they hold a sceptical attitude towards the learners. Very often, we have to spend a lot of time on the briefing” [PO 2]. On the other hand, the employers of some of the larger organizations/companies familiar with the activities of the training centre sat in on interviews when retraining candidates were chosen, to reduce potential problems of a mismatch.

An administrator suggested that offering a pre-course counselling service to potential learners might be a way to enhance the job placement service and avoid the potential of
mismatch. “On one hand, we could provide information and advice on the extent they could benefit from the program. On the other hand, it could help them realize their ability or potential; what is possible and what is impossible” [ADM 3].

Despite the difficulties of job matching, job placement help was highly valued by learners. One learner appreciated that “the centre provides a lot of placement help to us. They are very supportive and resourceful” [LRN 25]. Another learner reported her successful case related to the job placement service. “I got my job through the placement service of the centre. They offer a lot of help to us, in particular, the tips for interview. That’s something I didn’t know before and they are useful” [LRN 20]. The Employees Retraining Program was a catalyst for many of the participants. “Overall, the ERP is useful to easing the problem of job displacement” [PO 2]. What I saw in these participant responses was stakeholders’ perceptions of what might be wrong with retraining programs. But there were closely related factors, such as the changing demand structure of the workplace that must also be taken into consideration.

**Changing Labour Market Demands**

The difficulties some participants encountered during the process of finding jobs after retraining were blamed on the changing labour market. “The existing job market offers little opportunity to the learners” [ADM 1]. Other administrators suggested that many factors other than training outcomes determined reemployment in an ever-changing labour market. But not all participants had a negative view of the process. One worker was enthusiastic about his experience, saying “I got a job just one week after the retraining...my tutors said that my performance ...was good and they were pleased to recommend me. And, I think
that my appearance and prior experience also helped” [LRN 17]. This implied that other personal factors, beyond job skills, counted in job seeking.

Some placement officers worked closely with employers and soon got to know the type of individual the employer preferred to hire. This made the process of finding jobs for trainees from their programs easier. As one placement officer pointed out, some employers were less rigid than others. “Although they have a list of preset requirements, when it comes to the placement of our retrainees, they usually agree to adjust their requirements if the learners are highly recommended by the Centre” [PO 3].

The majority of participants anticipated positive results from retraining and most liked their courses. Some, however, credited other reasons like luck or connections between placement officers and employers, for providing opportunities to get back into the work force. But some workers complained that the expectations of employers discouraged them from job seeking. As one learner related, “every time I go to an interview, I realize that the working conditions are totally different from what was advertised. They demand a lot of extra duties and it is really harsh. That’s why I don’t accept the offers even if I really want to get a job” [LRN 6].

Employers had different requirements depending on the size and nature of their business and management style. A placement officer explained that smaller firms tended to provide more opportunities to job-seekers than large.

Firms of different sizes show different recruitment criteria. Smaller firms tend to be less rigid when selecting employees, whereas larger firms will stick to the official
established recruitment guidelines. As a result, smaller firms usually offer more job opportunities to learners [PO 4].

Another placement officer supported this view and pointed out that “smaller firms usually require multi-skilled employees and show less discrimination toward learners, whereas corporations require specific skills for specific positions and are more conscious of corporate image” [PO 1].

Perceptions of Discrimination

The major obstacles for learners seeking jobs are not necessarily related to the inadequacy of knowledge and skills. Very often the obstacles are personal factors, like age discrimination and negative perceptions of people who find themselves in Employment Retraining Schemes. In discussions with stakeholders, frustration with employers’ belief that “the higher the age, the less the ability to work” was widely spread. A middle-aged learner complained that “I am forty-one years old. I don’t think that I’m old, but I really feel that there’s some sort of discrimination against my age during job interviews” [LRN 9]. Age discrimination was not restricted to employers; administrators also expressed similar sentiments. “For certain work skills, it is hard for certain age groups to pick up. Computing skills for example, definitely belongs to learners of a younger age” [ADM 1].

One participant stated that “I feel that after reaching the forties, my chance of getting employment is diminished greatly” [LRN 13]. The signal that employers would not welcome new workers of this age was echoed by another participant “I feel that 45 is a critical age for getting employment. After the age of 45, it becomes more and more difficult” [LRN 23]. A placement officer confirmed that “for some learners of older age, when they inquire about
job vacancies over the phone, the first question frequently asked is ‘How old are you?’ When they report their age, the employers end the call right away” [PO 4].

Another placement officer argued that employers reluctance to hire older workers was a function of investment in employability rather than personal characteristics. As such, it could be overcome.

A critical age for employment does exist for both sexes. Those learners aged mid-forties or above will have a diminishing employability because employers are usually unwilling to invest in them. But this can be remedied if they demonstrate continual self-enhancement, attractive personal qualities, and possess useful work skills, relevant work experience and qualifications [PO 1].

Even when the criterion of age was clearly a factor in recruitment, an employer did not interpret it as a form of discrimination.

The fact is, what we could offer to these learners is very limited. It’s not because we would discriminate against them. As a matter of fact, “age” is an important factor in our company. I never doubt their willingness to learn, but in the computing field, it’s difficult for them to pick up. This field is ever-changing and the change is fast [EMP 9].

Workers appeared to be more concerned with age discrimination than gender equity. One worker reflected upon her own experience “I don’t think there is sex discrimination on the part of the employers. It all depends on the job nature and job types. It has nothing to do with discrimination. Some job types just prefer female and some prefer male” [LRN 14]. Another worker expressed a positive view on the issue of age and gender. “I don’t think there is any discrimination towards age or sex. If we are self-aspired and conscious of what we really want to achieve and how we want to achieve it, we will have more chances” [LRN 20]. An administrator suggested that attitude towards reemployment was different between males and females “There is a gender difference concerning opportunities among the
learners. Males very often would like to have an immediate solution for their unemployed situation” [ADM 2].

The theme of attitude toward reemployment and gender was elaborated on by a placement officer who described the experience of female learners.

Female learners in general have a lower success rate in getting jobs. It is mainly due to their [lack of] adaptability to the requirements of the labour market and their self-aspiration. Most of them are not breadwinners of the family and they do not have a pressing need to get employment. They also have a strong commitment to their families and hold traditional conceptions of gender-roles, such as a women’s primary duty is to take good care of their families. Some of them come to retraining programs not for employment, but for the training allowance [PO 1].

Another placement officer supported this assertion. “Female learners favour those jobs with regular working hours. They do not like to work over-time as they have to take up a lot of household chores after work. To these learners, cooking the dinner and making Chinese herb soup is the most important agenda of the day” [PO 3]. The apparent stereotypical attitude towards female workers by placement officers, may affect women’s opportunities for reemployment.

The difference between male and female learners was one area that most placement officers wanted to discuss. “Male learners normally join full-time programs, whereas female learners favour part-time courses” [PO 2]. Against all observations, one placement officer blamed differences in innate ability for what was perceived as women’s lower levels of ambition. “Male learners on average have higher cognitive ability and therefore, greater aspiration in work” [PO 3]. Some suggested that the difference was grounded in culture. “Females are more eager to have access to retraining programs than males. Males are
normally more passive and not as expressive as female when they are in the unemployment state. For men, 'being unemployed' is face-losing” [PO 1].

There were also suggestions of an interaction between gender and labour market requirements. “Whether male learners or female learners have a better chance of getting employment sometimes depends on the nature of the job. There is gender preference for some specific occupations. Say, for example, for domestic helpers, female learners are usually preferred. But for property attendants, male learners will have more opportunities” [PO 4].

Apart from the questions raised on differences between male and female workers, new arrivals from Mainland China complained about the lack of recognition of their academic credentials.

I am from the Mainland and am now working in a private club as a chef’s assistant. I have completed my secondary education, but my qualification is not recognized here [Hong Kong]. I can’t see any prospect for myself after moving to Hong Kong. I think I will have to further my study and get a recognized qualification before I can have any opportunity to change jobs or look for a better prospect [LRN 15].

A placement officer agreed that the Hong Kong labour market was often inhospitable to new immigrants. “Learners from the Mainland usually have an inferiority complex. Their qualifications are often discriminated against and downgraded by employers. Their credentials are not regarded as evidence of qualifications or as recognition of learning outcomes; it only serves as a reference” [PO 3]. The requirements posed by some employers when recruiting new arrivals were commented on by another placement officer. “Some employers impose more rigid selection criteria on new arrivals, even for entry level
jobs. Some of them even require that potential employees be native Cantonese-speaking and regard the level of English as a crucial selection criterion” [PO 4].

A placement officer discussed the rigidity of the labour market in certain sectors and the effect it had on job seekers from different regions. Learners did not appear to be aware of this rigidity.

Learners from different geographic regions have different chances of getting employment. For example, a lot of learners from the Eastern District of Hong Kong Island are boat people in origin. They are usually deprived of the chances of compulsory education due to their life patterns during their early years, which in turn reduces their employability to a large extent and in many cases, even their life chances. Moreover, some job types are confined to certain geographic areas, like office assistant, and clerks, are usually found in the business district [PO 2].

Questions were raised by participants about employers’ attitudes towards recruiting workers after retraining. Would employers’ recruiting practices be encouraging or discouraging? Many employers stated that they did not select for or against ERP learners. “We have no discrimination towards age and we do not have separate recruitment guidelines for the ERS learners. In fact, we value these employees because they have a lot of good qualities; they are mature, emotionally stable, hardworking, etc.” [EMP 7]. Some of the employers preferred to do much of their own training. “Actually, what learners have learned from the retraining program is not of absolute importance to us. We emphasize on-the-job training more. Work-skill is of course necessary, but we consider mindset, attitude and values as more important qualities” [EMP 2].

Other employers were concerned about the adaptability and flexibility of learners from Employment Retraining Schemes. Age was not a factor as long as ERS graduates possessed
the ‘right attitude & mindset’ and the all-round skills needed to cope in a multi-tasking environment.

As a small-sized company, what I need is a “Girl Friday”, who is independent and can take care of the office. Age is not a problem at all. If the ERS could offer multi-skill-based training aimed at producing all-round office administrators, I am sure they would be welcomed by a lot of SME employers [EMP 11].

A placement officer expressed her view of the qualities that employers are looking for.

Irrespective of age or sex, they must be: emotionally stable, self-aspired, self-confident, reliable, pleasant, skilled, willing to learn, hardworking, but not demanding in remuneration. In general, self-aspiration, work attitude and skills are the major factors that affect employability [PO 3].

Some employers preferred to participate in more tailor-made joint retraining programs with the ERB. These tailor-made programs offered government wage subsidies to businesses that employed trainees. For employers, such programs could be a valuable and cost-saving source of skilled workers. The subsidies reduced training costs while the programs allowed employers to shape the training curriculum to ensure that workers developed industry-relevant skills. However, employers who benefited from these programs were required to provide fairly extensive support to recruits.

We take the ERS learners as our main source of manpower. So far we are quite satisfied with their performance. We keep a tight monitoring of the project through regular curriculum review and testing of learners’ work knowledge. It is mandatory for these learners to attain professional qualifications, so there is motivation there. We provide a lot of support to these learners, such as on-line courseware, technical workshops and exam fee reimbursement [EMP 12].
Training following Reemployment

Once successfully reemployed, displaced workers began to look for ways to obtain employer–support for further training and education, whether inside or outside the workplace.

“Although the retraining course is useful, I need more on-the-job practice to sharpen my work skills” [LRN 16]. “I think after completing the retraining program, we need some skill-upgrading courses to enhance what we have acquired” [LRN 18]. A placement officer admitted that “the current provision cannot accommodate all the training needs. We can only look after the basics. There is a constant demand for skill-upgrading courses, which is more than we can do” [PO 2].

When participants considered continuing education they generally sought courses that were work-related. As one participant stated, “my selection of courses is mainly based on job needs. I’ve found that I am mostly interested in courses that are useful to my work” [LRN 2]. Some respondents were able to spell out the specific knowledge and skills that they required.

I would like to take some more computer and language courses. The computer skills that I acquired from the employees retraining program are very useful and practical, but now I need more. I also have to raise my level of English. It is very important to have some working knowledge of English in the workplace [LRN 1].

Another learner was very clear about why she wanted to acquire work-related skills of English. “I am on this course (General English V) because I know that there will soon be a promotional opportunity available, and I want to be ready” [LRN 16].

Recognizing the importance of continuing education, some participants had established a pattern. “In the past four years, I have taken three part-time evening courses. They are all
work-related" [LRN 10]. "I join at least one course every year. Sometimes it’s for work and sometimes for interest" [LRN 15].

Information and access to continuing education was an ongoing concern for learners. They appreciated the support services provided by the centre but felt there was a need for some type of counselling related to opportunities for continuing education once they completed retraining.

I really appreciate the placement support of the (training) centre, but it would help me a lot if there was a counselling service on continuing education as well. I got a job within one month after the course, and I felt a bit confused because I didn’t know what to study next and was not sure what options were available [LRN 24].

For some, the purpose of pursuing continuing education extended beyond simply meeting job requirements. One claimed “continuing learning is essential if I want to keep up with the changing society” [LRN 14]. Another made the following point. “Before the retraining program, I joined courses out of interest. After taking the retraining program, I joined courses based on job needs. Now, of course, I realize that both job needs and interest are crucial to keeping up with the changes” [LRN 17]. Other learners suggested that taking part-time courses, for leisure and personal interest, was an effective way to reduce stress.

The operation of mutual support and social capital was also observed in the search for continuing education. One learner noted that “sometimes we exchange continuing education information. I have a lot of emotional support from the group mates” [LRN 13]. A placement officer pointed out that

When the learners come to retraining courses, they are usually on their own. After completing the courses, things are different. Whether or not they participate in continuing education becomes more of a collective behaviour. That is to say, if
most of their course mates decide to join a certain course, they will follow suit [PO 1].

Although the purpose of continuing education was not necessarily related directly to work, the right climate for workplace learning was an important concern for participants. Some thought that small firms provided more opportunities and were more conducive to continuing learning. One learner based his decision of future employment on firm size. “I would like to work for a small firm because I would have more exposure to different types of office work and learn more. The training is more comprehensive” [LRN 19]. Another commented on the same point. “I like working in a small firm because I have more autonomy at work. I work more independently and have more exposure to different kinds of work and learning” [LRN 23].

Others suggested, in contrast, that large firms could be better places for those seeking workplace training and also provided more security. As a more experienced worker commented, “I look for stability at this age [43 years]...I would like to have a full-time job and work for a large company. Large companies usually have better fringe benefits and they provide better training” [LRN 22]. A placement officer confirmed that “larger firms usually provide in-house-training programs or offer their workers a course-fee subsidy, whereas smaller firms sometimes can only offer verbal encouragement” [PO 2].

The nature of a business and the employers’ attitude toward training were crucial factors in accessibility to workplace learning, and workers motivation to undertake continuing education. One participant explained that “my boss always encourages me to take some part-time courses to enhance my work skills. He has even promised to let me have a fee subsidy” [LRN 13]. In another case, although the boss’s encouragement was only verbal,
the learner sincerely appreciated the moral support. Also, “he says that if the business goes well, he may consider granting a subsidy to us to take courses as long as the courses we take are work-related” [LRN 16]. For a learner working in a small firm, despite the small size “my boss is very encouraging in supporting our part-time study. We can have fee subsidy if the course is related to our work” [LRN 6]. Another encouraging experience was the participant who reported “the organization that I work for provides very good support to our continuing development. We have fee subsidies, and are given time-off for training and studying” [LRN 15]. A former fisherman also found himself in a supportive environment.

I’m now working in an international school as a gardener. I need to learn more English as most of my seniors are English-speaking… I know that it takes time to learn a language, so I plan to take one more English course. Although I have to spend four evenings per week at that, it’s definitely worth doing. My boss is an English lady, and she says that I’m improving all the time. Her encouragement is an incentive to me [LRN 11].

But while some participants received encouragement in their continuing education efforts, others complained about the barriers that prevented them from engaging in education and training.

**Barriers to Adult Education and Training**

Some participants faced barriers to participation in continuing education and their views confirmed what previous research has already identified: that time, costs, and other commitments represent major barriers.

Time was a major factor for many. One learner explained that “I have too many commitments at the time being. But I will continue to look for courses once I have more free
time. It is necessary for job survival” [LRN 22]. Another faced family commitments. “I would like to take as many useful courses as I could, but sometimes I can’t. It is mainly due to my family commitments. I have to take care of my children and I have to give them my time and attention as well” [LRN 13].

Others complained about incompatibilities between work schedules and continuing education. As a learner in the sales business commented, “I had to quit (the English course)... I have to work long hours and I could never find time to do my homework. It’s just too hard” [LRN 16]. A participant working as a marine mechanic had a similar experience. “I had to quit because my work schedule doesn’t fit the class time. I could only attend about one-third of the classes or even less” [LRN 7]. Another learner said “I have to work 12 hours a day. I just do not have the extra energy for studying after that” [LRN 19].

One summarized the tensions as follows:

I think continuing education is essential, but it is difficult to manage my learning and work. At the age of 38, I feel that my energy level is declining. I have a very heavy workload and I have to manage a lot of household chores after work. Too many competing commitments! It’s just too difficult to manage [LRN 14].

Some participants framed the problem in terms of access difficulties to workplace training. Sometimes, it was the pressures to complete work tasks that prevented them from attending employer-provided training. For example, when the company scheduled training sessions after the working day, pressing deadlines often meant overtime and “my immediate boss would not release me” [LRN 17]. Sometimes, scheduling was the issue. For example, when in-house training was scheduled during normal working hours attending courses was difficult, if not impossible, for shift workers. Sometimes, the location of the training centre
was the problem. “I was so tired after work that I just didn’t want to go. The training centre is so far away. It takes me an hour to get there” [LRN 17].

In some cases, the opportunities for workplace learning were not open to all. A mature worker complained “I found that my company tends to invest more in the younger colleagues” [LRN 8]. A ‘blue-collar’ worker found that “my company only supports ‘white-collar’ workers. They not only get a subsidy but they also get time-off” [LRN 6]. Finally, as many continuing education courses were fee-paying, cost may represent a barrier. One learner remarked that “it’s difficult for me to participate in continuing education although I wish to. I have to support my family and my income is just enough to make ends meet” [LRN 5].

**Employer-supported Training**

Employers did not perceive the same barriers as the employees above. They believed they were providing a supportive training environment. One employer said “we provide in-house training for staff from time to time. We also encourage staff to take further training. We will consider time-off for further study by allowing staff to leave a bit early to travel to class” [EMP 12]. Another employer spoke of the provision of resources for staff development. “We put a lot of effort in creating a learning environment or culture, and have established a coaching system for continuing learning” [EMP 5]. In a third case, the employer tried to help employees draw up development paths. “We provide a lot of in-house training activities, either on mandatory or voluntary basis. Our employees can initiate their own training activities. We provide course sponsorship and education assistance to employees as long as the training and education that they wish to take is job-related” [EMP 3].
Staff development through employer-supported education and in-service training followed a variety of models ranging from formal, nonformal, and informal. For example, one employer provided "a bank of information on continuing education. We also provide a subsidy to those who are recommended by the department head to engage in training opportunities that are directly relevant to their work" [EMP 9]. Another employer assisted employees to gain professional qualifications. "We offer full-pay study leave and course fee subsidy to employees if they wish to engage in continuing education and get a professional qualification. We also emphasize on-the-job-training. All the senior staff members act as mentors to the junior staff. This mode of training is very effective and cost-effective" [EMP 1].

Employers acknowledged the eagerness of learners to participate in adult education and provide a wide variety of resources. However, they felt that taking advantage of the opportunities offered was up to the individual. "In our view, staff development cannot be forced, it has to be internalized. We never spoon-feed the employees. We have a mentor system. A mentor is meant to be a critical friend and his/her main duty is to help new recruits or junior staff members develop awareness of the need for continual job improvement and the importance of continuing learning" [EMP 5]. Another confirmed that "although we give direction to their development, we basically encourage initiation from the employees end" [EMP 7].
Culture of Lifelong Learning

As one of the learners expressed it, “Lifelong learning is a useful way to help us keep abreast of the changing society, and the changing needs of the job” [LRN 11].

Perhaps, the greatest challenge for stakeholders in retraining programs was whether to trust that a policy of lifelong learning would actually be implemented in Hong Kong. Many expressed reservations on the likelihood of that happening. As one learner—a longtime government employee—said, “the government is now promoting lifelong learning, but I think they are not on the right track. I don’t think that they are willing to give it their ‘genuine support’ and I have no idea how they will implement it. I think we should promote lifelong learning in a systematic way” [LRN 9]. An administrator thought the present retraining policy was too limited. “All those who need to be trained should get a chance for retraining. But people can’t rely solely on public funding. Trainees should partially support the retraining fund” [ADM 4]. According to a placement officer, there were difficulties in enacting a policy on lifelong learning. “It is generally agreed that education could guarantee good prospects and there is a need for continuing education, but in reality, there are too many barriers to learning and it is difficult to realize lifelong learning” [PO 3].

Interestingly, this person identified many of the same factors that participants referred to earlier as barriers to continuing education, i.e. “financial affordability, family commitments and roles, timing, energy level, job survival, job preparation and enhancement, self aspiration, convenience of venue/ location, availability of suitable courses, conception of sex roles, and personal interest.”
Although we spoke of “lifelong learning for all,” accessibility by learners from special groups remained unclear. An older learner said that “participation in lifelong learning should not be forced, it should be internalized gradually. It is a tough task for older people. The government should give assistance as far as possible” [LRN 10]. Motivation and an environment conducive to learning were considered important for increasing access to lifelong learning activities for some participants. “Lifelong learning is of course important. But, there’re a lot of situational factors at various stages of life that determine my level of participation. If I could have constant encouragement from other people, I’ll participate more” [LRN 12].

The support of employers was important for workers’ participation in lifelong learning activities. Employers saw the task as one of changing people’s attitudes and values. “Learning is no longer confined to the classroom; it takes place wherever and whenever it can. We have to be responsive to every learning opportunity and be proactive” [EMP 4]. Some employers, seeing the benefits of lifelong learning, considered it their obligation to promote employee participation. “We have to create a learning culture and foster an attitudinal change among people, so they want to participate in lifelong learning” [EMP 2].

However, a placement officer questioned the commitment of some employers. “In principle, they support lifelong learning and see its significance for staff development and company growth. However, they seldom lend their support in a genuine way. When they confront conflicting interests, like meeting pressing deadlines, staff development quickly becomes a lesser priority” [PO 3].
Employers' reasons for promoting lifelong learning are linked closely to the knowledge and skills required for work. They want their companies to become 'learning organizations,' able to respond to changing times and technologies. Many business fields today are knowledge-based. Having their employees participate in lifelong learning enhances a company’s ability to keep abreast of the latest developments and increases their chance for survival. One company incorporated lifelong learning into the appraisal system, where “it serves as an important criterion in determining salary revisions and opportunities for promotion of an employee” [EMP 4]. Most employers now recognize that lifelong learning is an important means to business and company growth.

Need for Changes in Retraining Policy

The views expressed by individuals in the previous section may largely relate to their experience of a single retraining course. There were also opinions on the overall employee retraining policy in Hong Kong expressed by other stakeholders. In this section, administrators and employers addressed the issues at a broader level: the social context in which retraining was embedded. A major concern for some administrators was the fragmented nature of a training policy that prevented development of a long-term and inclusive policy framework of adult continuing education. Some argued that “the government has no vision or long term planning for the Retraining Program, so it is difficult for the training bodies and the Employees Retraining Board (ERB) to do much” [ADM 2].

One employer was “supportive of the scheme because, overall, it is good for society” [EMP 1]. Another stated that “although I have heard a lot about its inadequacy and ineffectiveness
in solving unemployment issues, the ERP at least enhances trainees' employability” [EMP 4].

An employer who commented on the mismatch between the training provided to displaced workers, and the changing demands of the job market found existing policy inadequate to finding solutions. His comments linked back to the complaints expressed by displaced workers in the retraining programs, about their perception of a mismatch between what the training program provided and what employers demanded.

I get the impression that the retraining policy in Hong Kong is very fragmentary even though there is an Employees Retraining Board to look after it. There is often a mismatch between the retraining provision and work skills required by specific occupations. Overall, the input for retraining is too little. There is no “integrated” policy or overall planning in human resource development. Actually, unemployment issues are not just confined to displaced workers, it is a problem affecting society as a whole [EMP 3].

On the other hand, administrators defended the program and claimed responsibility for improvement rested with the government

Some people claim that the Employees Retraining Scheme (ERS) in Hong Kong is not useful at all because it does not produce the desired outcomes. They think that, with or without the scheme, the job market condition is still the same. But, the ERS does at least give some support to the displaced workers. It may not be a perfect scheme, but it can definitely improve. Actually, the problem is that not much can be done to improve the labour market. The government has not played an active role in this respect [ADM 3].

Other shortcomings of the policy were elaborated by another administrator “The current retraining policy can’t improve the job market because there are too many restrictions and this practice can’t help reduce the unemployment rate. Furthermore, the ERB’s policy has too many loopholes and this leads to a lot of problems in execution. The monitoring
mechanism is too strict and allows little flexibility” [ADM 1]. Another example of the policy’s weakness was cited in regard to so-called ‘tailor-made’ programs. These were said to be open to serious abuse. The programs

Often encounter employers who have no intention to hire the trainees at the end of training. Their primary intention is to import cheap labour. Running tailor-made programs is only an act to satisfy the Labour Department’s local staff recruitment policy. In fact some do not offer full-time jobs to trainees, and even if they do, the working conditions are so harsh and the wage is so low that trainees often would not accept [ADM 3].

Administrators criticized the operational efficiency of the ERB from a number of perspectives. First, they criticized the policy of the continuation of courses being dependent on the measures of placement figures at the end of the course. “It is not fair for the ERB to determine whether a training body can continue to offer a certain retraining course based solely on figures like placement and retention rates” [ADM 2]. They felt that this approach recognized only the training outcomes while ignoring the other indicators of usefulness.

The class operation is pegged to placement rates. We wonder if placement outcome is only used as an indicator for cost-effectiveness. The budget is very often linked with performance [placement rates], however, placement rate depends not just on the performance of the training centres, and a lot has to do with employers and the trainees themselves. It’s not fair that the training centres have to bear all the responsibilities [ADM 1].

The policy also appeared to ignore geographic anomalies or the fact that there were a greater variety of jobs and, therefore, more opportunity for placements in urban, rather than rural areas. An administrator complained that “they often disregard the location of the retraining centres. Due to geographical differences, requirements like placement figures should be taken into consideration” [ADM 4].
Second, administrators tended to decry the lack of labour market research. “ERB relies too much on the training bodies to determine the kind of retraining that is needed. The government should do more research on retraining needs in order to determine the retraining policy as well as the kind of retraining that is required” [ADM 3]. Labour market research should consider all the stakeholders “The ERB should have a more comprehensive retraining policy and establish a mechanism to determine the program types to be offered based on geographical needs, industrial needs and trainee’s needs”[ADM 2].

Third, administrators challenged the organizational structure of the statutory body responsible for retraining. “Currently, the ERB has a consultation mechanism. The team is basically composed of the employers. But, are the parties’ involved ‘appropriate people’ to decide curriculum design for retraining programs? I really doubt it” [ADM 9]. Others suggested that it was not who decided the curriculum, but the difficulties encountered in delivering it that should be addressed. “Some of the retraining policies involve too much red tape. It is very difficult for training bodies to follow through when there are so many changes to keep track of” [ADM 4].

Fourth, there was a feeling among administrators that the existing retraining ordinance was not sensitive to changes in the labour market “The retraining ordinance established in 1993 can not keep pace with current societal needs. It has had no amendment since then, so the ERB is not sensitive to the changing labour market condition” [ADM 2]. This lack of sensitivity to labour market change created difficulties for providers running the Employees Retraining Programs. Administrators of retraining programs voiced concerns ranging from the tension of financing, and job market failure, to administration rigidity.
One administrator suggested that to meet current needs, the program should change the age restrictions and allow more access to the retraining programs. “By law, the training scheme only takes care of those aged over 30. With the high unemployment rate, the policy can be more relaxed to accommodate more people. The lower age groups could also benefit from the retraining program. Moreover, specific occupations have their own specific culture and requirements. A certain degree of flexibility should be allowed” [ADM 3].

Fifth, administrators argued that the incentives and motivation system needed review. For the providers, the current incentives/support measures were not enough to improve their program provision. Some felt that “There is not much incentive for the providers, if they only have the opportunity to offer courses” [ADM 1]. Another administrator claimed that “The only incentive for the training bodies is ‘income’. As funding is linked to results (the performance indicator is placement rate), nobody dares to take a risk and we just stick to the current method of provision, which is time-proven and should be ‘safe’. There is no attempt to broaden the range and diversity of provision at all” [ADM 2].

While the incentives and support measures, such as free courses and retraining allowances, were generally accepted by the potential trainees, there was a need to set up a vocational qualification system to acknowledge and recognize their training outcomes. Administrators suggested that for the incentive of learners, “We should professionalize the retraining provision by means of accreditation of the certificates and setting up of competency-based assessment centres. For example, retraining programs should be targeted for professional qualifications; ERB should standardize the retraining program, seek recognition of trainees’ learning outcomes, and step up its research and development work, especially the research into the job market needs” [ADM 4]. There was support among administrators for the
learning that took place in their programs, but there was also the feeling that some sort of official recognition, in the form of credentials, would enhance the experience. "Seeking learning outcome recognition helps the trainees in two ways. It serves as an encouragement to them, and the paper qualifications could help them a lot in getting jobs" [ADM 3].

The longer term effects of certification of learning could extend beyond the retraining programs. "Professional certificates can be used as an incentive to motivate trainees to keep on learning, hence, upgrading the overall labour workforce. Professional certificates can be an asset for those who have little else in the way of certified qualifications" [ADM 2]. However, some administrators felt that ERB must take the lead in suggesting changes to training policy. "ERB is neither aggressive nor progressive enough. They should strive to award trainees the first recognized certificate because that is recognition of learning outcomes which would help them in job seeking and continuing education. Without a proper recognized certificate, it’s difficult for the trainees to advance. ERB should work out a qualification framework with recognition from the government" [ADM 4].

Besides the need for recognized qualifications, there were other suggestions in relation to the use of training allowance and promotion to the public. "Trainees would welcome recognized certificates, but right now, it seems that training allowance is more welcome" [ADM 3]. Suggestions for promotion included "a wider publicity channel for different target groups instead of a general public promotion. A road show is definitely not an effective means of promoting the programs. The publicity should not be just for promoting an image, but should really address specific target groups" [ADM 4].
Administrators' considered that training and retraining were basically two different things: training was for enhancing or upgrading work skills; retraining was for assisting displaced workers to pick up new work skills so as to re-enter the job market. For example, in-house training was considered the responsibility of corporations, whereas retraining was the responsibility of the ERB. Therefore, administrators suggested, there was a need for more expert policy domains as far as retraining was concerned, and the government must assist in this by:

Initiating policy measures, such as a subsidy to employers in the form of a tax rebate, allowing them to devise more training provision and offer training leave to employees. Government could also issue learning vouchers to the public to encourage continuing education. Moreover, we as the providers should expand our retraining provision [ADM 1].

Administrators felt strongly that there was a need to ask for government intervention in the labour market to establish a qualification framework as one form of intervention. And, besides offering assistance to employers and providers, the government should conduct regular surveys on the labour market and manpower needs of Hong Kong.

Summary

It is commonly assumed that people come to employee retraining courses with the intention of reemployment and improved earning prospects. However, the findings suggest that a considerable number of people participating in retraining have their own pre-set motives, which are quite different from those of the program. Individual learners also had concerns about whether retraining could accommodate their wide range of learning needs. Stakeholders identified a mismatch between what was offered by the retraining programs and the requirements of employers, and the changing demand structure of the workplace.
Stakeholders expressed concern about discrimination against older workers, women, and displaced workers in general. Some suggested that there was a stigma attached to retraining programs which made it difficult for retrained workers to find new jobs. Once reemployed, workers sought adult education and training from their new employers. Workers encountered a number of barriers, such as lack of time, cost of programs and other commitments, which restricted access to adult education and training. Employers and administrators of retraining programs agreed that changes were required in the retraining policy to make the programs more responsive to workers and employers' needs. There was an expressed need for government to become involved in establishing a qualification framework based on current labour supply and future labour market demands in Hong Kong.

In the next chapter, I conclude my study with a summary, discussion of implications, and recommendations for future research.
This chapter concludes the study with a brief summary of the research, a discussion of the implications for policy and practice, and makes recommendations for future research.

**Summary of the Study**

The provision of adult education and retraining embraces a variety of courses organized for adults within the policy control of the Education and Manpower Bureau of Hong Kong. This study focused on adults who experienced job displacement and went through retraining programs for reemployment. To what extent displaced workers benefit from retraining for employment is central to the study.

The study attempted to derive implications for adult education and retraining policies that addressed the issue of job displacement in relation to the needs of worker adjustment. It sought to stimulate concern and public interest about how adult education and retraining could contribute to the competitiveness and flexibility of the workforce in today’s globalized economy.

The method and design of the study took into account the need to evaluate both the aggregate-level rates of returns to adult education and retraining as well as the outcomes perceived at the individual level. By synthesizing aggregate and individual analyses, major
issues were reframed and new problems posed. The dual goals were to challenge existing assumption and beliefs of the role and impact of adult education and retraining, and to derive important policy implications.

Findings

The rates of returns analysis generated five major findings from an examination of the data set of 446 displaced workers. First, in the context of personal and family characteristics and socioeconomic position, displaced workers were among the lowest income groups in Hong Kong society and their levels of formal educational attainment were low relative to the population as a whole. Given the lower educational attainment and income, the participation rate in adult education was relatively high compared to the general participation rate in Hong Kong.

Second, the pre-displacement earnings of workers in the sample were analyzed by multiple linear regressions to provide a general picture of the impacts and relationships between earnings, initial formal education, adult education and training, work experience and other major labour market variables. The results showed earning premiums for human capital investments in adult education and training. However, at least for this group of displaced workers, there was no strong support for an earnings effect related to initial formal education. The analysis further disclosed earnings disparities between men and women, representing a gender bias in the labour market.

Third, the data set of 223 workers who were reemployed after retraining was analyzed in three stages: the pre-displacement stage, the reemployment stage, and both stages combined.
In this analysis, the earnings effect of adult education before job displacement was no longer found significant. Thus the transferability of human capital investment is questionable for displaced workers. On the other hand, there was strong support for the fact that training sponsorship from employers accounted for earnings premiums at the reemployment stage. The premiums also went to experienced workers at both stages.

Fourth, determination of the probability of becoming reemployed was found to be predicted by the level of education, work experience, and length of unemployment period. Experienced workers faced greater difficulties in finding reemployment.

Fifth, the theoretical framework of human capital theory was used to derive a path analytical model. The test of the model explained structural relationships among reemployment earnings, participation in adult education and training, work experience, family income, level of initial formal education and the interacting term of family income and formal education. The factors of family income and formal education were shown to have direct effects on reemployment earnings. The factor of work experience demonstrated stronger mediating effects than the factor of adult education and training.

In sum, the rate of returns analysis provided results in four areas that highlighted important policy concerns in relation to adult education and retraining. First, participation in adult education explained earnings premiums before displacement but the payoff was not carried forward after reemployment. Second, prior work experience generated earnings premiums at all stages of pre-displacement and reemployment but experienced workers had greater difficulty in re-entering the job market. Third, a gender bias was identified in the earnings
profile. Finally, employer sponsorship of education and training explained earnings premiums for reemployed workers.

As well as labour market outcomes represented by earnings and reemployment at the aggregate level, the analysis investigated gaps between the measurement of outcomes and the individual views of displaced workers on the adjustment process. Individual perspectives generated eight themes: (1) intentions to re-enter the job market, (2) outcomes and shortcomings of retraining programs, (3) barriers to adult education and training, (4) growing concerns about changing labour market requirements, (5) perceptions of discrimination, (6) training following reemployment, (7) understanding of the need for lifelong learning, (8) concerns for changes in retraining policy.

Stakeholders did not always agree in their views and opinions of the benefits of participation in retraining programs. Of particular concern to many participants was the rapidly changing labour market. Learners questioned whether employers were genuinely interested in recruiting them after retraining. In some cases, employer requirements appeared biased and discriminatory. On the other hand, employers claimed they were open and fair in recruitment, and argued the onus was on displaced workers to demonstrate adequate skills, a positive attitude, and to take the initiative in order to meet the requirements of employers.

**Implications for Policy and Practice**

In linking the individual perspectives to the rate of returns analysis, there seems to be a need to reframe some major issues and pose a number of new, policy-related questions. First, how can we recognize the multiplicity of the goals of adult education and retraining as an integral
part of the lifelong learning system? The policy implication here is the need to account for the multiple outcomes from adult education and retraining in a way that can lead to a wider spectrum of planning and development. Second, how do we retrain displaced workers to maintain their long-term employability? Here, the policy issue is the need for a mechanism to recognize work experience that will help demonstrate the value of experienced workers and keep them employable.

Third, what is the best way to rectify the market failure represented by mismatched jobs, discrimination, and barriers to access? The associated policy implication is the need for a mechanism that will closely monitor the availability of jobs and supply of workers in the market. Finally, how can we enhance the commitment of employers to the promotion of continuing education and workplace learning? The issue for policy makers here is the extent to which employers provide or support education and training and maintain efficient and equitable access for employees.

The present evaluation framework is unable to cope with factors, like these, that deal with the wider policy implications of adult education and retraining. Instead, it generates indicators like reemployment placement rates and changes in earnings. While these are important factors, they cannot provide sufficient information for adequate decision making. Other indicators should be added to make the information generated more meaningful and relevant.

An overall review of the existing output-based evaluation framework is required to construct a more inclusive framework that will measure a wider range of outcomes. A more inclusive framework would incorporate the four domains of policy implications noted above. To
reiterate, these are: (1) economic benefits of adult education and retraining, (2) implications of work experience, (3) matching and creation of jobs and (4) employer-supported education and training.

1: Economic Benefits of Adult Education and Retraining

Hong Kong continues to achieve a relatively high standard of economic performance, yet workers with lower level work skills are striving to maintain stable jobs and income. In order to establish an inclusive evaluation mechanism to facilitate workers’ adjustment to the changing economy, it is vital to recognize the multiplicity of goals of adult education and retraining as an integral part of the lifelong learning system. In this sense, the extent that other economic benefits of adult education are recognized has important implications for policy and practice.

The economic benefits of education are primarily related to earnings (Schultz, 1961 and Becker, 1964), but suggestions have recently been made on ways to develop direct measures of human capital by selecting other observed variables (Tuijnman, 2000). Data from the present study illuminate at least three additional benefits of participation in adult education and retraining embedded in the concept of social capital: (1) the growing mutual support among peer displaced workers, (2) increase in parental competence, and (3) orientation for new immigrants.

These three outcomes can also be interpreted in the economic context and can be measured by proper approximations of “market outcomes.” The formation of peer support can lead to savings of direct and indirect costs of retraining support and counselling services and generate added value for the program. The increase in parental competence can complement
and supplement the economic returns to formal education for children and youth. The increase may be taken as “non-market outcomes” or only serve as an indirect effect; the measure can be done by approximation (McMahon, 2001). This economic benefit is particularly important when the formal education system for children and youth calls for a greater extent of school-family cooperation and becomes more accommodating to the learning needs of parents. The orientation for new immigrants can contribute to the adaptation assistance of new members to the local community. The outcome accounts for the benefit of the social cohesion.

The recognition of other outcomes leads to a wider spectrum of planning and development of adult education and retraining. Special programs and activities may be designed for select target groups to achieve multiple goals. For example, special courses on job search skills can be offered to designated groups of new immigrants to help them understand the local communities, and assist with searching for jobs. Retraining programs may be integrated with other educational activities. For example, mainstream parental education programs can incorporate the theme of retraining for employment as one of the concerns in improving family relationships. At the same time, the recognition of other economic outcomes leads to the need for more training of the personnel involved. For example, a course on job-search skills for new immigrants clearly demonstrates a higher level of complexity and a greater demand for professional support in terms of input.

2. Implications of Work Experience

The importance of work experience is found significant in predicting earnings before job displacement and in reemployment. It also mediates other human capital investment variables to determine earnings in the path model. Linking the views of individual workers
to the macro-level analysis, we found that many participants in adult education and retraining confirm the important effect of work experience and learning on improving their employability. The importance of work experience is not limited to the number of years of work. Rather, work experience connects to the extent a person has learned and performed better in the workplace (Guile & Griffiths, 2001).

In order to formulate a more inclusive framework, the outcomes of work experience have to be identified and measured. In this sense, a mechanism to recognize work experience is crucial to keeping experienced workers employable. The recognition may take a form similar to the formal educational attainment that acts as a signal in the labour market. A qualification system is therefore desirable to reward and motivate workers to upgrade their knowledge and skills throughout their working life. If Hong Kong plans to become a high-skill economy in Asia, it cannot limit itself to a small pool of highly-skilled talent. The development of a high-skill society depends on a model of human capability that assumes everyone has the potential to benefit from skills upgrading and lifelong learning. It also depends on an inclusive system of education and training that achieves comparatively high standards for all social groups irrespective of social class, gender, race, or ethnicity (Brown, Green & Lauder, 2001).

On the other hand, work experience alone may not help people get a job after retraining. In the rate of returns analysis, more experienced workers had a lower probability of becoming reemployed. This apparent paradox may be due to workers' expectations of relatively high wages and/or job quality. Potential employers may be hesitant to commit to a higher remuneration and promising career path. The strengthened evaluation framework should include information on the barriers to re-entering the labour market and how access to the
job market is related to the bargaining power of both sides. The implication is the need to provide additional and specific types of job access service for this group of workers.

Among the group with more work experience, those who have overcome challenges in previous economic recessions and cyclical labour market changes gained better positions and earnings in their reemployment. The evaluation framework should not be limited to the measurement of earnings or occupational status but should also be able to identify the ways that trainees can contribute to their new employers. There is a need to set up some device for this particular group of displaced worker so that their adaptability to economic restructuring will be enhanced and they can become particularly helpful to certain specific trades and industries.

3. Matching and Creation of Jobs

A more inclusive evaluation framework would be formulated to measure the extent to which retraining keeps pace with, or matches, changing job requirements. This reformulation relates to the need to keep track of the supply and demand of skills. A mechanism to closely monitor the availability of jobs in the market and workforce supply should be established. Existing methods (e.g. manpower projections and optional reports of vacancies by employers) only provide a partial picture of changes in the nature of jobs or the trajectory of work culture. We need to improve research in these areas.

In a wider context, job matching is not merely a process determined by the efficiency of labour market mechanisms. As reframed, it is related to market failure. The role of government in combating labour market failure is discussed by the individual workers, placement officers and training-centre administrators who participated in this study. An
inclusive evaluation framework should examine the role of government in retraining to ensure an appropriate job market for displaced workers. The implication is to what extent regulatory measures should be reinforced to maintain open and equitable access to the labour market, particularly to ensure equal opportunities for people of different genders, age, and family positions.

As measured by the job status variable in the rate of returns analysis, the effect of working full-time is not necessarily proportionally more rewarding than working part-time. The reduction of the number and variety of “reasonable” full-time positions limits the choice of job seekers and they have to work for long hours and may get disproportionate pay. An inclusive evaluation should identify the changing employment patterns to enhance job matching. The implication is the need to call for job creation in the public and private sectors to balance the decrease in the number of full-time jobs.

The concern for social closure leads to the question of how work is defined and remunerated. Participants suggest that the idea of social worth is reflected in the market value of one’s employment. There is no reason why unemployment should be associated with enforced idleness, loss of self-respect, and dependence on the state. After all, there is no shortage of work, only a shortage of waged work. In the job market of the future, the implication is to reward certain jobs of an unpaid or voluntary nature.

Job matching and job creation can take the form of customized retraining for specific employers. However, the predicting variable of job matching does not display significant returns to adult education and retraining when analyzed by rate of returns methods. Instead, the predicting variables representing expanding industries display earnings effects compared
to declining industries. The implication is that the priority of customized retraining for specific employers is more related to specific industries than to the criterion of job matching.

4. Employer-supported Education and Training

The predicting variable for employer sponsored education and training accounts for earnings premiums in the rate of returns analysis. From the analysis of individual perspectives, there are barriers to accessing employer-supported education and training. The policy issue is the extent to which employers are involved in supporting education and training and maintaining efficient and equitable access for employees.

An inclusive evaluation framework should not be confined to measuring the changes in earnings but should also analyze the process of how workers can access learning opportunities. Displaced workers tend to be reemployed in low-skilled positions or, under certain circumstances, work as unskilled labour. Individual and structural barriers to unskilled workers’ access to learning have been well documented (Rainbird, 2000). Changes in the nature of unskilled work, such as flexible shifts and subcontracting of services, reinforce access barriers to learning. In this sense, some support measures provided to employers from public fund may encourage them to provide work-related education and training. These measures are less likely to be offered if they are to be drawn from employers’ own resources.

Time, finances and work commitments are barriers to participating in education and training in or outside the workplace. Unless employees can learn in nonformal ways, or informal settings, access to learning will be constrained. The implication is the need to convince employers to provide a conducive learning environment in their workplace. For those
preferring formal settings for education and training, some innovative forms of institutional arrangements between employers and adult education providers are desirable.

**Recommendations for Future Research**

The four sets of policy implications suggested by this study point out a more inclusive approach to upgrading skills for displaced workers and removing social rigidities that limit their access to learning and jobs. What becomes prominent is to situate retraining in a broader context of lifelong learning. In order to facilitate further understanding along this line, recommendations for future research are mainly related to challenges raised by two sets of questions: (1) To what extent is a wider scope of adult education and retraining made possible through implementation of retraining programs? Does the promotion of lifelong learning help shape this trend? What are the resource implications? (2) Are there alternatives that would allow Hong Kong to maintain its competitiveness without paying attention to the needs of displaced workers? To what extent is the adjustment affected by rapid changes in social, economic, and political aspects of Hong Kong? What is the role in Hong Kong policy deliberations of the social structure of Mainland China, including the education and training system and the labour market?

The first set of questions centre around whether this inclusive approach is realistic. Lifelong learning and the learning society are major themes in recent education reforms in Hong Kong. The development of broader approaches to adult education and retraining is likely to be included in the policy agenda. In this context, future research should investigate the resource commitments needed for lifelong learning activities and the extent of support required from both the public and private sectors. Controversies can be expected to emerge,
particularly around "who should pay for what?" Also, many efforts and decisions to implement new initiatives find justifications from the economic imperatives. Given this trend, future studies focusing on the costs and financing of adult education are required. Researchers should strive to illuminate how adult education and retraining can move on under the current economic imperatives to maximize output in a broader sense and minimize cost and ultimately pave ways to develop a new mechanism along this line.

In this regard, it becomes important to address questions such as: what are the cost and priority implications of re-orienting training systems toward a lifelong learning approach? What are the trends in development over time of the costs of formal education and training provision? Is there any evidence for achieving economies of scale in formal education and training systems? How can differences in development costs between countries be explained? What are the relationships between aggregate costs and indicators of educational outcomes? In order to clarify that a broader provision of adult education and retraining in the context of lifelong learning is feasible, future investigations showing how it is made affordable for all stakeholders are necessary.

As the implementation of lifelong learning policies encourages partnerships with the private sector, future investigations of these types of partnership are of particular importance. This kind of partnership is largely determined by the social, economic, and political priorities of a society and the resources available to fulfil these commitments. An appropriate balance between the labour market, employers and employees is required.

The second set of questions relates to changes in the social, economic, and political aspects of Hong Kong. As a Special Administrative Region of China since July 1, 1997, the
political regime of Hong Kong has been settled by an agreement to “one country, two systems.” As China is increasingly aware of the importance of the open-door policy and participation in international cooperation, the relationship between Hong Kong and the Mainland has remained smooth and positive. At this stage, political stability is rarely challenged. However, economic progress is far less promising. The Asian Currencies crisis in 1998 changed the economic power and future plans of the four ‘little dragons’ in East Asia. The comparative advantage and competitiveness of Hong Kong’s economy is even further constrained by the packed exchange rate with the U.S. dollar. In addition to global competition, rapid growth of major cities on the Mainland, such as Shanghai and Shenzhen, increases the degree of “internal competition” and challenges the likelihood of Hong Kong’s economy rebounding in the near future. The phenomena of a high unemployment rate, sluggish economic growth, and income polarization characterize the economy at present.

On the other hand, these adverse changes in economic life have weakened social cohesion in general and challenged barriers to the social inclusiveness of disadvantaged groups like unemployed workers, less educated women, and new immigrants. While Hong Kong attempts to keep its position as an Asian metropolis amidst all these challenges, it is important to investigate how the upgrading of skills and human resources can contribute to the achievement of this objective. Further investigations are recommended to explore how the suggested inclusive approach of adult education policy can contribute to sustained economic growth and well-being with reference to the historical, cultural, institutional, and political context.

Important debates in the future will concentrate on the conception of inclusiveness in adult education policy. There is a tradition of elitism in the formal education system of Hong
Kong, which has been premised on an assumption that only a minority of the population are capable of high-skilled work and that the education system must be organized in such a way as to be able to identify and cultivate this limited pool of talent. It follows, therefore, that the notion of competitiveness is largely related to the skill upgrading of those in administrative, managerial, or professional positions rather for those in less-skilled positions. Future studies must challenge this assumption and explore how a model of developing human capability for all can be implemented.

If Hong Kong is going to adopt a more inclusive approach for policy formulation, the role of government needs further investigation. This study suggests policies that require a great deal of government intervention, such as developing a qualification framework and creation of jobs. For example, the formulation of a qualification framework is unlikely to be ordered by the education authority; it requires negotiation among professional bodies, employer groups, and the school system. In the case of job creation, collaboration is essential even across the border into Mainland China since the interplay of the two labour markets brings more job opportunities. Hong Kong is well known for its “free enterprise” practices and belief in the myth that market mechanisms will determine almost anything. There is little experience or preparation for interventionist policies that would enable the government to initiate these changes or to identify the networks of stakeholders affected by policy changes. The extent to which government can coordinate and facilitate this development without overreacting, remains a crucial question that would benefit from further study. The theoretical and empirical work reported above, addressing the concerns of globalization, competitiveness, and skill formation can serve as a departure point for future studies of this nature.
In conclusion, the recommendations of this study focus on the need for continuing analysis of adult education and retraining, embedded in lifelong learning strategies and in the context of current and future changes in Hong Kong. However, the above suggestions are not intended to exclude or discount other potential areas for further research and practice based on similar or alternative approaches. Above all, the most important requirement is to enrich the understanding of the impact of adult education and retraining in a broader social and economic context to facilitate informed decision making of public policies by all concerned.
REFERENCES


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Appendix One
Employees Retraining Participants

Background information on ERP participants who completed the courses (April 01 1999 – July 31 1999)

Distribution by sex

<table>
<thead>
<tr>
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<th>Number of participants</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Male</td>
<td>7,039</td>
</tr>
<tr>
<td>Female</td>
<td>19,358</td>
</tr>
<tr>
<td>Total</td>
<td>26,397</td>
</tr>
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</table>

Distribution by age

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
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<th>Female</th>
<th>Percentage</th>
<th>Total</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>468</td>
<td>6.6%</td>
<td>1,040</td>
<td>5.4%</td>
<td>1,508</td>
<td>5.7%</td>
</tr>
<tr>
<td>30 – 39</td>
<td>2,374</td>
<td>33.7%</td>
<td>7,976</td>
<td>41.2%</td>
<td>10,350</td>
<td>39.2%</td>
</tr>
<tr>
<td>40 – 49</td>
<td>2,675</td>
<td>38.0%</td>
<td>8,434</td>
<td>43.6%</td>
<td>11,109</td>
<td>42.1%</td>
</tr>
<tr>
<td>50 – 55</td>
<td>921</td>
<td>13.1%</td>
<td>1,557</td>
<td>8.0%</td>
<td>2,478</td>
<td>9.4%</td>
</tr>
<tr>
<td>Over 55</td>
<td>601</td>
<td>8.5%</td>
<td>351</td>
<td>1.8%</td>
<td>952</td>
<td>3.6%</td>
</tr>
<tr>
<td>Total</td>
<td>7,039</td>
<td>100%</td>
<td>19,358</td>
<td>100%</td>
<td>26,397</td>
<td>100%</td>
</tr>
</tbody>
</table>

Distribution by educational level

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Male</th>
<th>Percentage</th>
<th>Female</th>
<th>Percentage</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal schooling</td>
<td>4</td>
<td>0.1%</td>
<td>19</td>
<td>0.1%</td>
<td>23</td>
<td>0.1%</td>
</tr>
<tr>
<td>Primary 6 and under</td>
<td>47</td>
<td>0.7%</td>
<td>309</td>
<td>1.6%</td>
<td>356</td>
<td>1.3%</td>
</tr>
<tr>
<td>Completed primary 6</td>
<td>716</td>
<td>10.2%</td>
<td>2,358</td>
<td>12.2%</td>
<td>3,074</td>
<td>11.6%</td>
</tr>
<tr>
<td>Completed secondary 3</td>
<td>2,638</td>
<td>37.5%</td>
<td>7,543</td>
<td>39.0%</td>
<td>10,181</td>
<td>38.6%</td>
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<tr>
<td>Completed secondary 5</td>
<td>2,726</td>
<td>38.7%</td>
<td>7,208</td>
<td>37.2%</td>
<td>9,934</td>
<td>37.6%</td>
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<tr>
<td>Completed secondary 7</td>
<td>486</td>
<td>6.9%</td>
<td>1,249</td>
<td>6.5%</td>
<td>1,735</td>
<td>6.6%</td>
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<tr>
<td>Tertiary level</td>
<td>422</td>
<td>6.0%</td>
<td>672</td>
<td>3.5%</td>
<td>1,094</td>
<td>4.1%</td>
</tr>
<tr>
<td>Total</td>
<td>7,039</td>
<td>100%</td>
<td>19,358</td>
<td>100%</td>
<td>26,397</td>
<td>100%</td>
</tr>
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Appendix 1 (Continued)

Distribution by district

<table>
<thead>
<tr>
<th>District</th>
<th>Number of graduate</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td><strong>Hong Kong Island</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central &amp; Western</td>
<td>472</td>
<td>1.8%</td>
</tr>
<tr>
<td>Eastern</td>
<td>842</td>
<td>3.2%</td>
</tr>
<tr>
<td>Southern</td>
<td>224</td>
<td>0.8%</td>
</tr>
<tr>
<td>Wan Chai</td>
<td>1,324</td>
<td>5.0%</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>2,862</td>
<td>10.8%</td>
</tr>
<tr>
<td><strong>Kowloon</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kowloon City</td>
<td>1,179</td>
<td>4.5%</td>
</tr>
<tr>
<td>Kwun Tong</td>
<td>2,006</td>
<td>7.6%</td>
</tr>
<tr>
<td>Shum Shiu Po</td>
<td>1,869</td>
<td>7.1%</td>
</tr>
<tr>
<td>Wong Tai Sin</td>
<td>5,245</td>
<td>19.9%</td>
</tr>
<tr>
<td>Tsim Sha Tsui, Yau Ma Ti &amp; Mong Kok</td>
<td>6,769</td>
<td>25.6%</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>17,068</td>
<td>64.7%</td>
</tr>
<tr>
<td><strong>New Territories and outlying Islands</strong></td>
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<td></td>
</tr>
<tr>
<td>New Territories North</td>
<td>143</td>
<td>0.5%</td>
</tr>
<tr>
<td>Shatin</td>
<td>816</td>
<td>3.1%</td>
</tr>
<tr>
<td>Tai Po</td>
<td>2,026</td>
<td>7.7%</td>
</tr>
<tr>
<td>Tsuen Wan and Tsing Yi</td>
<td>1,018</td>
<td>3.9%</td>
</tr>
<tr>
<td>Tuen Mun</td>
<td>1,983</td>
<td>7.5%</td>
</tr>
<tr>
<td>Yuen Long</td>
<td>414</td>
<td>1.6%</td>
</tr>
<tr>
<td>Outlying Islands</td>
<td>67</td>
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</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>6,467</td>
<td>24.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26,397</td>
<td>100%</td>
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</table>

Distribution by previous trade

<table>
<thead>
<tr>
<th>Previous trade</th>
<th>Male</th>
<th>Percentage</th>
<th>Female</th>
<th>Percentage</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garment</td>
<td>560</td>
<td>8.0%</td>
<td>3,569</td>
<td>18.4%</td>
<td>4,129</td>
<td>15.6%</td>
</tr>
<tr>
<td>Electronic Industry</td>
<td>262</td>
<td>3.7%</td>
<td>1,005</td>
<td>5.2%</td>
<td>1,267</td>
<td>4.8%</td>
</tr>
<tr>
<td>Other Manufacturing</td>
<td>1,590</td>
<td>22.6%</td>
<td>2,331</td>
<td>12.0%</td>
<td>3,921</td>
<td>14.9%</td>
</tr>
<tr>
<td>Service</td>
<td>2,406</td>
<td>34.2%</td>
<td>7,578</td>
<td>39.1%</td>
<td>9,984</td>
<td>37.8%</td>
</tr>
<tr>
<td>Other</td>
<td>2,221</td>
<td>31.6%</td>
<td>4,875</td>
<td>25.2%</td>
<td>7,096</td>
<td>26.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,039</td>
<td>100%</td>
<td>19,358</td>
<td>100%</td>
<td>26,397</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Employees Retraining Board, 1999, Hong Kong
Appendix Two
Retraining courses funded by ERB

I. Ordinary Retraining Programs

A. Core Course
   1. Core Course on Job Search Skills

B. Job-specific Skills Courses
   2. Buildings Caretaker
   3. Receptionist & Office Assistant
   4. General Clerk & Chinese Computer Application
   5. Decorative Painting
   6. Decorative Joinery
   7. Construction Purchaser & storekeeper
   8. Junior Account Clerk
   9. Chinese Bookkeeping
  10. Shipping & Documentation of Cloth Industry
  11. Security Guard Training
  12. Personal Care Workers & Janitorial Workers for the Elderly and Attention Home Training Seminar
  13. Personal Care Workers for the Elderly Care and Attention Home Training Course
  14. Janitorial Workers for the Elderly Care and Attention Home Training Course
  15. Estate Management Trainee Training
  16. Basic Clerical Training
  17. Office Assistant Training
  18. Course on Import & Export Procedure & Documentation Foundation
  19. Course in Retail Service
  20. Introduction to Desktop Publishing
  22. Training on Basic Office Skills
  23. Course on Self-employ / Establishment and Management for Small Business
  24. Estate Attendant Management Course
  25. Tutor Training for Primary School
  26. Housekeeping Training
  27. Caretaker Training
  28. Babysitting Skill Training
Appendix 2 (Continued)

29. Interviewing Skills Training for Retrainees for JMP
30. Chinese Domestic Service / Domestic Helper
31. Carpentry Assistant Training for Home Decoration
32. Plumber Assistant Training for Home Decoration
33. Painter Assistant Training for Home Decoration
34. Certificate Training Course for Health Care Assistant
35. Security Course for Beginner
36. Computer Application & Clerical Training (including follow-up training after employed)
37. Travel Assistant Training
38. Site Administrator Training
39. Assistant Electrician Training Course
40. Application on Elementary Chinese Bookkeeping in a Business
41. Bamboo Scaffolders Training
42. Janitor for School / Social Service
43. Semi-skilled Training for Mechanical Workers
44. Semi-skilled Training for Electrical Workers
45. Basic Food Hygiene Training
46. Property Management Training
47. Apparel Import / Export Documentation
48. Care Workers Training
49. Estate Management & Security Guard Training (Job-oriented Intensive Training Course)
50. Accounts Clerk Training Course (Job-oriented Intensive Training Course)
51. LCCI Bookkeeping (2nd level) Training Course
52. Junior Account Clerk & Computer Applications
53. Bookkeeping (Part 2 for Public Exam)
54. Construction Security Guard
55. Certificate of Skill Training (Service Industries)
56. Office Clerk Training (Job-orientated Intensive Training)
57. Car Park Attendant training Course
58. Building Service Craftsman Training
59. Auto CAD Training for existing draughtsman
Appendix 2 (Continued)
C. General Skill Courses
   60. Office Putonghua
   61. Office English
   62. Practical English
   63. Practical Putonghua
   64. Putonghua for Retail Business
   65. Introduction to Typing
   66. Chinese Computer Application
   67. Computer Application Software
   68. Computer Data Processing Operation Training
   69. Introduction to WinWord
   70. Sign Language Training for Supervisors
   71. English for Retail Industry
   72. Commercial Putonghua Knowledge
   73. Vocational English for Chinese Restaurant Employees
   74. Basic Commercial Putonghua (Advanced)
   75. Introduction to Commercial English Knowledge (Intermediate)
   76. Introduction to Commercial English Knowledge (Advanced)
   77. Chinese Microsoft Word
   78. Chinese Microsoft Excel
   79. Word Processing in Pitman – Basic Level

D. Tailor-made Courses for Employers
   80. Integrated Customer Service Course
   81. Building Attendant and Security Guard Training
   82. Cleaning Worker Training for Aircraft
   83. Junior Kitchen Helper Training
   84. Car Detailing & Protection Services
   85. Car Park Attendant Training
   86. Trade Assistant
   87. Tunnel Boring Machine Operatives Trainees
   88. Apparatus Installation & Blockwiring Implementation

Source: Employees Retraining Board 98–99 Annual Report, Hong Kong
Appendix Three
Questionnaire

Program code: ______  Project case number: ______

Please tick the appropriate boxes.

**Part A Personal Information (to be completed by the trainee)**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>Sex</td>
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</tr>
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</tr>
<tr>
<td></td>
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<td>Male</td>
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<tr>
<td>2</td>
<td>Age</td>
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<tr>
<td></td>
<td>1</td>
<td>Below 30</td>
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<td></td>
<td>2</td>
<td>30 – 34</td>
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<td>35 – 39</td>
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<td></td>
<td>4</td>
<td>40 – 44</td>
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<td></td>
<td>5</td>
<td>45 – 49</td>
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<tr>
<td></td>
<td>6</td>
<td>50 or above</td>
</tr>
<tr>
<td>3</td>
<td>Level of education/years of schooling (6 years = primary; 9 years = Secondary 3)</td>
<td>Coding</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Less than 6 years’ schooling</td>
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<tr>
<td></td>
<td>2</td>
<td>Primary education</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Junior secondary education (Secondary 3)</td>
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<td>Secondary education (Secondary 5)</td>
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<td>Post-secondary education or above</td>
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<td>6</td>
<td>Others: (please specify)</td>
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<td>Have you ever studied in Hong Kong?</td>
<td>Coding</td>
</tr>
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<td>Yes</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Number of years engaged in paid work</td>
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</tr>
<tr>
<td></td>
<td>1</td>
<td>Less than 1 year</td>
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<tr>
<td></td>
<td>2</td>
<td>1 – 2 year(s)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3 – 4 years</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5 – 6 years</td>
</tr>
<tr>
<td>6</td>
<td>The type of housing you are currently living in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Private</td>
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<tr>
<td>Monthly family income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>1 □ Less than $4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 □ $4,000 - $7,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 □ $8,000 - $11,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 □ $12,000 - $16,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 □ $17,000 - $21,999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 □ $22,000 or above</td>
<td></td>
<td></td>
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</table>

**Part B Job Information Prior to Retraining (to be completed by the trainee)**

<table>
<thead>
<tr>
<th>Industry engaged</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 □ Primary production/mining/energy/construction</td>
<td></td>
</tr>
<tr>
<td>2 □ Textile/Garment</td>
<td></td>
</tr>
<tr>
<td>3 □ Other manufacturing</td>
<td></td>
</tr>
<tr>
<td>4 □ Import/export</td>
<td></td>
</tr>
<tr>
<td>5 □ Wholesale/retail</td>
<td></td>
</tr>
<tr>
<td>6 □ Hotel/catering</td>
<td></td>
</tr>
<tr>
<td>7 □ Transportation/storage/communications</td>
<td></td>
</tr>
<tr>
<td>8 □ Finance/insurance/property management/business services</td>
<td></td>
</tr>
<tr>
<td>9 □ Community/social/personal services</td>
<td></td>
</tr>
<tr>
<td>10 □ Others: (please specify)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 □ Professional / technical</td>
<td></td>
</tr>
<tr>
<td>2 □ Executive / management</td>
<td></td>
</tr>
<tr>
<td>3 □ Clerical</td>
<td></td>
</tr>
<tr>
<td>4 □ Service</td>
<td></td>
</tr>
<tr>
<td>5 □ Sales</td>
<td></td>
</tr>
<tr>
<td>6 □ Machine operator / manufacturing</td>
<td></td>
</tr>
<tr>
<td>7 □ Others: (please specify)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job status</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 □ Full-time</td>
<td></td>
</tr>
<tr>
<td>2 □ Part-time</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 □ Less than $2,000</td>
<td></td>
</tr>
<tr>
<td>2 □ $2,000 - $3,999</td>
<td></td>
</tr>
<tr>
<td>3 □ $4,000 - $4,999</td>
<td></td>
</tr>
<tr>
<td>4 □ $5,000 - $5,999</td>
<td></td>
</tr>
<tr>
<td>5 □ $6,000 - $6,999</td>
<td></td>
</tr>
<tr>
<td>6 □ $7,000 - $7,999</td>
<td></td>
</tr>
<tr>
<td>7 □ $8,000 - $8,999</td>
<td></td>
</tr>
<tr>
<td>8 □ $9,000 - $9,999</td>
<td></td>
</tr>
<tr>
<td>9 □ $10,000 or above</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Firm Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 □ Public sector</td>
<td></td>
</tr>
<tr>
<td>2 □ Non-profit-making organization</td>
<td></td>
</tr>
<tr>
<td>3 □ Private sector</td>
<td></td>
</tr>
<tr>
<td>4 □ Self-employed</td>
<td></td>
</tr>
</tbody>
</table>
13 Firm Size (in terms of number of employees)

1 □ Below 10
2 □ 11 – 20
3 □ 21 – 30
4 □ 31 – 40
5 □ 41 – 50
6 □ 51 – 60
7 □ 61 – 100
8 □ 101 – 200
9 □ 201 – 300
10 □ 301 – 400
11 □ 401 – 500
12 □ 501 or above

14 Have you ever participated in any adult education courses?

1 □ Yes
2 □ No

If your answer is ‘yes’, please complete #14.1.

14.1 How many courses have you taken in the past five years?

1 □ 1 – 3
2 □ 4 – 6
3 □ 7 – 9
4 □ 10 or above

Part C Information at the Start of Retraining (to be completed by the trainee)

15 Have you lived in Hong Kong for at least seven years?

1 □ Yes
2 □ No

16 Did you join the retraining program with your ex-colleague(s)?

1 □ Yes
2 □ No

17 The retraining program area that you are currently participating in

1 □ Job access orientation
2 □ Vocational skill training

Part D Trainee's Job Information Obtained Six Months after Retraining
(to be completed by the placement officer / center administrator)

18 The level of the vocational skill training that the trainee undertook

1 □ Elementary
2 □ Intermediate
3 □ Advanced

19 Where did the trainee obtain the job placement service?

1 □ By himself/herself
2 □ Training body
3 □ Union
4 □ Labor Department
5 □ Others: (please specify)
20 The number of months to get reemployment after completion of retraining
1 ☐ 1 – 3 month(s)
2 ☐ 4 – 6 months
3 ☐ 7 – 9 months
4 ☐ 10 – 11 months
5 ☐ 12 months or above

21 New industry engaged
1 ☐ Primary production/mining/energy/construction
2 ☐ Textile/Garment
3 ☐ Other manufacturing
4 ☐ Import/export
5 ☐ Wholesale/retail
6 ☐ Hotel/catering
7 ☐ Transportation/storage/communications
8 ☐ Finance/insurance/property management/business services
9 ☐ Community/social/personal services
10 ☐ Others: (please specify)

22 Occupation
1 ☐ Professional / technical
2 ☐ Executive / management
3 ☐ Clerical
4 ☐ Service
5 ☐ Sales
6 ☐ Machine operator/manufacturing
7 ☐ Others: (please specify)

23 Did the field of retraining match with the field of work?
1 ☐ Yes
2 ☐ No

24 Job status
1 ☐ Full-time
2 ☐ Part-time

25 Monthly income
1 ☐ Less than $2,000 6 ☐ $7,000 - $7,999
2 ☐ $2,000 - $3,999 7 ☐ $8,000 - $8,999
3 ☐ $4,000 - $4,999 8 ☐ $9,000 - $9,999
4 ☐ $5,000 - $5,999 9 ☐ $10,000 or above
5 ☐ $6,000 - $6,999

26 Firm Size (in terms of number of employees)
1 ☐ Below 10 7 ☐ 61 – 100
2 ☐ 11 – 20 8 ☐ 101 – 200
3 ☐ 21 – 30 9 ☐ 201 – 300
4 ☐ 31 – 40 10 ☐ 301 – 400
5 ☐ 41 – 50 11 ☐ 401 – 500
6 ☐ 51 – 60 12 ☐ 501 or above
27 Will the trainee participate in continuing education?
   1 □ Yes
   2 □ No

28 Will there be any training subsidy offered by the employer?
   1 □ Yes
   2 □ No

This is the end of the questionnaire. Thank you for your cooperation.
Appendix Four
Core Questions for Individual Interviews (Learners)

1. Do you find the retraining program useful?
   1a) Does it match your job needs?

2. Did you join the retraining program (this part-time course) with your friends?
   2a) What kinds of support have you developed among yourselves?

3. Do you wish to have further training?
   3a) If so, could you suggest what level/type/content of the training you prefer?

4. Will you get a job after completing the course?
   4a) Would you prefer a full-time or part-time job?

5. Have you currently got a job?
   5a) (If the answer is “Yes”) What is your present job? How did you find it? Can you describe the support you received from the placement officer?

6. How long did it take you to get this job?
   6a) Why do you think it took that long?

7. Did you encounter any difficulties during the process of finding a job?
   7a) If so, what kind of difficulties were they? How did you deal with them?

8. Did your previous work experience have an impact on your re-employment?

9. Have you experienced an economic downturn/recession before?
   9a) If so, do you think it has an impact on finding jobs?

10. Have you participated in any continuing education (before/during/after the retraining program)?
    10a) Why (and/or) why not? How regularly do you participate?

11. Which is your favorite course?

12. Do you find that what you have gained from continuing education is useful to your work?

13. How many workers are in your company?
    13a) Does your employer support continuing education?
    13b) If so, what form does the support take?

14. Do you enjoy your working life in general?
15. What is your view of lifelong learning?

**Note:** *Questions 5, 6 and 13 do not apply to those interviewees who are unemployed at the time of being interviewed.*
Appendix Five
Core Questions for Focused Group Interview (Administrators)

1. What is your view on the employee retraining policy in Hong Kong?

2. What are the difficulties that you have encountered in running the Employees Retraining Program so far?

3. What is the match between the program provision and the employers’ expectation?

4. Do you think the incentives/support measures are enough for the providers to improve their program provision?

5. Do you think the incentives/support measures are enough for the target groups (potential trainees)?

6. What do you think about the role of Government in job creation?

7. Do you agree that the Government should intervene in the labor market?

8. To what extent does the education system account for unemployment issues?
   8a) Do you have any suggestions for improving the education system as a whole?

9. What is your view on how to improve the retraining policy measures?
Appendix Six
Core Questions for Focused Group Interview (Placement Officers)

1 What are the major obstacles for trainees when they seek jobs?

2 What are the employers' attitudes towards the trainees?

3 What is the match between the program and the employers' requirements?

4 Have you encountered any difficulties in your placement work?
   4a) If so, what are they?

5 What is your view on the Employees Retraining Program?

6 What are your suggestions for improving the Program?

7 What are the trainees' attitudes towards continuing education?
   7a) Can they access the courses they want to take?
   7b) Do they need support services beyond what you can provide?

8 Do employers support their employees' desire for continuing education?
   8a) If so, in what form?
Appendix Seven
Core Questions for Employer Interviews

1. What is your view of the Employees Retraining Program?

2. Have you ever recruited the trainees of the Program?
   2a) Why and/or why not?

3. What are the selection criteria of your company for ERP trainees?

4. What is your view on lifelong learning?

5. What is your company’s policy on staff development?
Appendix Eight
Population and Labour Force Projections

Population and labor force projections to 2005

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>1999</th>
<th>2000</th>
<th>2005</th>
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<tbody>
<tr>
<td>Total population</td>
<td>6 484 300</td>
<td>6 720 700</td>
<td>6 800 700</td>
<td>7 171 500</td>
</tr>
<tr>
<td>Population of working age#(No.)</td>
<td>5 162 200</td>
<td>5 491 900</td>
<td>5 595 300</td>
<td>6 038 300</td>
</tr>
<tr>
<td>Labour force participation rate (LFPR) (%)</td>
<td>61.6%</td>
<td>60.9%</td>
<td>60.9%</td>
<td>60.8%</td>
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<tr>
<td>- Male</td>
<td>75.8%</td>
<td>73.8%</td>
<td>74.2%</td>
<td>73.6%</td>
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<tr>
<td>- Female</td>
<td>47.4%</td>
<td>48.7%</td>
<td>48.4%</td>
<td>48.8%</td>
</tr>
<tr>
<td>Total labour force (No.)</td>
<td>3 181 700</td>
<td>3 342 500</td>
<td>3 406 300</td>
<td>3 670 800</td>
</tr>
<tr>
<td>- Male</td>
<td>1 943 500</td>
<td>1 963 700</td>
<td>2 007 100</td>
<td>2 146 300</td>
</tr>
<tr>
<td>- Female</td>
<td>1 238 300</td>
<td>1 378 800</td>
<td>1 399 200</td>
<td>1 524 400</td>
</tr>
<tr>
<td>Local labour force* (No.)</td>
<td>2 956 400</td>
<td>3 105 100</td>
<td>3 151 400</td>
<td>3 375 500</td>
</tr>
<tr>
<td>- Male</td>
<td>1 885 000</td>
<td>1 919 900</td>
<td>1 955 400</td>
<td>2 085 100</td>
</tr>
<tr>
<td>- Female</td>
<td>1 071 400</td>
<td>1 185 300</td>
<td>1 195 900</td>
<td>1 290 300</td>
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<tr>
<td>Standardised LFPR® (%)</td>
<td>N.A.</td>
<td>60.9%</td>
<td>61.0%</td>
<td>61.6%</td>
</tr>
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</table>

Notes: Figures may not add up exactly to the total due to rounding.

(#) Referring to the non-institutional resident population aged 15 and above.

(+) Total labour force excluding foreign domestic helpers and Hong Kong residents working and employed by businesses outside Hong Kong, as an indicator of local manpower supply.

(@) Standardised LFPR has been computed using the sex-age distribution of the 1999 non-institutional resident population aged 15 and above as standard.

Source: 1999-based labour force projection, Census and Statistics Department.
Appendix Nine
Educational Attainment

Educational attainment of population aged 15 and over by sex

<table>
<thead>
<tr>
<th>Sex/Educational attainment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
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</tr>
<tr>
<td>No schooling/kindergarten</td>
<td>4.5</td>
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<tr>
<td>Primary</td>
<td>23.8</td>
</tr>
<tr>
<td>Secondary</td>
<td>48.4</td>
</tr>
<tr>
<td>Matriculation</td>
<td>4.0</td>
</tr>
<tr>
<td>Post-secondary (including technical/vocational)</td>
<td>7.4</td>
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<tr>
<td>Degree course</td>
<td>12.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

| **Female**                                          |            |
| No schooling/kindergarten                           | 13.3       |
| Primary                                             | 22.6       |
| Secondary                                           | 44.2       |
| Matriculation                                       | 4.1        |
| Post-secondary (including technical/vocational)     | 7.1        |
| Degree course                                       | 8.6        |
| Total                                               | 100.0      |

| **Overall**                                         |            |
| No schooling/kindergarten                           | 8.9        |
| Primary                                             | 23.2       |
| Secondary                                           | 46.3       |
| Matriculation                                       | 4.0        |
| Post-secondary (including technical/vocational)     | 7.3        |
| Degree course                                       | 10.3       |
| Total                                               | 100.0      |

Source: Census and Statistics Department, Hong Kong, 1999
Appendix Ten
Average Wage Rates

Average wage rates by industry sector and sex for June (1999)

<table>
<thead>
<tr>
<th>Industry sector</th>
<th>Supervisory, technical, clerical and miscellaneous non-production workers</th>
<th>All selected occupations</th>
<th>Average monthly salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Overall</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>13,037</td>
<td>10,875</td>
<td>11,957</td>
</tr>
<tr>
<td>Wholesale, retail and import/export trade, restaurants and hotels</td>
<td>12,801</td>
<td>10,953</td>
<td>11,827</td>
</tr>
<tr>
<td>Transport services</td>
<td>14,375</td>
<td>11,806</td>
<td>13,373</td>
</tr>
<tr>
<td>Financing, insurance, real estate and business services</td>
<td>10,892</td>
<td>13,558</td>
<td>11,934</td>
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<tr>
<td>Personal services</td>
<td>7,496</td>
<td>5,526</td>
<td>6,311</td>
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<tr>
<td>All selected industries (1)</td>
<td>12,189</td>
<td>10,954</td>
<td>11,584</td>
</tr>
</tbody>
</table>

Notes: (1) Figures for ‘All selected industries’ refer to all industries covered in the wage enquiry of the Labor Earnings Survey, including the electricity and gas sector.

Source: Wages and Labor Costs Statistics Section, Census and Statistics Department, Hong Kong.
Appendix Eleven
Household Income

Domestic households by monthly household income (1999)

<table>
<thead>
<tr>
<th>Monthly household income (HK$)</th>
<th>No. ('000)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 4,000</td>
<td>163.1</td>
<td>7.9</td>
</tr>
<tr>
<td>4,000 - 5,999</td>
<td>94.4</td>
<td>4.6</td>
</tr>
<tr>
<td>6,000 - 7,999</td>
<td>107.9</td>
<td>5.2</td>
</tr>
<tr>
<td>8,000 - 9,999</td>
<td>147.3</td>
<td>7.2</td>
</tr>
<tr>
<td>10,000 - 14,999</td>
<td>356.3</td>
<td>17.3</td>
</tr>
<tr>
<td>15,000 - 19,999</td>
<td>288.4</td>
<td>14.0</td>
</tr>
<tr>
<td>20,000 - 24,999</td>
<td>230.8</td>
<td>11.2</td>
</tr>
<tr>
<td>25,000 - 29,999</td>
<td>151.2</td>
<td>7.3</td>
</tr>
<tr>
<td>30,000 - 39,999</td>
<td>208.0</td>
<td>10.1</td>
</tr>
<tr>
<td>40,000 - 49,999</td>
<td>114.0</td>
<td>5.5</td>
</tr>
<tr>
<td>≥ 50,000</td>
<td>198.7</td>
<td>9.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2060.1</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Median (HK$)**  
17,000

Source: Census and Statistics Department, Hong Kong
Appendix Twelve
Levels of Formal Education

Correlations Matrix: Levels of Formal Education

<table>
<thead>
<tr>
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**Correlation is significant at the 0.01 level (2-tailed).**