



Section 4.5

Education-Job Requirement Matching

Work and Lifelong Learning Resource Base (WALLRB)
Materials for Teaching, Research and Policy Making

Principal Investigator: **David W. Livingstone**

Team Members: **M. Raykov, K. Pollock, F. Antonelli**

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1. Adams, T., & McQuillan, K. (2000). New jobs, new workers? Organizational restructuring and management hiring decisions. *Relations Industrielles/Industrial Relations*, 55(3), 391-413.

Recent studies of work have argued that organizational restructuring & the introduction of technology are altering the nature & experience of work. In this paper, we examine whether recent change has affected managerial perceptions of the characteristics & abilities required of workers. Drawing on interviews with human resource managers in three industries (chemicals production, transportation equipment manufacturing, health services) in southwestern Ontario, we conclude that management across these industries is indeed seeking a "new" kind of worker, & is placing new demands on their workers. Implications of these changes for employment & for workers are discussed.

KEY WORDS: Employment Changes; Work Skills; Job Requirements; Occupational Qualifications; Ontario; Personnel Management; Personnel Policy; Manufacturing Industries; Chemical Industry; Health Care Services.

2. Andino, G. (2005). More education for lower-income jobs. *Revista Argentina de Sociología*, 3(4), 133-154.

Labour and income gap among those who possess different education levels has grown steadily. From the 1980's, the new productive pattern seems reluctant to absorb a work force that is not highly qualified. Traditional Fordist workers have been replaced by employees who must have more autonomy, responsibility, functional variety; a continuous labour qualification, implying an increasing education for work, as a result of their formal education, their non-formal training; the knowledge obtained during their working career. In situations of high unemployment and poverty, as in Argentina, the characteristics described face a reality where workers need to acquire more qualifications; find new employment; find young people who are looking for their first job, can't find it; or, women in precarious labour condition; with lower salaries than their male partners, even with the same job, combine their own situations with their belonging to a layer of vulnerability or social exclusion. Therefore, coming from households that suffer from structural scarcities or low incomes, or both, feel unable to gain a suitable education.

KEY WORDS: Education Work Relationship; Employment Changes; Social Closure; Labor Market Segmentation; Argentina; Employability.

3. Aronowitz, S. (2004). Against schooling: Education and social class. *Social Text*, 22(2-79), 13-35.

After discussing the idea that the function of public education in the US is to prepare students to meet the "industrial & technological imperatives" of the modern workplace, the contemporary crisis of education - particularly in terms of the view that it is the key vehicle for achieving class mobility - is explored. Arguments that improving access to educational opportunities will help overcome class-based inequalities are challenged, suggesting that the structure of schooling itself embodies the class system of the larger society. The equation of access to schooling with greater opportunities for working-class children is refuted, as is the argument that increased enrollments in higher education signify an increase in students with better qualifications for professional or managerial jobs. Rather, it is suggested that mass higher education effectively masks unemployment & underemployment. Pierre Bourdieu's contention that "schools reinforce class relations by reinforcing rather than reducing class-based differential access to social & cultural

capital" is supported. The idea of the labor & radical movements as educational sites is proposed & the working-class intellectual that emerges from these sites is characterized. The problem of academic "standards" as the primary focus of educational policy is addressed, & some suggestions for reforming schools - which today serve primarily as "credential mills" & "institutions of control" - are offered.

KEY WORDS: Educational Inequality; Education Work Relationship; Educational Reform; Schools; Social Reproduction; Social Inequality; Educational Opportunities; Educational Policy; Educational Mobility.

4. Barton, P. (2000). What jobs require: Literacy, education, and training, 1940 - 2006. Princeton: Educational Testing Service.

This report assembles the best information available on past and future trends in employment and the education requirements of jobs in the post-World War II period, focusing on data for 1986 and 1996 and projections to 2006. The report's first section explains what is known from the 1992 National Adult Literacy Study, which measured prose, document, and quantitative literacy of more than 26,000 adults. The discussion of the literacy levels in terms of real-life situations is background for the second section, "Literacy and Occupations." This section presents employment trends in terms of the literacy requirements of jobs and examines the most rapidly growing and declining occupations, the occupations with the highest and lowest literacy requirements, and the average for all employment for those years. Information is gathered from the Bureau of Labor Statistics, the National Adult Literacy Study, and the Position Analysis Questionnaire, a job analysis program that has been applied to 2,200 jobs. The third section discusses employment and training requirements of occupations. The fourth section traces trends from World War II to the present, and the fifth section explains what the analysis means in the broad context of the operations of the labor market. The final section, "The Bottom Line," shows the long-term bias toward higher literacy requirements. Appendix A shows prose, document, and quantitative literacy for 1986, 1996, and projections for 2006.

KEY WORDS: Training; Education; Work and Learning.

5. Batenburg, R., & De Witte, M. (2001). Underemployment in the Netherlands: How the Dutch 'poldermodel' failed to close the education-jobs gap. *Employment and Society*, 15(1), 75-101.

This paper describes the underemployment situation in the Netherlands between 1973 and 1995. It shows, through different methods that the "education-jobs gap" has widened increasingly. The return to credentials of Dutch employees has diminished for every educational category within the total labour population, an increasing share of employees can be considered as underemployed and deal with credential inflation. At the lower levels of education men have suffered from credential inflation more than women. At the higher levels of education it is the reverse. It also appears that young people deal with a "waiting-room effect": they enter the labour market at relatively low skill levels, given their educational level and gender. A further breakdown by educational specialisation shows that employees with an educational background in health care or technical studies have suffered relatively more from credential inflation compared to those with a commercial education. The paper concludes by stating that in spite of much rhetoric about the skill deficiencies of the current workforce, the lack of decent jobs has caused basic allocation problems at the Dutch labour market. From a human resources perspective, the growing wastage of employees' potential should not be underestimated or dismissed. It argues that an effective allocation of knowledge and skills to occupations will be the basic tenet of labour market policy and new forms of work organisation.

KEY WORDS: Underemployment; Netherlands; Labor Market; Education Work Relationship.

6. Belfield, C. R., & Harris, R. D. F. (2002). How well do theories of job matching explain variations in job satisfaction across education levels? Evidence for UK graduates. *Applied Economics*, 34(5), 535-548.

Using ordered probit estimation technique this paper examines the job satisfaction of recent UK graduates. Focusing primarily on explaining job satisfaction in terms of individuals matching to jobs, with the match depending on reservation returns, information sets and job offer rates. Only limited support can be found for the argument that job matching explains higher job satisfaction. In addition, stylizing graduates as a peer group, who form satisfaction levels based on their rankings relative to each other we examine whether or not education quality, which raises peer group status and increases the job offer rate, is systematically related to job satisfaction. The results broadly support the hypothesis that job satisfaction is neutral across graduates of different education qualities. However, our specification tests indicate that ordered probit estimation may not be fully appropriate for identifying the characteristics of those with high job satisfaction.

KEY WORDS: Labor-Market; Earnings; Unemployment; Unions; Wages; Differentials; Unhappiness; Inequality; Happiness; Income.

7. Belzil, C. (2001). Unemployment insurance and subsequent job duration: Job matching versus unobserved heterogeneity. *Journal of Applied Econometrics*, 16(5), 619-636.

This study examines the relationship between unemployment insurance benefit duration, unemployment duration and job duration. Results indicate increasing benefit duration (1.0 to 1.5 days) with unemployment duration but much smaller raise in job duration.

KEY WORDS: Unemployment; Unemployment Insurance; Benefits; Unemployment Duration; Job Duration.

8. Berg, I. (2001). Employment relations and work structures in the United States: From Huddersfield to "industrial democracy" and back. In I. E. Berg & A. L. Kalleberg (Eds.), *Sourcebook of labor markets: Evolving structures and processes* (pp. 165-186). New York: Kluwer Academic.

A number of gross contextual developments regarding employment relations & work structures in the US are examined. Macro- & microcosmic developments that have influenced both the structure & function of labor markets are considered. It is argued that though the prospects for an economic downturn have remained unconvincing, this can be attributed to the fact that the US & Western Europe have enjoyed a decade-long economic boom. Unfortunately, this boom is being undermined by the concept of "industrial democracy." Meanwhile, economists & labor market scholars have resorted to mistaking a labor market shift for actual structural change.

KEY WORDS: Labor Relations; Labor Market; Economic Change; Economic Structure; Industrial Democracy; Work Organization; United States of America.

9. Berg, I. (2003). Education and jobs: The great training robbery. [Unabridged republication of 1970 edition with a new introduction]. Clinton Corners, NY: Percheron Press/Elliot Werner.

This book critically examines the by now well-known economic thesis that investment in education shows a rate of return that compares favorably with other forms of capital investment. While this is true as a statistical generalisation, what this book argues is whether it should be true. The fact that most employers have been talked into rewarding more education with higher salaries does not necessarily mean that education should be so rewarded. In fact it is by now very well-known that education does little to provide many of its recipients with any skills, abilities or knowledge that are at all likely to be of any use in employment. Most employers accept that a graduate will be almost totally useless to them until the job itself has taught him what he needs to know. Why then do they pay more for useless qualifications? The honest answer of course is that they are buying what they see as prestige. Berg punctures this assertion by a whole series of studies making up the body of his book which show that in fact the employees who are actually seen as most productive and who are in fact promoted on merit generally turn out to be not the better educated ones but rather in some cases the less educated ones. Education is as often a negative predictor of a man's worth to his employer as it is a positive one. This was shown to be true for technical staff, unskilled staff and white-collar staff. It was even true of professionals. Education was quite evidently not worth the extra money it cost.

KEY WORDS: Occupations; Academic Requirements; United States; Surveys; Education; Economic Aspects; Labor Turnover; Education and Employment; Labour Economics; Employee Morale; Employees; Vocational Education.

10. Billett, S. (2001). Learning throughout working life: Interdependencies at work. *Studies in Continuing Education*, 23(1), 19-35.

Learning throughout working life results from everyday thinking and acting, shaped by work practices. The quality of learning depends on the kinds of activities and interdependencies available. Individuals' ability to maintain vocational practice is shaped by their opportunities for engagement and interaction.

KEY WORDS: Individual Development; Interpersonal Relationship; Job Skills; Lifelong Learning; Skill Development; Work Environment.

11. Bills, D. B. (2003). Credentials, signals, and screens: Explaining the relationship between schooling and job assignment. *Review of Educational Research*, 73(4), 441-469.

The empirical relationship between educational attainment and credentials with socioeconomic attainment is well established, but why this relationship arises remains in doubt. The author of this article discusses seven types of middle-range theories meant to explain the relationship: human capital, screening (including filtering), signaling, control, cultural capital, institutional, and credentialist theories. In each, the central causal mechanism concerns how employers and job seekers acquire and use labor market information. The author argues that occupational status attainment and wage determination models are not adequate to explain the mechanisms underlying the process whereby the highly schooled become the highly placed in job hierarchies. He indicates the implications of transformations of the American labor market for further assessment of the relationship between educational credentials and job assignment.

KEY WORDS: Educational Screening; Employers; Job Matching; Labor Markets; Socioeconomic Attainment; Human-Capital Theory; Labor-Market; Educational Credentials; United-States; Strong Version; Hypothesis; Information; Employers; Returns; Attainment.

12. Borghans, L., & de Grip, A. (2000). *The overeducated worker? The economics of skill utilization*. Cheltenham: Edward Elgar 2000.

This book deals with the relation between overeducation and the business cycle. In line with the state of the art, it uses much cruder approaches to the issue than would be needed for a full assessment of the returns to specified (and possibly useless) education at the level of a single individual. However, it explores several new approximations. It has eleven essays, divided over an Introduction and three sections: Underutilization or Upgrading?, Causes and Consequences of underutilization. In the first section, Edward Wolff opens with an illuminating analysis of aggregate skill trends in the US. The second section has two theory papers and two empirical analyses. The third section, on consequences of underutilization, has three papers.

KEY WORDS: Unskilled Labor; Supply and Demand; Skilled labor; Labor Supply; Effect of Education on Underemployment.

13. Brkich, M., Jeffs, D., & Carless, S. A. (2002). A global self-report measure of person-job fit. *European Journal of Psychological Assessment*, 18(1), 43-51.

This study reports the development of a short, global measure of person-job fit (P-J fit). The P-J Fit scale provides an assessment of the degree to which an individual's knowledge, skills, abilities, needs and values match job requirements. After a pilot study, the scale was tested with two samples: Sample 1 consisted of 308 professionals from three occupational groups and Sample 2 consisted of 174 adults working in call centres and related administrative areas. Exploratory and confirmatory factor analyses indicated that the nine items assess a single, global construct of P-J fit. Construct and criterion-related validity were demonstrated by correlating the scale with empowerment, job satisfaction and organizational commitment.

KEY WORDS: Employee Characteristics; Job Characteristics; Person-Environment Fit; Rating Scales; Self Report; Test Construction; Test Validity.

14. Brown, P., Hesketh, A., & Williams, S. (2003). Employability in a knowledge-driven economy. *Journal of Education and Work*, 16(2), 107-126.

Examines employability through the lenses of consensus theory and conflict theory. Expands the latter into positional conflict theory, which explains how the market for credentials is rigged and how individuals are ranked in it. Argues that even employable people may fail to find jobs because of positional competition in the knowledge-driven economy.

KEY WORDS: Knowledge Economy; Education and Employment; Work and Learning.

15. Brynin, M. (2002). Overqualification in employment. *Work, Employment and Society*, 16(4), 637-654.

There is widespread evidence that many workers have higher qualifications than are needed for their job. The finding of a substantial degree of overqualification should not be the case if, as has often been argued, there has been a consistent upgrading of the skills of the labour force as a result of technological change. It might also be argued that even if overqualification exists, this is a result of a new emphasis on flexible employment & therefore increased labour-market uncertainty: people start careers at a level below the

traditional start, & so are initially overqualified. In this case overqualification is only a temporary, life-course phenomenon. Evidence is presented here using BHPS & LFS data to suggest, first, that an upgrading of labour does not adequately describe recent change in employment &, second, that overqualification is not a temporary factor resulting from changed employment practices. We should therefore view overqualification as having some sort of structural causation. One tentatively given explanation is that the social demand for education is causing a bunching of qualifications at the higher levels, which means that employers cannot easily discriminate between different apparent skill levels. As a result they reduce the rewards for such skills.

KEY WORDS: Occupational Qualifications; Underemployment; Technological Change; Employment Changes; Labor Market; Education Work Relationship; Occupational Status.

16. Carnevale, A. P., & Desrochers, D. M. (2002). *The missing middle: Aligning education and the knowledge economy*. Washington, DC: Office of Vocational and Adult Education (ED).

The growing importance of education in overall economic growth and individual opportunity has necessitated that education reformers address the need for the additional and better human capital needed to foster overall growth in the new knowledge-based economy. Education reformers must also work to reduce the growing differences in family incomes by closing the gap between the nation's education-haves and education-have-nots. Addressing these challenges requires strengthening the relationship between education and work requirements and focusing more strongly on the years when academic and applied learning overlap between the completion of basic academic preparation and the completion of occupational or professional training. Although jobs requiring an associate degree are expected to grow the fastest, a sizable number of jobs will still be available for less-skilled workers. The shift in the U.S. economy's structure to a knowledge-based economy has increased the need for workers with reasoning, problem-solving, and behavioral skills; a positive cognitive style; and specific occupational and professional competencies. Although policy goals are well defined in elementary and higher education, the middle sections in the K-16 education pipeline needs revision to provide the appropriate mix of academic and applied curricula for the transition years from high school to college or high school to training and work.

KEY WORDS: Academic Education; Access to Education; Adjustment (to Environment); Articulation (Education); Cognitive Style; College Bound Students; Demand Occupations; Economic Change; Education Work Relationship; Educational Change; Educational Environment; Educational Needs; Educational Objectives; Educational Policy; Elementary/ Secondary Education; Emerging Occupations; Employment Projections; Employment Qualifications; Equal Education; Human Capital; Integrated Curriculum; Labor Force Development; Labor Needs; Literature Reviews; Needs Assessment; Noncollege Bound Students; Policy Formation; Postsecondary Education; Trend Analysis; Vocational Education.

17. Clayton, P., & Euscher, G. (2001). Hidden treasure. *Adults Learning (England)*, 13(1), 9-11.

Over 100 women immigrants were interviewed in the United Kingdom, Denmark, Czech Republic, and Germany. Two-thirds had participated in higher education in their home countries, one-third had degrees, some had owned businesses, and over half had good English skills. Despite their qualifications, only five were currently not underemployed.

KEY WORDS: Educational Needs; Employment Qualifications; Females; Foreign Countries; Immigrants; Underemployment.

18. Cline, R. R., & Mott, D. A. (2000). Job matching in pharmacy labor markets: A study in four states. *Pharmaceutical Research*, 17(12), 1537-1545.

Purpose. Reports from various pharmacy labor market sectors suggest that the United States may be experiencing a shortage of pharmacists. To guide policy making and planning with respect to this shortage it is necessary to develop a better understanding of the process by which pharmacists choose jobs. Using the economic theory of job matching, this study sought to understand how (a) attributes of the practice setting, (b) characteristics of pharmacists, and (c) regional and urbanization variables are associated with pharmacy practice setting choices. Methods. A secondary database containing information about employment characteristics and work histories of 541 pharmacists in four states was used. The data were augmented with information on the relative number of employment opportunities in each of three practice settings (large: chain, institutional, and independent) in the year the respondent's most recent employment change occurred. Practice setting choices were modeled using multinomial conditional logit regression. Results. A total of 477 pharmacists represented in the database met the inclusion criteria for the study. Multivariate analyses showed that the impact of search costs and wage differentials varied with the practice setting chosen. Pharmacists choosing independent settings over large chain settings were more likely to be white and to have worked in an independent setting in their prior job. Pharmacists living in Oregon were less likely to choose institutional settings compared to those living in Massachusetts, whereas those living in areas with populations greater than 50,000 were more likely to choose institutional settings. Conclusions. Pharmacist job matching appears to be a complex process in which diverse factors interact to produce a final match. Our results suggest that the pharmacy labor market may actually be composed of two distinct labor markets: an ambulatory market and an institutional market.

KEY WORDS: Job Choice; Pharmacy Labor Markets; Discrete Choice Modeling; Turnover.

19. Cohen, M. S., & Zaidi, M. A. (2002). *Global skill shortages*. London: Edward Elgar.

This book discusses the causes and impact of global skill shortages, focusing on data from skill shortages measured in the period 1995-1998 in 19 developed and emerging economies. Chapter one contains a brief introduction. Chapter two is a review of theoretical literature on skill shortages, including static and dynamic shortages, efficiency wage theory, insider-outsider theory, labor mobility, path dependence, job vacancies, and measures of labor shortage. Chapter three discusses the forces that drive globalization and make economies interdependent, market and production globalization, and the need to look at occupational skill shortages globally. Chapter four summarizes studies on labor and skill shortages in 12 countries and Europe as a whole. Chapter five discusses in detail, the methodology of measuring skill shortages by occupation and country, the data used in the studies, and the results. Efforts are made to validate the methodology. Chapter six examines factors that can explain shortages and labor surpluses and analyzes the relationship between the shortage indicators and other indicators in the 19 countries analyzed. Chapter seven discusses how companies have coped with labor shortages. Chapter eight contains brief concluding remarks. The book also contains an appendix of data tables for all 19 countries, references for each chapter, and an index.

KEY WORDS: Career Development; Comparative Analysis; Demand Occupations; Economic Factors; Employment Opportunities; Foreign Countries; Global Approach; Globalization; International Trade; Job Skills; Labor Economics; Labor Force Development; Labor Needs; Labor Supply; Skill Development; Skilled Occupations; Skilled Workers; Supply and Demand.

20. Coleman, M. G. (2003). Job skill and Black male wage discrimination. *Social Science Quarterly*, 84(4), 892-905.

Objective. Debate over the causes of wage inequality have raised suggestions that, rather than discrimination, skill differences may be the reason for racial wage disparities. The purpose of this research is to examine what impact on-the-job skill differences have on wage inequality. Method. I regress the log wage onto race and a measure of skill. The Multi-City Study of Urban Inequality Employer Survey is particularly useful in this analysis because it contains the employer's evaluation of the worker's relative skill against other workers. Result. When white and black men have the same employer's competitive performance rating, rather than decreasing racial wage differences, the differences actually increase. Conclusion. The wage gap is not a skills gap, but evidence of racial discrimination in the labor market.

KEY WORDS: Employee Skills; Equity (Payment); Income Level; Race and Ethnic Discrimination; Salaries; Blacks; Whites.

21. Cruikshank, J. (2003). The flexible workforce: Implications for lifelong learning. *Australian Journal of Adult Learning*, 43(1), 8-22.

The globalized economy appears to promote economic insecurity and underemployment. Lifelong learning is increasingly focused on competitive advantage. Adult educators should encourage discussion and debate about the nature of these changes and advocate lifelong learning that benefits the whole person and broader community.

KEY WORDS: Adult Education; Education Work Relationship; Foreign Countries; Lifelong Learning; Organizational Change; Role of Education; Underemployment.

22. Cully, M. (2002). The cleaner, the waiter, the computer operator: Job change, 1986-2001. *Australian Bulletin of Labour*, 28(3), 141-162.

Australian census data were analyzed to determine how the transition to a knowledge economy has altered the character of jobs. Of 340 occupations, 84 declined and 64 doubled in overall employment. Occupations dominated by women and part-time workers grew fastest. The knowledge economy has had ambiguous effects; many workers are underemployed.

KEY WORDS: Demand Occupations; Economic Change; Employment Patterns; Foreign Countries; Labor Market; Labor Needs; Tables (Data); Underemployment.

23. Culpepper, P. D. (2003). Creating cooperation: How states develop human capital in Europe. Cornell studies in political economy. Ithaca, NY: Cornell University Press.

This book looks at ways European governments can create changes in institutions that will foster cooperation among states, focusing on company investment in general skills and using data from France and Germany. Chapter one provides a general description of the challenges governments face in developing policies to change company-level vocational training practices. Chapter two contains an analysis of why actors (countries, companies, etc.) have an interest in cooperation. It focuses on the experiences of France and Germany, East German large firms, and French and German small and mid-size firms. Chapter three examines the training behavior of companies in Germany and France and provides an overview of government training program reforms in the two

countries, along with the results of training reforms. Chapter four compares the policies of Saxony regarding encouraging apprenticeships with those of neighboring state Saxony-Anhalt. Chapter 5 discusses the general failure of French vocational training reform and contrasts it with the success of an association of employers in the Valley of the Arve. Chapter six considers the broader implications of the book's findings for cooperation and policy-making. The book also contains a list of abbreviations, three appendixes, extensive references, and an index.

KEY WORDS: Adult Vocational Education; Apprenticeships; Comparative Education; Cooperative Programs; Economics of Education; Education Work Relationship; Educational Change; Educational Improvement; Foreign Countries; Government Role; Government School Relationship; Human Capital; Industrial Training; International Cooperation; Job Skills; Labor Force Development; Postsecondary Education; Skilled Workers; Small Businesses; Trade and Industrial Education.

24. de Jong, G. F., & Madamba, A. B. (2001). A double disadvantage? Minority group, immigrant status, and underemployment in the United States. *Social Science Quarterly*, 82(1), 117-130.

This study documents the magnitude of four types of underemployment experienced by both native-born minority & ethnic immigrant male & female workers in the US & tests a "double disadvantage" economic outcome hypothesis that minority workers tend to be channeled into secondary-sector jobs & that immigrant workers face initial disadvantages in labor force assimilation. Data for men & women aged 25-64 who are in the labor force & not attending school were derived from the 1990 Census Bureau Public Use Microdata Sample. Multinomial logistic regression procedures were used to estimate the effect of minority group membership & immigrant status on the odds of unemployment, part-time employment, working poverty, & job mismatch, relative to adequate employment. Descriptive results showed greater overall underemployment among females than males. Blacks & Hispanics had higher unemployment & working-poverty rates compared to non-Hispanic Whites & Asians, with job mismatch highest among Asians. Immigrant underemployment was greater than that of the native-born. Asians posted the largest disparity in immigrant vs native-born underemployment, & Blacks had the smallest. Multivariate models showed that minority group effects were stronger than immigrant status effects in predicting underemployment. Increased likelihood of underemployment across the different minority groups vs non-Hispanic White workers was not fully accounted for by the expected influences of human-capital, demographic, industry, & occupational variables. It was concluded that the double disadvantage hypothesis of minority group & immigrant status is accepted only for Asian men & women with jobs mismatched to their skills & for Asian women, who are most likely to be unemployed or be among the working poor.

KEY WORDS: Underemployment; Nativism; Minority Groups; Immigrants; United States of America; Labor Force Participation; Comparative Analysis; Working Class.

25. de Wolff, A. (2000). Breaking the myth of flexible work: Contingent work in Toronto. A study conducted by the workers project. Toronto: Toronto Organizing for Fair Employment.

A survey of 205 people, 4 group interviews with approximately 30 people, and 6 design and analysis meetings involving approximately 40 people were conducted in a 1999 participatory study of contingent workers in Toronto. (Contingent work was defined to be lower-waged forms of non-permanent work arrangements that include contracting, employment through a temporary agency, sequential short term employment multiple job holding, non-permanent part-time work, and self-employment where the worker does not

hire anyone else.) The study found that, despite popular perception of the attractiveness of such "flexible" work arrangements, most contingent workers wanted to break into or rejoin the permanent, core workforce but were prevented from doing so by rules of temporary employment agencies, lack of education, immigration status, or discrimination. These workers received very low wages, had breaks in employment between assignments, worked long days on short notice, and usually lacked benefits such as sick leave, disability, and unemployment insurance. The study determined that the so-called work flexibility is not favored by most contingent workers and is usually a hidden form of unemployment or underemployment. The researchers concluded that increasing the incidence of contingent work may have detrimental long-term consequences for the workers as well as for society as a whole.

KEY WORDS: Adults; Employee Attitudes; Employer Attitudes; Employer Employee Relationship; Employment Patterns; Employment Practices; Employment Services; Equal Opportunities (Jobs); Flexible Working Hours; Fringe Benefits; Immigrants; Job Satisfaction; Job Security; Organizational Development; Part Time Employment; Public Policy; Quality of Working Life; Salary Wage Differentials; Tables (Data); Temporary Employment; Underemployment; Unemployment; Wages; Work Attitudes; Work Environment.

26. Di Pietro, G. (2002). Technological change, labor markets, and 'low-skill, low-technology traps'. *Technological Forecasting and Social Change*, 69(9), 885-895.

There is evidence that in several European countries in the last decade, the demand for skilled workers did not keep pace with the relative supply, thereby leading to the creation of a large pool of overeducated & underutilized workers. This paper analyzes whether this mismatch can be attributed to a technology-related explanation. According to this hypothesis, pockets of overeducated & underutilized workers stem from firms' inability to reap the benefits associated with a high rate of technological progress because of strict employment protection regulation. Firing restrictions may prevent firms from immediately taking advantage of upward changes in skilled workforce availability & hence they may discourage firms from adopting new technologies. This, in turn, may diminish firms' growth prospects & thereby may reduce the number of vacancies that can be filled with highly skilled workers. Data from the 1995 wave of the European Community Household Panel survey support the hypothesis of technology-related pockets of overeducated & underutilized workers.

KEY WORDS: Supply and Demand; Labor Supply; Employment Opportunities; Occupational Qualifications; Adoption of Innovations; Europe; Technological Change; Education Work Relationship; Underemployment.

27. Dube, A., & Mercure, D. (1999). New flexibility-based qualification models: Between professionalization and the Taylorization of work. *Relations Industrielles/Industrial Relations*, 54(1), 26-50.

Attempts to identify new forms of job qualification, based on results of a large-scale questionnaire survey conducted among employees of four groups of Quebec manufacturing firms. Focus is on whether Quebec firms are truly searching for flexibility & its potential impact on required worker qualifications. Five forms of flexibility are investigated: financial, technical, organizational, numerical, & functional. Three new qualification models, all based on flexibility, are highlighted: occupational-conceptual, Taylorist, & adroit-analytical. Results reveal that, although employers are increasingly seeking functional flexibility, it does not necessarily follow that job fragmentation & decomposition among certain categories of workers are being abolished. In other words,

the argument that Taylorist forms of work are being maintained or reinforced is not incompatible with the position that employers have developed new requirements with regard to work flexibility.

KEY WORDS: Flexibility; Occupational Qualifications; Flexible Specialization; Taylorism; Manufacturing Industries; Employment Change; Work Skills; Quebec.

28. Elias, P., McKnight, A., & Kinshott, G. (1999). Redefining skill: Revision of the standard occupational classification (SOC2000). Skills task force research paper 19. Nottingham: DfEE.

This paper considers issues relating to the measurement of skill for national statistical purposes. It draws upon the work program and research underlying the revision of the national occupational classification for the United Kingdom (UK), SOC90 (Standard Occupational Classification introduced in 1990). The report's introduction states the intention to reflect upon the review-related research findings; detail the perceived inadequacies of SOC90; describe the problems associated with occupational definition in certain areas; show how the revised classification will affect the analysis of skill change; and cause experts to rethink the forecasts of occupational change. Section 2 presents an overview of the history of occupational classification in the UK. Section 3 describes the conceptual basis of the SOC. Section 4 details the perceived weaknesses in SOC90 and the constraints surrounding the development work undertaken to revise this classification. Section 5 outlines some key processes that were influential in bringing about a redefinition of occupations for statistical purposes. Section 6 discusses the resources that were used to investigate the processes of occupational change from a statistical and definitional perspective. Section 7 examines the revised classification in terms of its ability to distinguish and discriminate between occupations and the new analytical opportunities it will provide. Section 8 concludes that SOC2000 (published in spring 2000) makes better use of its conceptual base, solves problems inadequately dealt with earlier, and provides a better tool for job matching purposes than did SOC90.

KEY WORDS: Adult Education; Career Guidance; Classification; Developed Nations; Employment Qualifications; Foreign Countries; Job Analysis; Job Skills; Occupational Information; Occupations; Postsecondary Education; Research Problems; Secondary Education; Standard Setting; Statistical Analysis; Vocational Education; United Kingdom.

29. Elliott, J. R. (2000). Class, race, and job matching in contemporary urban labor markets. *Social Science Quarterly*, 81(4), 1036-1052.

Recent research on job matching has demonstrated the significance of personal contacts in linking workers to jobs. Few studies, however, have examined how these dynamics vary by class position. I investigate this issue, focusing on nonsearches in addition to formal & informal job matching. Data are drawn from the Multi-City Survey of Urban Inequality, which is based on a random sample of households in Atlanta, Boston, & Los Angeles. Statistical analyses show that job matching varies significantly by class position, with managers more likely to be matched through nonsearches, skilled labor through formal channels, & general labor through personal intermediaries. The analyses also show that differences in racial composition among classes cannot fully explain this variation or its effects on hourly wages. These findings suggest that class position plays a key role in shaping contemporary job matching & merits more detailed attention in future research.

KEY WORDS: Labor Market; Urban Population; Social Networks; Network Analysis; Class Analysis; Employment Opportunities; Atlanta, Georgia; Boston, Massachusetts; Los Angeles, California.

30. Evetts, J., & Dingwall, R. (2002). Professional occupations in the UK and Europe: Legitimation and governmentality. *International Review of Sociology/Revue Internationale de Sociologie*, 12(2), 159-171.

Draws on the work of Herbert Spencer & Michel Foucault to examine the rise of the regulatory state in Europe & the implications of the construction of common regulatory regimes for professions. National arrangements are being changed by supranational /international organizations being formed to regulate licensing, training, & educational requirements. The emergence of a European regulatory framework is outlined, & forms of state development associated with professions are examined, maintaining that the EU's increased role represents the shift of sovereignty from member states to the EU. Foucault's (1979) ideas about legitimacy frame a discussion about the legitimacy of both the international profession & the international state. Limitations of the role of law in processes by which professionalism is internationalizing are explored, along with the link between the authority of states & professions in the reproduction of legitimate political & professional power. It is concluded that the changing nature of states & professions represents a redefinition of their functions rather than a decline.

KEY WORDS: Professional Workers; Professional Training; Job Requirements; Certification; Government Regulation; European Economic Community; Legitimacy; Foucault, Michel; Spencer, Herbert.

31. Fallows, S., & Weller, G. (2000). Transition from student to employee: A work-based programme for "graduate apprentices" in small to medium enterprises. *Journal of Vocational Education & Training: The Vocational Aspect of Education*, 52(4), 665-685.

The Graduate Apprenticeship Scheme places new college graduates in small and medium-sized enterprises and provides skill development workshops to enhance their employability. Employers thus have a low-risk means of evaluating potential employees and graduates gain experience that helps them avoid underemployment.

KEY WORDS: Apprenticeships; College Graduates; Education Work Relationship; Employment Potential; Entry Workers; Foreign Countries; Job Skills; Small Businesses.

32. Felstead, A., Gallie, D., & Green, F. (2002). *Work skills In Britain 1986-2001*. Nottingham, UK: Department for Education and Skills.

This paper gives findings from the 2001 Skills Survey. This survey is a high quality representative survey of working individuals in Britain aged 20-60. It collected a great deal of information about the skills utilised at work, using an innovative methodology that had previously been developed for an earlier survey in 1997. The paper explains how several different aspects of work skill can be measured, and examines the distribution of skills among workers. The report also describes changes that have taken place since 1986, by making comparisons with previous surveys. Finally, the extent to which different types of skills are valued in the labour market is investigated.

KEY WORDS: Discretion; Decision-Making; Occupation; Class Analysis; Skill; Underemployment.

33. Fernandez, R. M. (2001). Skill-biased technological change and wage inequality: Evidence from a plant retooling. *American Journal of Sociology*, 107(2), 273-320.

One of the most popular explanations for the increased wage inequality that has occurred since the late 1970s is that technological change has resulted in a downward shift in the demand for low-skill workers. This pattern is also alleged to account for the growth in racial inequality in wages over the same period. This article reports on a case study of the retooling of a food processing plant. A unique, longitudinal, multimethod design reveals the nature of the technological change, the changes in job requirements, & the mechanisms by which the changes affect the wage distribution for hourly production workers. This research finds that, indeed, the retooling resulted in greater wage dispersion & that the changes have also been associated with greater racial inequality in wages. However, contrary to the claims of advocates of the skill-biased hypothesis, organizational & human resources factors strongly mediated the impact of the changing technology. Absent these "high road" organization choices, this impact on wage distribution would have been even more extreme.

KEY WORDS: Technological Change; Employment Changes; Income Inequality; Food Industry; Factories; Income Distribution; Social Inequality; Racial Differences; Work Skills; Midwestern States.

34. Flynn, N. T. (2003). The differential effect of labor market context on marginal employment outcomes. *Sociological Spectrum*, 23(3), 305-330.

By employing a new structuralist approach & focusing on the area opportunity structure, along with the traditional human capital framework, I link both the local labor market context & individual qualities that affect employment outcomes (Browne 1997; Cotter et al 1997; McCall 2000). In this article, I examine the effect of contextual factors, specifically the area levels of occupational sex-segregation & the size of the service sector industry, on men & women's marginal employment outcomes during the early 1990s. Several findings stand out. First, women post higher chances of working for low wages than their male counterparts. However, employment in the expanding service sector does reduce men & women's chances of experiencing part-time work. Second, the protection afforded by individual-level, human capital qualities remains relatively constant for women across metro areas, but labor market context significantly affects women's odds of employment marginalization. Context is not as salient for men, but the value of their personal attributes vary across labor markets. Finally, women working in areas with higher levels of occupational sex segregation were relatively worse off than those in areas with more integration.

KEY WORDS: Labor Market; Occupational Segregation; Service Industries; Employment; Part Time Employment; Wages; Human Capital; Sex Differences; Opportunity Structures; Working Women; Working Men; United States of America.

35. Frenette, M. (2000). Overqualified? Recent graduates and the needs of their employers. *Education Quarterly Review*, 7(1), 6-20.

This article focuses on co-op studies. At the college level, co-op graduates are generally just as likely to be overqualified as non-co-op graduates. Graduates of co-op studies at the bachelor's level are typically less prone to overqualification than graduates of non-co-op bachelor's programs, while master's graduates and master's co-op graduates have roughly equal rates. Reliable results for doctoral graduates are not available because of low sample sizes. The rates of overqualified graduates by region are based on the region's needs for skilled workers, as well as the desire of skilled workers to live in the region. An economically stagnant region may require very few skilled workers, and this would tend to increase the rate of overqualification. However, the region's skilled workers may choose to move to more prosperous regions where their skills may be in greater

demand. The result is that the mobility of workers tends to reduce regional disparities in rates of overqualification.

KEY WORDS: Job Skills; Postsecondary Graduates; Employment; Statistics; Work and Learning.

36. Friedberg, L. (2003). The impact of technological change on older workers: Evidence from data on computer use. *Industrial and Labor Relations Review*, 56(3), 511-529.

Current Population Survey and Health and Retirement Study data indicated that rates of computer use were similar for all but the oldest workers, perhaps due to impending retirement. Computer users retired later than nonusers. Possible explanations are because they have valuable skills or because they already intend to delay retirement and thus acquire more computer skills.

KEY WORDS: Computer Use; Job Skills; Older Workers; Retirement; Technological Advancement.

37. Garavan, T. N., Morley, M., Gunnigle, P., & McGuire, D. (2002). Human resource development and workplace learning: Emerging theoretical perspectives and organisational practices. *Journal of European Industrial Training*, 26(2-4), 60-71.

Identifies a shift in workplace learning from formal, intermittent and discontinuous to informal, experiential, asynchronous, and situated. Highlights themes in both workplace learning and human resource development: knowledge, expertise, competence, organizational learning, and employability.

KEY WORDS: Competence; Employment Potential; Job Skills; Organizational Change.

38. Gingras, Y., & Roy, R. (2000). Is there a skill gap in Canada? *Canadian Public Policy/Analyse de Politiques*, 26, 159-174.

The increased employment of knowledge workers in the Canadian economy, combined with the growing number of employers reporting difficulties recruiting qualified employees, raises questions concerning the supply of skills in Canada. By drawing principally on an analysis of descriptive statistics, the authors conclude that there is no reason to believe that, globally, Canada is suffering from a broad-based shortage of skilled labor or that its workforce cannot fulfill the economy's needs. Examination of macroeconomic data reveals an increased frequency of specific labor shortages in certain sectors & occupations in recent years. Nonetheless, it does not appear that these shortages are more common today than they were in the past at similar stages of the business cycle. The authors conclude that, while there may be a growing labor shortage (skilled & low skilled), there is no aggregate shortage of skilled labor. Available data indicate that Canada compares favorably with many of its principal competitors in world markets, both in terms of investments in human capital & in the stock of skills. We investigate the minimum skill level necessary for success in the Canadian labor market. We conclude that, at the very least, young people today need a high school diploma to qualify for even the lowest-skill jobs.

KEY WORDS: Canada; Labor Supply; Work Skills; Human Capital; Employment Changes; Postindustrial Societies; Work and Learning.

39. Glenn, A., McGarrity, J. P., & Weller, J. (2001). Firm-specific human capital, job matching, and turnover: Evidence from major league baseball, 1900-1992. *Economic Inquiry*, 39(1), 86-93.

The two dominant labor market turnover hypotheses, the firm-specific human capital model (FSHCM) and the job-matching model, suggest different patterns of player mobility in major league baseball. The matching hypothesis predicts greater mobility of players in positions that require substantial production. A better match may offer large productivity gains. Alternately the FSHCM predicts players in positions requiring the greatest amount of team work will benefit from specific knowledge, making them less likely to change teams. We examine the frequency distribution of trades by player position from 1900-1992 and find the FSHCM provides the best explanation for turnover in this industry.

KEY WORDS: Human Capital; Job Matching; Firm-specific Human Capital; Turnover.

40. Glover, D., Law, S., & Youngman, A. (2002). Graduateness and employability: Student perceptions of the personal outcomes of university education. *Research in Post-Compulsory Education*, 7(3), 293-306.

Surveys of 408 British students at the beginning and 425 at the end of university studies explored tensions between "graduateness" (effect of college degrees on knowledge, skills, and attitudes) and employability. Evidence suggests economic motivations are more important than pursuit of knowledge and employability is an increasing expectation of higher education courses.

KEY WORDS: College Graduates; Degrees (Academic); Employment Potential; Foreign Countries; Higher Education; Job Skills; Outcomes of Education; Student Educational Objectives; Student Motivation.

41. Gottfredson, L. S. (2003). The challenge and promise of cognitive career assessment. *Journal of Career Assessment*, 11(2), 115-135.

Abilities are as important as interests in career choice and development. Reviving cognitive assessment in career counseling promises to help counselees better understand their career options and how to enhance their competitiveness for the ones they prefer. Nearly a century of research on human cognitive abilities and jobs' aptitude demands in the U.S. economy reveals that the two domains are structured in essentially the same way. The author describes that common structure and how it can be used in assessing person-job match in terms of general ability level and ability profile. She also suggests ways of resolving various technical and professional questions, such as which cognitive abilities to assess, how to assess them, what the most useful aptitude-based occupational classification would be, and how to use cognitive assessments in a broader "reality-based exploration" process intended to expand people's career opportunities.

KEY WORDS: Ability Level; Cognitive Ability; Occupational Aspirations; Occupational Guidance; Person-Environment Fit; Career Development; Cognitive Assessment; Occupational Choice.

42. Green, F., S. McIntosh, S., & Vignoles, A. (1999). *"Overeducation" and skills: Clarifying the concepts*. London: Centre for Economic Performance.

There is now a burgeoning literature on the topic of "overeducation" (and the complementary concept of "undereducation"), and a growing quantity of UK empirical evidence on this issue. However, as Joop Hartog indicated in his keynote address to the

Applied Econometrics Association, "a solid relation [of the overeducation/ undereducation literature] with a formal theory of the labour market is lacking" (Hartog, 1997). Furthermore, the term "overeducation", in particular, is often used interchangeably with similar but distinct concepts such as "qualification inflation". This paper attempts to define and measure "undereducation" and "overeducation" more precisely, to quantify the extent of genuine skill and educational mismatch and to link these phenomena into the existing literature on skill-biased change and wage inequality. The authors provide new empirical evidence on this issue, using data from the International Adult Literacy survey, the recent UK Skills Survey, and the National Child Development Study. Specifically, they find convincing evidence of skill under-utilisation in the British labour market. For example, 20% of IALS respondents have reading and comprehension skills that appear to be under-utilised in their jobs. They also show that "genuine" overeducation is a significant phenomenon in Britain. For instance, a new survey of graduates by the University of Newcastle suggests that just over 20% of recent graduates are genuinely "overeducated" for their jobs. They discuss the policy and welfare implications of their findings.

KEY WORDS: Overeducation; Undereducation; Labour Market; Skill; Educational Mismatch; Skill Under-utilisation; Graduates; Policy; Welfare.

43. Groot, W., & Maassen van den Brink, H. (2000). Overeducation in the labor market: A meta-analysis. *Economics of Education Review*, 19(2), 149-158.

A meta-analysis of studies on overeducation and undereducation in the labor market reveals that of the four different definitions of overeducation distinguished in the literature, only the one based on variation in years of education within occupational groups appears to yield significantly lower-than-average rates of overeducation.

KEY WORDS: Education Work Relationship; Educational Attainment; Elementary/ Secondary Education; Foreign Countries; Higher Education; Labor Force; Labor Market; Meta Analysis; Salary Wage Differentials; Supply and Demand; Europe; Overeducation; Rate of Return; United States.

44. Handel, M. J. (2000). *Trends in direct measures of job skill requirements. Working paper no. 301*. New York: Jerome Levy Economics Institute. Retrieved on October 22, 2003 from <http://www.levy.org/docs/wrkpap/papers/301.html>.

Assumptions have been made that jobs in the United States require ever-greater levels of skill and that this trend is accelerating as a result of the diffusion of information technology. These assumptions have led to substantial concern over the possibility of a growing mismatch between the skills workers possess and the skills employers demand, reflected in debates over the need for education reform and the causes of the growth in earnings inequality. However, efforts to measure trends have been hampered by the lack of direct measures of job skill requirements. A study used previously unexamined measures from the Quality of Employment Surveys and the Panel Study of Income Dynamics to examine trends in job education and training requirements and provide a validation tool for skill measures in the "Dictionary of Occupational Titles." Results indicate that job skill requirements have increased steadily over the 1970s-1990s but that there has been no acceleration in recent years that might explain the growth in earnings inequality. There is also no dramatic change in the number of workers who are undereducated. These results reinforce the conclusions of earlier work that reports of a growing skills mismatch are exaggerated and that the recent growth in the U.S. wage inequality may not be a result of a skills shortage.

KEY WORDS: Academic Achievement; Adults; Education Work Relationship;

Educational Change; Educational Needs; Employment Patterns; Employment Projections; Employment Qualifications; Job Performance; Job Skills; Job Training; Salary Wage Differentials; Skill Development; Wages Dictionary of Occupational Titles; Income Disparities; Panel Study of Income Dynamics.

45. Handel, M. J. (2003). Skills mismatch in the labor market. *Annual Review of Sociology*, 29, 135-165.

Researchers across a wide range of fields, policymakers, & large segments of the public believe that the work-related skills of the labor force do not match the requirements of jobs & that this explains a large part of the growth of wage inequality in the US in the past 20 years. Opinions are divided on whether the trend is driven by workforce developments, such as an absolute decline or declining growth of human capital due to changes in educational attainment or test scores, or employer-side changes, such as accelerating growth of job skill requirements due to the spread of computers & employee involvement techniques. Some believe the problem has grown worse over time. However, the evidence is often more ambiguous & fragmentary than recognized, & the argument overlooks the roles of institutional changes & management's policies toward labor in workers' changing fortunes. Evidence suggests that the growth in educational attainment has decelerated, cognitive skill levels have remained stable, & job skill requirements have gradually increased, but a large portion of employer dissatisfaction relates to effort levels & work attitudes of young people that may represent transitory, life-cycle effects. There is little information on whether job demands are actually exceeding workers' capacities. The absence of a standardized, up-to-date method of collecting information on the actual skill content of jobs is a significant obstacle to answering this question with confidence.

KEY WORDS: Labor Force; Human Capital; United States of America; Work Skills; Work Attitudes; Work Orientations; Youth Employment; Employment Changes; Educational Attainment.

46. Handel, M. J. (2005). *Worker skills and job requirements: Is there a mismatch?* Washington: Economic Policy Institute.

There is a widespread belief that U.S. workers' education and skills are not adequate for the demands of jobs in the modern economy. Many believe that this presumed mismatch between the skills workers possess and the skills that jobs require will become even more serious as the workplace becomes increasingly high-tech and service-oriented. But many simple assumptions regarding skills mismatch in the U.S. labor market do not stand up well to closer examination. This article provides an overview of the skills mismatch debate, reviews research on skill levels, and scrutinizes trends in the skills workers possess, the skills employers demand, and the evidence for a mismatch between the two.

KEY WORDS: United States; New Economy; Job Skills; High Tech; Job Skills Mismatch.

47. Hartog, J. (2000). Over-education and earnings: Where are we, where should we go? *Economics of Education Review*, 19(2), 131-147.

Drawing on empirical studies from five countries (Netherlands, Spain, Portugal, United Kingdom, and United States), over 2 decades, outlines irregularities in the incidence of over- and under-education and consequences for individual earnings. The overall incidence of overeducation in the labor market is about 26 percent.

KEY WORDS: Comparative Education; Education Work Relationship; Educational

Attainment; Elementary/ Secondary Education; Foreign Countries; Job Skills; Labor Market; Mathematical Models; Salary Wage Differentials; Sex Differences; Netherlands; Overeducation; Portugal; Spain; United Kingdom; United States.

48. Haunschild, A. (2003). Managing employment relationships in flexible labour markets: The case of German repertory theatres. *Human Relations*, 56(8), 899-929.

In theatres, "new" forms of employment are rather old. Based on qualitative case study research, this article analyses policies for managing human resources in a German non-profit repertory theatre. Referring to Marsden's theory of employment systems, the article suggests regarding these policies as being embedded in an interorganizational employment system, which comprises rules of job design and task assignment, the labour market, inter-firm institutions and the education system. This employment system for German theatre artists is marked by high labour mobility and contingent work arrangements, but is also characterized by an ensemble structure providing (temporary) stability of the workforce. By studying how employment relationships are "managed" in theatres and how the organizational level is linked to the field's labour market characteristics, this article aims at contributing to the exploration of institutional prerequisites and organizational consequences of contingent work arrangements. In doing so, the article continues recent efforts to link studies on careers, labour markets and work arrangements in the cultural industries to the "future of work" debate.

KEY WORDS: Theatre Management; Labor Relations; Organizational Structure.

49. Hyslop-Margison, E. J., & Welsh, B. H. (2003). Career education and labour market conditions: The skills gap myth. *Journal of Educational Thought/Revue de la Pensee Educative*, 37(1), 5-22.

Asserts that it is a questionable claim that a widespread knowledge and skill shortage is causing current labour market supply problems, unemployment, or increased social stratification. Adds that the percentage of new jobs requiring high levels of knowledge and skill is limited when compared to low-skilled service industry occupations. Questions the foundations of career education.

KEY WORDS: Career Education; Education Work Relationship; Employment; Labor Force Development; Labor Market; Labor Needs; Skill Development; Two Year Colleges; Vocational Education.

50. Jackson, M. (2001). Non-meritocratic job requirements and the reproduction of class inequality: An investigation. *Work, Employment and Society*, 15(3), 619-630.

This article evaluates the presence or absence of the "Increased Merit Selection" (IMS) theory or meritocracy in society, as it relates to the employment process in order to distinguish whether this theory is valid in today's society, thus creating social mobility for individuals regardless of their social class. Through the analysis of a random sample of 322 job listings in national, regional, & local newspapers, it was found that "merit" in the form of qualifications, ability & effort, meritocratic characteristics, & experience & technical skills was predominate, yet ascriptive characteristics in the form of social skills & personal characteristics still made their way into these findings. Therefore, it seemed we still are unable to fully escape "where we come from" & "who we are" because it is just these characteristics that provide us with suitability for a job that another individual with more so-called achievements may not possess.

KEY WORDS: Meritocracy; Social Mobility; Social Class; Hiring Practices; Occupational Mobility; Job Requirements; Social Background.

51. Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational & Organizational Psychology*, 73(3), 287-302.

Building on person-environment fit theory and social exchange theory, the relationship between job demands and innovative work behaviour was assumed to be moderated by fairness perceptions of the ratio between effort spent and reward received at work. This interaction of job demands with perceptions of effort-reward fairness was tested among 170 non-management employees from a Dutch industrial organization in the food sector. Results demonstrated a positive relationship between job demands and innovative work behaviour when employees perceived effort-reward fairness rather than under-reward unfairness.

KEY WORDS: Employee Attitudes; Energy Expenditure; Null Hypothesis Testing; Organizational Behavior; Job Characteristics; Job Satisfaction; Justice; Person-Environment Fit.

52. Jensen, L., & Slack, T. (2003). Underemployment in America: Measurement and evidence. *American Journal of Community Psychology*, 32(1-2), 21-31.

An important way in which employment hardship has come to be conceptualized & measured is as underemployment. Underemployment goes beyond mere unemployment (being out of a job & looking for work), to include those who have given up looking for work, part-time workers whose employer(s) cannot give them full-time work, & the working poor. To provide needed background for the other articles in this special issue, we trace the history of the concept of underemployment, review existing empirical literature, offer a critique of the measurement of underemployment as conventionally operationalized, & provide up-to-date evidence on the trends & correlates of underemployment in the US.

KEY WORDS: Underemployment; Measures (Instruments); Measurement; United States of America.

53. Jones, R. T. (2003). What employers expect of education. *Liberal Education*, 89(2), 41-43.

Describes the expectations held by employers for graduates in a world of global competition and rapid change, and discusses why preparation for work and for higher education now require the same academic standards.

KEY WORDS: Academic Standards; College School Cooperation; Education Work Relationship; Educational Needs; Employer Attitudes; Employment Qualifications; Higher Education; Job Skills.

54. Kager, M. B. (2000). Factors that affect hiring: A study of age discrimination and hiring. *Dissertation Abstracts International Section A: Humanities & Social Sciences*, 60(11-A), 4201.

This study examines the effect applicant age on the selection recommendations of human resource managers. An original, fractional, factorial survey design with a vignette

format was used. This form of design allows the researcher to use a relatively large number of factors and levels within those factors to enhance the resemblance between the real and the experimental world. The dimensions used in constructing the vignettes included: job requirements, personal characteristics and employment experience of the applicant, unemployment duration and previous, as well as, proposed salary levels. Seventy-eight levels were created within seventeen dimensions. The vignettes were designed to represent the interviewer's personal notes about twelve hypothetical candidates and to reflect information gathered in the pre-interview, interview and post interview phases of the hiring process. The survey was mailed to a random, national sample of 500 members of a national association of human resources managers. Two mailings produced a response rate of 24.5% (N = 118), and generated 1,416 vignette judgements. Respondents were seventy percent female, with thirty-five percent overall having ten or more years of experience as a human resource professional. Logistic regression analysis of the data found that twenty-five levels among the seventeen dimensions were significantly associated with selection decisions at the 5% level or below. Personality/Attitude and mode of dress had the strongest effects on selection recommendations. For example, candidates represented as "enthusiastic, energetic and eager" the odds of a favorable recommendation were increased by more than 400% over those who were "unresponsive and lacked eye contact." No significant effects of age, gender or race on selection recommendations were found. These findings suggest that when age discrimination in hiring occurs it is prior to or subsequent to interaction with experienced human resources management professionals. In addition, the findings suggest that for all applicants regardless of age, race or gender, the interviewer's selection decisions can be affected by factors largely within the applicant's control.

KEY WORDS: Age Differences; Age Discrimination; Personnel Selection.

55. Lamba, N. K. (2003). The employment experiences of Canadian refugees: Measuring the impact of human and social capital on quality of employment. *La Revue Canadienne de Sociologie et d'Anthropologie/The Canadian Review of Sociology and Anthropology*, 40(1), 45-64.

Examining the resettlement experiences of 525 adult refugees living in Canada, this study uses a multiple regression approach to investigate the impact of human & social capital on refugees' quality of employment. Giddens's structuration theory acts as a useful interpretive framework to describe how refugee agency is constrained & enabled by the rules & resources governing the employment integration process. Results show that refugees use both family & ethnic group ties as resources in searching for employment. However, constrained by a combination of structural barriers, a significant proportion of refugees find that their human capital has little or no value in the Canadian labor market &, moreover, that the networks refugees are presently employing may not be sufficient to compensate for their downward occupational mobility.

KEY WORDS: Refugees; Canada; Human Capital; Cultural Capital; Social Networks; Employment; Labor Market; Quality of Working Life; Agency and Structure; Structuration.

56. Landrum, R. E., & Harrold, R. (2003). What employers want from psychology graduates. *Teaching of Psychology*, 30(2), 131-133.

Most undergraduate psychology majors do not opt for graduate school but attempt to enter the workforce. We surveyed employers in 3 regions of the United States to assess the importance of qualities, skills, and abilities that psychology graduates need. Results indicate that the 5 most important qualities, skills, and abilities to employers are listening skills, desire and ability to learn, willingness to learn new and important skills, getting along with others, and ability to work with others as part of a work team. Faculty

members advising students may wish to emphasize the importance of these people and teamwork skills in an effort to ensure that students have a sense of what is important to employers.

KEY WORDS: Education; Educational Research; Multidisciplinary Research; Employee Skills; Employer Attitudes; Psychology; Undergraduate Education.

57. Larsen, C. A. (2003). Structural unemployment. An analysis of recruitment and selection mechanisms based on panel data among Danish long-term unemployed. *International Journal of Social Welfare*, 12(3), 170-181.

The perception of structural unemployment - summarised in the notion of "Eurosclerosis"- became almost hegemonic during the 1990s. Policy makers all over Europe tried, by means of supply-side policies, to counteract the lack of incentives in the developed European welfare states, the lack of qualification on the post-industrial labour markets and the personal decay due to long-term unemployment. However, based on the critical case of Denmark, this article challenges the perception of structural unemployment and suggests an alternative business cycle/barrier perception. At the macro level it is difficult to explain the Danish decline in unemployment from 1994 to 2000 within the structure perception. The lack of explanatory power of the structure perception is further highlighted in micro-level analyses conducted on a panel study of long-term unemployed. Based on the unemployed's own assessments, we find no indications of supply-side problems. These results are supported by analyses of actual labour market integration of the long-term unemployed in the period between 1994 and 1999, which show that education level and previous unemployment had no noteworthy influence on labour market integration, whereas age had a decisive influence. These surprising results further undermine the perception of structural unemployment and the supply-side policies rooted in this 'mistaken' problem definition.

KEY WORDS: Labor Market; Unemployment; Unemployment Rates; Denmark; Business Cycles; Labor Policy.

58. Lester, B. Y., & McCain, R. A. (2001). An equity-based redefinition of underemployment and unemployment and some measurements. *Review of Social Economy*, 59(2), 133-159.

An attempt is made in this article to redefine underemployment & unemployment without making reference to an excess supply of labor or any causal mechanism of unemployment. Instead, underemployment & unemployment are defined in terms of equity, which draws upon the individual's preferences. A specific proposal is that underemployment be defined by the presence of contribution inequity relative to at least half the persons employed in a field that the underemployed person might prefer to move into. Empirically, most recent survey data on preferences for contingent & other nontraditional employment are used to illustrate the application of the concept. The major finding is that nearly 10 million Americans in the nontraditional workforce are underemployed.

KEY WORDS: Underemployment; Unemployment; Equity; United States of America.

59. Linsley, I. (2005). Causes of overeducation in the Australian labour market. *Australian Journal of Labour Economics*, 8(2), 121-143.

A form of labour underutilization which occurs when the formal education level of a worker exceeds that which is required for the job known as overeducation. Close to 30

per cent of workers are overeducated and are underutilizing their skills in Australia. Data from the Negotiating the Life Course survey, the author determines the causes of overeducation in Australia. Four of the key theories that have been used to explain overeducation are tested: human capital, job competition, assignment and the career mobility theories. Tests show that the job competition model best explains the existence of overeducation in the labour market in Australia.

KEY WORDS: Analysis of Education; Human Capital; Skills; Occupational Choice; Labor Productivity (Formal Training Programs; On-the-Job Training; Job; Occupational and Intergenerational Mobility; Promotion; Australia; Education; Human Capital; Skill Development.

60. Livingstone, D. W. (1999). *The education-jobs gap: Underemployment or economic democracy*. Boulder/Toronto: Westview press/Garamond press.

Confronting conventional wisdom, this book argues that the major problem in education-work relations is not education, but work. Formal schooling, further education, and informal learning have continued to increase while the knowledgeable and skilled are increasingly underemployed. Using analysis based on Canadian and U.S. large-scale surveys of work and learning experiences, NALL - the first representative survey on underemployment, and in-depth interviews at university placement offices and food banks, the author exposes the myth of the "knowledge economy" and the limits of human capital theory. The author assesses six facets of the underemployment: the talent-use gap, structural unemployment, involuntary reduced employment, the credential gap, the performance gap, and subjective underemployment. He explains the wastage of workers' useful knowledge in terms of the conflicting forces driving current economic restructuring. Finally, he provides a critical review of basic economic alternatives (shareholder capitalism, stakeholder capitalism, and economic democracy) and gauges their prospects for overcoming the education-jobs gap.

KEY WORDS: Work; Learning; Education Work Relationships; Education-job Matching; Underemployment; Underqualification.

61. Livingstone, D. W. (2000). Public education at the crossroads: Confronting underemployment in a knowledge society. In D. Glenday & A. Duffy (Eds.), *Canadian society surviving into the 21st century* (pp. 143-167). Don Mills: Oxford University Press of Canada.

The author evaluates three alternatives to reforming education in Canada to meet contemporary needs: (1) The market-driven option would restrict entry to postsecondary education & tailor the curriculum more closely to employment prospects. (2) The knowledge economy option would encourage advanced education at increased personal expense. (3) The economic democracy option would support public education as a civil right & reform paid employment to better fit individuals' learning capabilities. The author discusses the history of Canadian education, informal learning, the myth of the knowledge economy, underemployment, life-long learning, & the popular demand for knowledge.

KEY WORDS: Educational Reform; Educational Systems; Public Schools; Educational Policy; Knowledge; Underemployment; Economic Systems; Canada; Education Work Relationship.

62. Livingstone, D. W., & Hart, D. J. (2005). *Public attitudes towards education in Ontario 2004: The 15th OISE/UT survey*. Toronto: Ontario Institute for Studies in Education of the University of Toronto.

"The commitment of the new Liberal government to increase resources for public education does not yet appear to be sufficient in the eyes of most Ontarians," says David Livingstone, director of the Centre for the Study of Education and Work at OISE/UT. He conducted the 15th biennial survey, Public Attitudes Towards Education in Ontario 2004, with co-author Doug Hart, at OISE/UT. "There is a widespread consensus among virtually all social groups that further funding increases are still needed," Livingstone adds.

KEY WORDS: Public Opinion; Public Education; Attitudes; Funding; Survey; Ontario.

63. Lloyd, C., & Payne, J. (2002). Developing a political economy of skill. *Journal of Education and Work*, 15(4), 365-390.

Finds little evidence of a paradigm shift in capitalism or a trend toward a high-skills knowledge economy. Points out problems in demand-side proposals. Concludes that it is necessary to recognize the centrality of conflict, power, and exploitation in capitalism and outlines a radical political economy of skill.

KEY WORDS: Capitalism; Change Agents; Foreign Countries; Job Skills; Labor Force Development; Labor Needs; Politics; Public Policy.

64. Loos, R. (2002). Innovations for the integration of low-skilled workers into lifelong learning and the labour market: Case studies from six European countries. Luxembourg: CEDEFOP.

This report presents innovative vocational training (VT) initiatives to improve integration of low-skilled workers into lifelong learning and the labor market. Chapter 1 describes study structure and methodology. Chapter 2 addresses the theoretical basis for observing innovations. It analyzes the definition and significance of innovation in system theory and VT; examines the practical definition of innovation and explains differences between good practice and best practice innovation; presents the innovation typology and its significance as an instrument of observation for identifying and evaluating innovations; and introduces the European Commission's definition of lifelong learning and assessment of its relevance for analyzing innovations for integrating the low-skilled. Chapter 3 analyzes innovative case studies with practical relevance for integrating low-skilled workers into lifelong learning and the labor market in these six European countries: Spain, Greece, Austria, Denmark, Luxembourg, and Liechtenstein. Case analysis is divided into three thematic areas: program/project development and its objectives; innovative elements of the project/program; and the initiative's implementation and transfer potential. Chapter 4 summarizes the most important innovations identified and analyzes to what extent and under which circumstances transfer of these innovative practices to other EU states and candidates would be possible.

KEY WORDS: Adoption (Ideas); Adult Education; Case Studies; Definitions; Demonstration Programs; Education Work Relationship; Educational Innovation; Foreign Countries; Information Transfer; Job Skills; Job Training; Labor Force Development; Labor Market; Lifelong Learning; Postsecondary Education; Program Development; Program Implementation; Secondary Education; Semiskilled Workers; Technology Transfer; Unskilled Workers; Vocational Education.

65. Mason, G. (2002). High skills utilisation under mass higher education: Graduate employment in service industries in Britain. *Journal of Education and Work*, 15(4), 427-456.

In Britain, the retailing, computer services, transportation, and communications industries have hired increasing numbers of college graduates, both because of demand for skills

and oversupply of graduates. This has contributed to temporary and permanent job upgrading through expansion of tasks and responsibilities in certain jobs.

KEY WORDS: College Graduates; Foreign Countries; Higher Education; Job Development; Job Skills; Labor Supply; Personnel Selection; Service Occupations; Underemployment; Work and Learning.

66. May, C. (2000). Information society, task mobility and the end of work. *Futures*, 32(5), 399-416.

The emergence of global information society has led to a decline of manufacturing employment & the expansion of the service sector in the most developed economies of the global system. To replace lost manufacturing jobs, many commentators & policy makers have suggested that information & knowledge work represents the future for displaced workers, & have recommended policies to support IT skills. However, in this article, I argue that informational labor is just as amenable to task migration as manufacturing work, &, thus, policy prescriptions based on the presumption that developed states will retain most if not all knowledge work are mistaken. Some developing states such as India & the Caribbean Islands are already successfully competing against knowledge services in the OECD states. With the further development of global electronic networking informational tasks are likely to be increasingly mobile. While this will aid development outside the rich states, it will also reinforce the dynamic of income inequality & underemployment in Europe & America. Thus, the global information society represents a further challenge to the developed states' labor forces rather than their delivery from low cost manufacturing competition.

KEY WORDS: Globalization; Information Technology; Income Inequality; North and South; Labor Force; Employment Changes; Manufacturing Industries; Service Industries; Developing Countries; Industrial Societies.

67. McBride-King J. et al. (2000). *What to do before the well runs dry: Managing scarce skills*. Ottawa: Conference Board of Canada.

Today's organizations face a rapidly changing business and labour environment. A particular concern is the difficulty experienced in recruiting and retaining the skills needed to compete in the global marketplace. This report notes that effectively managing the scarce skills problem depends on more than the best efforts of individual organizations. It also requires the integrated efforts of many stakeholder groups including the education system and government. This study identified actions that were statistically significant predictors of recruitment and retention success.

KEY WORDS: Skills; Changes; Business; Labour Market; Recruitment; Global Marketplace; Scarce Skills; Education System; Canada.

68. Mills, V. (2002). Employability, globalization and lifelong learning - A Scottish perspective. *International Journal of Lifelong Education*, 21(4), 347-356.

The ideological transformation of the Labour Party to New Labour has resulted in supply-side approaches to lifelong learning that are not succeeding in Scotland's low-wage, low-skill economy. Despite the rhetoric, acquiring job skills does not automatically result in employability, without government intervention.

KEY WORDS: Employment Potential; Foreign Countries; Government Role; Ideology; Job Development; Job Skills; Lifelong Learning.

69. Munro, A., & Rainbird, H. (2002). Job change and workplace learning in the public sector: The significance of new technology for unskilled work. *New Technology, Work and Employment*, 17(3), 224-235.

Interviews (n=350) and a survey (n=323) of managers, trainers, and union representatives in British health care agencies showed that technology caused some job enlargement and enrichment; positive or negative effects depended on context. Other jobs were deskilled due to work organization, not technology. Technology's impact on job change was diversified and complex.

KEY WORDS: Foreign Countries; Job Development; Job Skills; Public Sector; Technological Advancement; Unskilled Workers.

70. Nabi, G. R. (2003). Graduate employment and underemployment: Opportunity for skill use and career experiences amongst recent business graduates. *Education & Training*, 45(7), 371-382.

Graduate underemployment continues to be a serious and growing problem in the UK. Yet, there is a scarcity of research that has attempted to identify the nature, extent and specificity of the problem. This study examines the opportunity for skill use (skill requirements of the job, personal skill levels, congruence between these two measures) and intrinsic (job, career, life satisfaction) and extrinsic career success (salary, promotion) amongst underemployed graduates. Appropriately employed graduates (those who were in jobs for which they required their degree) were used as a comparison group. Questionnaire data were collected from 203 business graduates in the UK. The key findings suggested that underemployed graduates reported significantly lower levels of opportunity for skill use and intrinsic (job, career, life satisfaction) and extrinsic career success (salary). The implications of these findings and avenues for further research are discussed.

KEY WORDS: Graduates; Underemployment; Ability; Business Students; Career Development; Employment Status; Graduate Students; Life Satisfaction; Personnel Promotion; Salaries.

71. Ono, H. (2001). Temporary employment and the spot market: Reflections from a qualitative study. *Michigan Sociological Review*, 15, 93-123.

In recent years, the growth rate of temporary employment has far surpassed the growth rate of aggregate nonfarm employment. Market uncertainty, such as the rapid pace of technological change, has given rise to a practice wherein employers hesitate to hire workers into their core workforce, & rely increasingly on contingent labor. The result is a "just-in-time" practice of human labor, with employers purchasing skills on an as-needed basis. While previous studies have focused on either the supply- or the demand-side factors behind temporary employment growth, this paper focuses on the actual temp-employer matching process that takes place within temporary staffing firms. Based on interview results from managers & executives in temporary staffing firms in the US, I argue that the explosive growth of temporary employment can be attributed to its spot market features, which allow employers to adjust freely to market changes while minimizing transaction costs.

KEY WORDS: Part Time Employment; Underemployment; Labor Market; Labor Supply; Technological Change; Modern Society; United States of America; Employment Changes.

72. Oosterbeek, H. (2000). Introduction to special issue on overschooling. *Economics of Education Review*, 19(2), 129-130.

This special issue was inspired by Greg Duncan and Saul Hoffman's 1981 article on the "incidence and wage effects of overeducation." These researchers used a Mincer earnings equation to determine that a substantial number of American workers were over- or under-educated for their chosen occupations.

KEY WORDS: Education Work Relationship; Educational Attainment; Educational Economics; Elementary/ Secondary Education; Higher Education; Human Capital; Labor Market; Mathematical Models; Measurement; Salary Wage Differentials; Overeducation; Return on Investment.

73. Orr, L. L. (2001). What are they doing? *Performance Improvement*, 40(5), 28-31.

Explains how to develop job profiles that describe the output expected from employees and the competencies required to meet the output so that managers understand and appreciate what their employees actually do. Discusses needs assessments and how clear descriptions of competencies, skills, knowledge, and values are useful in developing training.

KEY WORDS: Administrator Attitudes; Administrators; Competence; Job Analysis; Job Skills; Needs Assessment; Skill Analysis; Task Analysis; Training Methods; Values.

74. Parent, D. (2002). Matching, human capital, and the covariance structure of earnings. *Labour Economics*, 9(3), 375-404.

This paper tests the theory of job matching and the theory of human capital by examining the covariance structure of residuals from a typical Mincer log earnings equation using methods of moments techniques. Job matching theory predicts that we should observe an eventual decrease in the contribution of the job-match component in the residual variance as workers acquire tenure on the job. This prediction is mildly supported by the data. On the other hand, human capital theory predicts a trade-off between job-specific intercept and slope parameters. This prediction, which is not shared by the theory of matching, is strongly supported by the data. This is especially true for men with at least a high school degree.

KEY WORDS: Matching; Firm-specific Human Capital; Generalized Method Of Moments; Job Seniority; Wages Rise; Young Men; Mobility; Turnover; Workers; Information; Tenure.

75. Parvinder, K. (2005). Graduate overeducation in Australia: A comparison of the mean and objective methods. *Education Economics*, 13(1), 47-72.

This paper studies the extent of graduate overeducation in Australia utilising both the objective and mean methods. As well, the paper tests for non-linear returns to overeducation. It is found that the rates of graduate overeducation vary by both gender and with the methods utilised, and stand between 21% and 46%. Non-linear returns to overeducation were evident among some groups of graduates. Young male graduates seem to suffer no penalty for overeducation compared with their matched peers, but this may be a reflection of technological change altering workplace requirements faster than changes in occupational titles.

KEY WORDS: Graduate Overeducation; Labour Market Mismatch.

76. Pastor, M., Jr., & Marcelli, E. A. (2000). *Social, spatial, and skill mismatch among immigrants and native-born workers in Los Angeles*. San Diego: University Center for Comparative Immigration Studies.

Racially different economic outcomes stem from multiple causes, including various "mismatches" between minority employees and available jobs. A skill mismatch occurs when individuals' education and job skills do not qualify them for existing jobs. A spatial mismatch means that people live far from the work for which they qualify. A social mismatch refers to the practice of finding jobs through social networks; when friends and family are not well-connected to good jobs, one's chances of finding a good job decrease. This paper explores how these mismatches determine labor market outcomes, particularly wage impacts, in Los Angeles County for different racial groups and for immigrant versus native-born workers. Data on male workers were drawn from the Los Angeles Survey of Urban Inequality, census responses for Public Use Microdata Areas (PUMAs), and a unique dataset on job location and composition in southern California. The results indicate that all three types of mismatch matter, but they affect various groups differently. Social network quality mattered most for Anglos. For African Americans, the skill gap was more important than social networks or job growth in the local neighborhood. For recent Latino immigrants, individual characteristics mattered more than spatial or skill mismatches. Individual variables (including English fluency) also played a large role for longer-term immigrant and U.S.-born Latinos, but the skill gap also mattered. Asian Americans were affected by spatial and skill mismatches.

KEY WORDS: Asian Americans; Blacks; Educational Needs; Educational Status; Comparison; Employment Potential; Hispanic Americans; Immigrants; Income; Job Skills; Labor Market; Males; Neighborhoods; Poverty; Racial Differences; Social Networks; Whites; Latinos.

77. Pelsma, D., & Arnett, R. (2002). Helping clients cope with change in the 21st century: A balancing act. *Journal of Career Development*, 28(3), 169-179.

The current environment requires personal agency. Successful individuals need four abilities: (1) willingness to cope with uncertainty; (2) ability to overcome obstacles; (3) ability to take risks and learn from experience; and (4) ability to make decisions.

KEY WORDS: Career Counseling; Career Development; Change Strategies; Coping; Job Skills; Self Determination.

78. Reitz, J. G. (2001). Immigrant skill utilization in the Canadian labour market: Implications of human capital research. *Journal of International Migration and Integration*, 2(3), 347-378.

The quantitative significance of the underutilization of immigrant skills may be assessed, albeit imprecisely, in human capital earnings analysis. Earnings deficits of immigrants may arise from (1) lower immigrant skill quality, (2) underutilization of immigrant skills, & (3) pay inequities for immigrants doing the same work as native born Canadians. Consistent with numerous studies, 1996 census microdata show that underutilization of immigrant skills is significant, though less so than unequal pay within occupations. In 1996 dollars, the total annual immigrant earnings deficit from all three sources was \$15 billion, of which \$2.4 billion was related to skill underutilization, & \$12.6 billion was related to pay inequity. Discussion considers adjustments to these estimates, taking account of difficulties measuring the skill levels of occupations & immigrant skill quality.

KEY WORDS: Immigrants; Canada; Work Skills; Income Inequality; Underemployment; Human Capital; Employment Discrimination; Labor Market.

79. Richards, P. (2001). Towards the goal of full employment: Trends, obstacles and policies. Geneva: ILO.

Expanding upon a report presented to the International Labor Organization (ILO), this book documents the current world employment situation, including how it has fallen short, how current economic policies interact with world employment, and how improvements can be made. Chapter one, "The Commitment to Full Employment," describes how the ILO measures and defines employment and unemployment and discusses the concept of creating a universal employment strategy in developing, industrialized and transition countries. Chapter two, "The Current Employment Picture" looks at broad trends in employment globally and regionally and the characteristics of employment quality, including freedom of association and equal opportunity. Chapter three, "The Employment Effects of Current Policies," discusses the recent experiences of developing countries in East and Southeast Asia and Latin America, as well as the older Organization for Economic Cooperation and Development (OECD) members. Chapter four presents conclusions, including discussions of poverty, income distribution and economic growth, full employment policies, and how the ILO helps promote full employment in a global context and at the national level. Extensive bibliographic notes follow each chapter. The document contains data tables and an index.

KEY WORDS: Adult Education; Careers; Developed Nations; Developing Nations; Economic Development; Employment; Employment Opportunities; Employment Patterns; Equal Opportunities (Jobs); Foreign Countries; Labor Economics; Labor Force Development; Labor Market; Labor Standards; Postsecondary Education; Poverty; Quality of Working Life; Skill Development; Underemployment; Unemployment.

80. Rogers, J. K. (2001). There's no substitute: The politics of time transfer in the teaching profession. *Work and Occupations*, 28(1), 64-90.

Recent scholarly attention has turned to the imbalance of work time in the US. Although some workers experience overwork, others remain underemployed, often in contingent employment. School districts across the US are experiencing shortages of substitute teachers, while regular teachers experience long workdays & significant work-family conflict. Without the ability to recruit more substitutes, many districts propose solutions to classroom coverage problems that involve a time to transfer from a group of substitute teachers' work hours. Although substitutes who were interviewed expressed a desire for more teaching hours, they were constrained by their need to make a living either through multiple jobs or finding a higher wage job. This case study demonstrates the process through which a time transfer is proposed, contested by teachers, & ultimately without challenging the disparities between these groups of teachers.

KEY WORDS: Teachers; United States of America; Time Utilization; Working Hours.

81. Sawchuk, P. H. (2003). *Adult learning and technology in working-class life*. Cambridge, UK / New York: Cambridge University Press.

To date little is known about the everyday activities that make up the majority of people's learning lives. This book presents a critical approach to learning using situated learning and activity theory, drawing on the writings of Marx, Gramsci, Marxist-feminists, as well as the sociology of Bourdieu. Though many have demonstrated that schooling and adult training are deeply affected by issues of social class, this book explodes the myth that

everyday learning, despite its apparent openness and freedom, can be understood as class-neutral. Based on life-history interviews, selected ethnographic observations in homes and factories, large-scale survey materials as well as microanalysis of human computer interaction, the analysis explores learning across the various spheres of 'working-class life'. The author draws on his own experience as a factory worker, labour educator and academic to offer the most detailed examination of computer literacy and lifelong learning practice amongst working-class people currently available.

- Offers detailed, extended excerpts from 'learning life-history' interviews with manufacturing workers
- Combines micro and macro perspectives on learning, technology and social class
- Clear and accessible introduction to political economy, class analysis, and cultural-historical psychologies

KEY WORDS: Adult Learning; Informal Learning; Business and Industrial Personnel; Human Computer Interaction; Social Class; Technology.

82. Scherer, S. (2004). Stepping-stones or traps? The consequences of labour market entry positions on future careers in West Germany, Great Britain and Italy. *Work, Employment and Society*, 18(2), 369-394.

This article addresses the question of whether the first job functions as a 'stepping stone' or as a "trap". It does so by using individual longitudinal data to estimate the consequences on future occupational attainment of entry into the labour market via (a) "under-qualified" jobs or (b) via temporary contracts. A cross-national comparison of West Germany, Great Britain and Italy allows assessment of the impact of different labour market structures on this allocation process. With regard to 'under-qualified' positions, the findings are not consistent with the stepping-stone hypothesis but provide some support for the entrapment hypothesis. Despite the greater mobility chances of over-qualified workers, the initial disadvantage associated with status-inadequate jobs is not fully overcome during their future careers. The article shows, however, that the negative effects are not due to the mismatch as such but rather to the relatively lower level positions. These effects are mediated by the national labour market structure, with the British flexible model providing the best chances of making up for initial disadvantages, and the more tightly regulated and segmented markets in Germany and Italy leading to stronger entrapment in lower status positions. No negative effects of the type of contract are found for later occupational positions in any of the countries.

KEY WORDS: Great Britain; Italy; Federal Republic of Germany; Occupational Mobility; Occupational Achievement; Labor Force Participation; Occupational Qualifications; Underemployment.

83. Sigworth, D., Hawkins, C., & Daiek, D. (2003). 21st century skills: Are we teaching what students need to know? *Community College Enterprise*, 9(1), 39-47.

Discusses the institutional inventory completed at Schoolcraft College (Michigan), which focused on how to learn or teach necessary skills, the skills that are important for success, and the best way to assess skills necessary for competency. Reports that most stakeholders agreed on the skills that are important for success, but they held various opinions about how best to assess, learn, and teach them.

KEY WORDS: Administrator Attitudes; Community Colleges; Educational Assessment; Job Skills; Job Training; Labor Force Development; Skill Analysis; Two Year Colleges.

84. Sirgy, M. J., Efraty, D., Siegel, P., & Lee, D.-J. (2001). A new measure of quality of work life (QWL) based on need satisfaction and spillover theories. *Social Indicators Research*, 55(3), 241-302.

A new measure of quality of work life (QWL) was developed based on need satisfaction & spillover theories. The measure was designed to capture the extent to which the work environment, job requirements, supervisory behavior, & ancillary programs in an organization are perceived to meet the needs of an employee. We identified seven major needs, each having several dimensions. These are: (a) health & safety needs (protection from ill health & injury at work & outside of work, & enhancement of good health); (b) economic & family needs (pay, job security, & other family needs); (c) social needs (collegiality at work & leisure time off work); (d) esteem needs (recognition & appreciation of work within the organization & outside the organization); (e) actualization needs (realization of one's potential within the organization & as a professional); (f) knowledge needs (learning to enhance job & professional skills); & (g) aesthetic needs (creativity at work as well as personal creativity & general aesthetics). The measure's convergent & discriminant validities were tested & the data provided support to the construct validity of the QWL measure. Furthermore, the measure's nomological (predictive) validity was tested through hypotheses deduced from spillover theory. Three studies were conducted: two using university employees & the third using accounting firms. The results from the pooled sample provided support for the hypotheses &, thus, lent some support to the nomological validity to the new measure.

KEY WORDS: Quality of Working Life; Job Satisfaction; Work Environment; Measures (Instruments); Needs; Job Characteristics; Superior Subordinate Relationship; Management Styles.

85. Skinner, C. (2001). Measuring skills mismatch: New York City in the 1980s. *Urban Affairs Review*, 36(5), 678-695.

The author develops a new methodology to measure occupational skill requirements in New York City. The analysis matches locally derived skill ratings for detailed census occupations to years of local schooling & then estimates the change in mean skill requirements for employed New York City residents & the change in local employment of occupational skills classed by level of required education during the 1980s. The results show insignificant change in employment weighted skill means for all occupations. But the disaggregated analysis shows skill requirements bifurcated during the decade, with employment growth concentrated in college-level & sub-high school graduate-level occupations relative to high school graduate-level occupations. The findings suggest that demand-side forces are destroying mid-skilled jobs, casting doubt on the efficacy of supply-side policy measures intended to improve labor market outcomes for workers with less than a college education.

KEY WORDS: Research Methodology; Occupational Qualifications; Work Skills; New York City, New York; Education Work Relationship.

86. Smith, A. (2002). *Evidence of skill shortages in the engineering trades*. Leabrook, SA: National Centre for Vocational Education Research.

Statistical information about employment in 13 engineering trades occupations in Australia was examined to identify skill shortages in the country's engineering trades. Data from various Department of Employment, Workplace Relations and Small Business (DEWRSB) reports regarding the supply of and demand for skills in the engineering trades including a 1999 DEWRSB survey of Australian employers' recent experience of

skill shortages in the engineering trades were analyzed. Overall, the combination of commencements in new apprenticeship training, the availability of nonapprenticeship training pathways to the engineering trades, declining employment growth in recent years, and projected low growth in the future has been sufficient to keep pace with employment trends in the trades. However, despite continuing declines in total employment in the engineering trades, skill shortages are likely to persist especially for the more specialized metals trades. The study suggested that the issues of relevance and quality of training for existing workers and new entrants to the engineering trades will be even more critical than increasing the numbers of individuals in training. The biggest challenge to meeting Australia's rapidly changing engineering skill needs appears to be ensuring that the content and coverage of training keeps pace with the rapid rate of technological change in engineering.

KEY WORDS: Apprenticeships; Competence; Education Work Relationship; Educational Needs; Employer Attitudes; Employment Level; Employment Patterns; Employment Projections; Employment Qualifications; Engineering Technicians; Entry Workers; Foreign Countries; Job Skills; Labor Needs; Labor Supply; Metal Working; Needs Assessment; Postsecondary Education; Relevance (Education); Secondary Education; Technological Advancement; Technology Transfer; Trade and Industrial Education.

87. Spill, R. (2002). An introduction to the use of skill standards and certifications in WIA programs, 2002. Washington, DC: National Skill Standards Board.

This report focuses on the use of nationally recognized, industry-based skill standards and occupational certifications that promote certificate portability, skill transferability, worker mobility, and education and training consistency within and across states and nationwide. Chapters 1, 2, and 3 define what is meant by skill standards and certifications, present the case for their use, and discuss their benefits for individuals, employers, educators and trainers, Workforce Investment Boards (WIBs), and others. Chapters 4, 5, and 6 outline the mission of the National Skill Standards Board and its role in developing and promoting an industry-based skill standards and certifications system and then examine some key representative applications in education and training delivery systems and in WIB contexts. Chapters 7, 8, and 9 provide WIBs with a practical 22-step process approach for identifying and selecting industry-based occupational certifications that match local-, regional-, and state-determined workforce needs; explain the purpose and advantages of the locally designed Work Readiness Certification; and provide a brief resource guide to WIBs for further follow-up assistance.

KEY WORDS: Adult Education; Educational Certificates; Industry; Job Skills; Job Training; Labor Force Development; Labor Needs; National Standards; Occupational Mobility; Postsecondary Education; Secondary Education; Student Certification; Vocational Education.

88. Staff, J., & Uggen, C. (2003). The fruits of good work: Early work experiences and adolescent deviance. *Journal of Research in Crime and Delinquency*, 40(3), 263-290.

Some theories of crime suggest that "adult-like" work conditions will diminish adolescent delinquency, whereas others suggest that a precocious entry into adult work roles will increase youth problem behaviors. We consider the relationship between delinquency and several dimensions of adolescent employment, including learning opportunities, freedom and autonomy, status, demands and stress, wages, and the compatibility between work and school. More specifically, we ask: (1) Do these early work conditions affect adolescent deviance net of the number of hours worked and self-selection processes? (2) If so, are "adult-like" work environments harmful or beneficial for

adolescents? And, (3) which employment dimensions are the most important for theory and research on crime and delinquency? We find the lowest rates of 12th grade school deviance, alcohol use, and arrest among adolescents whose jobs supported rather than displaced academic roles and provided opportunities for them to learn new things. In contrast, many qualities of work considered desirable for adults (autonomy, social status, and wages) appear to increase delinquency in adolescence. We conclude that work conditions have age-graded effects on delinquency that are contingent on the life course stage of the worker.

KEY WORDS: Adolescent Development; Juvenile Delinquency; Youth Employment; Deviant Behavior; Delinquency Prevention.

89. Stevens, M. (2003). Earnings functions, specific human capital, and job matching: Tenure bias is negative. *Journal of Labor Economics*, 21(4), 783-805.

This article investigates the hypothesis that when measures of specific human capital (such as job tenure) are included in earnings functions, there may be a sample selection bias because of job-matching effects because workers with high unobserved match quality receive and accept high wage offers. We develop a model for wage offers in a labor market characterized by both specific human capital and job matching. The model provides a theoretical basis for empirical earnings functions containing specific capital, and it demonstrates that sample selection bias reduces the estimated return to specific human capital and tenure.

KEY WORDS: Wages Rise; Seniority; Investment; Labor.

90. Stier, H., & Levanon, V. (2003). Finding an adequate job: Employment and income of recent immigrants to Israel. *International Migration*, 41(2), 81-107.

The study examines the early market experience of recent immigrants to Israel from the former Soviet Union (FSU) & their mobility patterns a few years after migration. The Labour Utilization Framework, proposed by Clogg & Sullivan (1983), was analyzed to identify the employment difficulties immigrants experienced upon arrival, their short-term mobility in the labor market, & the income consequences of their disadvantaged position in the market. Using a panel study of immigrants who arrived in Israel during 1990, we found that although most of them found employment, only a minority did not experience employment hardships. Four years after their arrival, most immigrants were still employed in occupations for which they were overqualified, & only a small portion of the group managed to find adequate employment. Women had more severe employment hardships & a lower rate of mobility into the better positions. For men & women alike, almost any deviation from a stable adequate employment entailed wage penalties.

KEY WORDS: Immigrants; Israel; Income; Employment Opportunities; Slavic Cultural Groups; Occupational Mobility.

91. Stofferahn, C. W. (2000). Underemployment: Social fact or socially constructed reality? *Rural Sociology*, 65(2), 311-330.

Analyzes merged data from 1987-1990 surveys & in-depth interviews with 33 persistently underemployed rural residents to determine whether the researchers were imposing their definition of reality on the interviewees. The data from the interviews largely demonstrated a correspondence between the objective definition of reality as defined by

measures of underemployment & the informants' subjective interpretation of their employment situation. This procedure demonstrated that the underemployed had created their own subjective reality, which had become an objective reality, ie, a socially created fact. A few cases, however, raised concerns about the extent to which that reality, was widely shared because the interviewees' definitions did not correspond to the researchers' objective definitions or did not make sense in their own situations. Other interviewees' comments raised significant questions about the applicability of formal labor market concepts & measures, which tend to overlook the unique characteristics of rural labor markets, eg, uncompensated labor, self-employment, & multiple job holding. Thus the in-depth interviews provided conceptual checks on the extent to which researchers can impose their definitions of the situation on respondents' subjective reality.

KEY WORDS: Underemployment; Rural Population; Interviews; Social Constructionism; Subjectivity; Ethnomethodology; Methodological Problems; Qualitative Methods.

92. Tremblay, D.-G. (2001). New learning models for the new knowledge-based economy: Professional and local-personal networks as a source of knowledge development in the multimedia sector. Paper presented at the Conference of the European Society for Research on the Education of Adults (3rd), Lisbon, Portugal, September 13-16, 2001.

The role of professional and local-personal networks as a source of knowledge development in the new knowledge-based economy was examined in a 15-month study that focuses on people working in the multimedia industry in Montreal, Quebec. The study focused on the modes of exchange and learning, collaborative work, and management and development of knowledge within firms through exchanges between workers. Of the approximately 50 firms contacted, 18 agreed to participate in the study. Sixty open-ended interviews (48 with workers and 12 with employers or managers) were conducted. The interview responses were analyzed within the contexts of the concepts of collective competence and communities of practice. The interviews established that collaborative work, teamwork, and knowledge sharing have become normal in multimedia firms. The perceptions and values of the workers interviewed appeared to counter those of the traditional Tayloristic vision of work, which assumes a strong division of labor and little if any exchange between workers. Most interviewees were ready to share information, often without expecting anything in return, and most enjoyed teamwork. Many firms used capacity to work in a group as a selection criterion when hiring employees. The managers reported looking for complementary specializations within teams.

KEY WORDS: Adult Learning; Competence; Foreign Countries; Group Dynamics; Individual Development; Information Networks; Learning Processes; Models; Organizational Climate; Organizational Communication; Organizational Objectives; Professional Development; Teamwork; Work Environment.

93. Van Ham, M., Mulder, C. H., & Hooimeijer, P. (2001). Local underemployment and the discouraged worker effect. *Urban Studies*, 38(10), 1733-1751.

The effect of poor local labor market opportunities on occupational achievement is an important aspect of the spatial mismatch hypothesis. Much of the research has concentrated on the direct link between geographical access to jobs & employment outcomes. In contrast, little attention has been given to the discouraging effect of poor chances on job search activities. The discouraged worker effect is defined as the decision to refrain from job search as a result of poor chances on the labor market. Discouragement effects can arise from a lack of individual qualifications, from

discrimination in the labor market, or from a high local level of underemployment. The empirical findings of this paper, based on the Netherlands Labor Force Surveys 1994-1997, show that discouragement can enter the job search process both at the stage of deciding to enter the labor force & at the stage of deciding to engage actively in a job search. Gender differentials in discouragement are revealed in the process of self-selection into the labor force. Poor labor market chances lead to less activity in both off-the-job & on-the-job search, indicating a role of discouragement in the spatial mismatch. Individual qualifications & ascribed characteristics turn out to be more decisive than the local level of underemployment.

KEY WORDS: Labor Market; Job Search; Employment Opportunities; Occupational Qualifications; Netherlands; Spatial Analysis; Underemployment.

94. Vann, J. W., Wessel, R. D., & Spisak, S. A. (2000). Job opportunity evaluation matrix: Ability to perform and job attractiveness. *Journal of Career Development, 26*(3), 191-204.

People evaluating job opportunities must decide whether to allocate their energies, knowledge, skills, and a portion of their lives to a prospective job. Inappropriate allocations will mean wasted resources and potentially negative outcomes. This paper demonstrates how an adaptation of an opportunity evaluation scheme used in business (Aaker, 1998) can be used by the job seeker. The evaluation scheme utilizes a two-dimensional matrix that simultaneously represents job attractiveness (JA) from the perspective of the job seeker and the job seeker's ability to perform the job (ATP). This matrix simplifies the opportunity assessment process by combining multiple variables that determine job attractiveness and that determine ability to perform into one summary variable for each and then generates a recommended course of action for the job seeker based on the coordinates of those two summary variables in the matrix.

KEY WORDS: Employee Skills; Job Characteristics; Job Search; Occupational Guidance; Job Applicant Attitudes; Occupational Interests.

95. Vernez, G., Krop, R., & Rydell, P. (1999). *Closing the education gap: Benefits and costs*. Santa Monica: Rand.

This study explored the implications of demographic trends on the quality of the future labor force and on public social expenditures. It also focused on the educational costs and social benefits of educational and immigration policy alternatives designed to close the gap in educational attainment between non-Hispanic whites and Hispanics and blacks. The RAND Education Simulation Model examines U.S. population flows through the primary, secondary, and postsecondary education systems, dividing the nation into two regions California and the rest of the nation with California chosen for the study because it has the largest immigrant and minority populations. The model estimates that in spite of the rapid growth in the percentage of minorities in the nation's population, the educational attainment of the adult population (age 25 and over) will be higher in 2015 than it was in 1990. However, unless further gains are made in the educational attainment of minorities, their share of college-educated entrants into the labor force will decrease. In addition, the educational gap between Asians and non-Hispanic whites vis-a-vis blacks and Hispanics will increase, especially in California. The results suggest that closing this educational gap would pay for itself, particularly in California. Nine appendixes provide detailed statistical tables.

KEY WORDS: Educational Equalization; United States; Minorities; Economic Aspects; Work and Learning.

96. Virgona, C., Waterhouse, P., Sefton, R., & Sansuinetti, J. (2003). *Making experience work: Generic skills through the eyes of displaced workers*. Adelaide: The National Centre for Vocational Education Research (NCVER).

The role of generic skills in the lives, work, and employment of 127 dislocated workers in a broad cross-section of job categories in five areas of Australia were examined through individual interviews, focus groups, and a survey questionnaire. Selected findings are as follows: (1) generic skills are developed in all areas of human endeavor, including in the family, education, community, and employment environments; (2) demand for high levels of generic skills and technical skills and different kinds of generic skills (for example, entrepreneurship and enthusiasm for change) are becoming more highly valued, whereas "traditional" generic skills (such as teamwork) are being devalued; (3) although many study participants considered themselves reasonably well prepared for the demands of the current employment market, others believed that their skills had been superseded and that their values and aspirations no longer matched the requirements of work in the new economy. The study findings challenged current vocational education and training practice by demonstrating that generic skills are basically developed through experiential learning, and they reflected the need for structures and services that support lifelong learning within and beyond the world of work.

KEY WORDS: Adult Students; Dislocated Workers; Education Work Relationship; Educational Attitudes; Employee Attitudes; Employer Employee Relationship; Employment Potential; Employment Qualifications; Experiential Learning; Foreign Countries; Job Skills; Postsecondary Education; Questionnaires; Relevance (Education); Retraining; Secondary Education; Skill Development; Unemployment; Vocational Education; Work Attitudes.

97. Watson, L. (2001). *Who pays for lifelong learning?* Paper presented at the Research to Reality: Putting VET Research To Work. Proceedings of the Australian Vocational Education and Training Research Association (AVETRA) Conference. 4th, Adelaide, South Australia, March 28-30, 2001.

Structural change in the economy has seen the emergence of human resource skills as an important intangible input to the value-adding process. The fastest growing sectors of the economy employ workers with high levels of skill. This has led to the development of a lifelong learning policy agenda that argues lifelong learning is the key to economic prosperity in the future. The lifelong learning policy agenda assumes that because education is important to worker productivity, industries and employees will be willing to finance the cost of workers' participation in education and training. The lifelong learning policy agenda emphasizes the need to motivate people and their employers to invest more in education and training. But there is a significant difference between the amount of training undertaken by high- and low-skilled workers and a disparity in the extent to which these groups of individuals attract employer support. People in highly skilled jobs are more likely to participate in continuing education and training than people in low-skilled occupations. People in low-skilled occupations are less likely to receive employer support for their participation in continuing education and training. The policy goal of "lifelong learning for all" is unlikely to be achieved unless governments actively support education and training participation among people with lower levels of skill.

KEY WORDS: Access to Education; Adult Education; Continuing Education; Corporate Support; Developed Nations; Educational Finance; Educational Policy; Educational Status Comparison; Employer Attitudes; Federal Aid; Foreign Countries; Government

Role; Job Skills; Labor Force Development; Lifelong Learning; Participation; Resource Allocation; Skilled Workers; State Aid; Student Motivation; Unskilled Workers.

98. Westwood, A. (2002). *Is new work good work?* London: The Work Foundation.

Some new work is good work. Quality is ultimately defined by the individual. However, these perceptions are inevitably colored by the circumstances in which people find themselves, by the time, place, and wide range of motivations for having to do a particular job in the first place. One person's quality may be another's purgatory and vice versa. Four important changes in Great Britain's labor market are a major decline in the number of people in manual employment; a rise in skilled employment of people performing managerial, professional, and technical jobs; a rise in mixed but essentially low formal skilled employment performed by "personal and protective" workers; and the continued increase of women in the labor force. The point may be not that newer work is bad or worse because it has replaced older, more traditional industrial and manual jobs but that women do these emerging jobs. Retail has been one of the most maligned types of work, but popular perceptions have been misplaced. ASDA/Walmart has been voted the best place to work in Britain. Some reasons are its approach to its employees or colleagues and the vast range of benefits on offer to them. Retailers like ASDA have been at the forefront of business in restoring job opportunities to parts of Britain that need them the most. Britain needs more good jobs because Britain need to perform better as an entire labor market.

KEY WORDS: Adult Literacy; Compensation (Remuneration); Demand Occupations; Economic Impact; Employee Attitudes; Employees; Employment Opportunities; Employment Patterns; Foreign Countries; Job Satisfaction; Job Skills; Job Training; Labor Conditions; Labor Market; Poverty Areas; Public Opinion; Quality of Working Life; Retailing; Unskilled Occupations; Work Environment.

99. Wieling, M., & Borghans, L. (2001). Discrepancies between supply and demand and adjustment processes in the labour market. *Labour*, 15(1), 33-56.

Changes in demand & supply in segments of the labor market will affect the labor market position of workers with an educational background in a related field of study. In one economic tradition such discrepancies between supply & demand are thought to lead to unemployment in the case of excess supply & to unfilled vacancies or skill shortages in the case of excess demand. The other neoclassical-oriented tradition expects wage adjustments to take fully account of these labor market imbalances, leading to higher wages for studies with excess demand & lower wages in case of excess supply. In practice the labor market might, on the one hand, be more flexible than suggested by the first approach, but on the other hand adjustment might be incomplete & not only wages but also other aspects of the employment relationship might be affected by a friction between supply & demand. This study examines the relationship between discrepancies between labor demand & supply on the one hand & manifestations of these tensions in the labor market experience of school-leavers on the other hand. To investigate this relationship, a random coefficient model has been used that allows for different adjustment processes for the various educational types, but still makes full use of all the information available. The analyses provide insights about the importance of different adjustment processes & their complementarity & substitutability. We show that on average, supply surpluses lead to pressure to accept jobs at a level lower than the school-leavers educational level, jobs with relatively low wages, & jobs with part-time contracts. A direct link between supply surpluses & unemployment is only found for a few specific fields of study. Unemployment seems to occur mostly when school leavers do not take temporary jobs or jobs below their educational level in case of excess supply.

KEY WORDS: Supply and Demand; Employment Opportunities; Labor Market; Education Work Relationship; Occupational Qualifications; Wages; Unemployment; Underemployment; Labor Supply.

100. Willams, S., & Hesketh, A. (2004). *The mismanagement of talent: Employability and jobs in the knowledge economy*. Oxford: Oxford University Press.

This book examines what makes a “knowledge worker” employable and argues that the demand for “knowledge workers” is not nearly so great as is often claimed by governments. The authors also examine government policies aimed at encouraging employability, particularly UK higher education policies and argue that employability policies must take account of the positional conflicts of candidates.

KEY WORDS: Knowledge Workers; UK; United States.

101. Wolbers, M. (2003). Job mismatches and their labour market effect among school-leavers in Europe. *European Sociological Review*, 19, 249-266.

In this article, we investigate the determinants of job mismatches with regard to the field of education among school-leavers in Europe. We also examine the effects of job mismatches on the labour-market position of school-leavers. Special attention is paid to cross-national differences in this respect. The data used are from the EU LFS 2000 ad hoc module on school-to-work transitions. The empirical results show that a number of individual, structural and job characteristics affect the likelihood of having a job mismatch. Moreover, in countries in which the education system is vocationally oriented, the incidence of job mismatches among school-leavers is higher than in countries in which the education system is mainly general. With respect to the labour-market effects of job mismatches, it is found that school-leavers with a non-matching job achieve a lower occupational status, more frequently look for another job, and more often participate in continuing vocational training than those with a matching one. These labour-market effects of job mismatches are smaller in countries in which the vocational orientation of the education system is stronger.

KEY WORDS: Education Work Relationship; European Union; Dropouts; Occupational Status; Crosscultural Differences; Vocational Education; Job Training; Educational Programs.

102. Wonacott, M. E. (2002). *The impact of work-based learning on students*. *ERIC Digest*. Washington, DC: Office of Educational Research and Improvement.

Recent educational approaches that have career and technical education (CTE) components have integrated work-based learning (WBL) with traditional academics. Among positive effects of the association between WBL and secondary students' educational outcomes are: (1) increased attendance, (2) decreased dropout rates, (3) increased number of academic courses; and (4) higher grade point averages. The longer-term effect in students' postsecondary experiences has been too little investigated. Additional positive effects of WBL are seen in students' attitudes toward such programs and in some employment statistics. Researchers are cautious about isolating the effects of WBL, but acknowledge that it may play a crucial indirect role in improving outcomes for at-risk students.

KEY WORDS: Academic Achievement; Academic Education; Career Academies; Career Education; College Students; Curriculum Design; Effective Schools Research; Employment Level; Employment Potential; Experiential Learning; Grades (Scholastic); High Risk Students; High School Students; Integrated Curriculum; Job Skills; Learning Motivation; Literature Reviews; Longitudinal Studies; Outcomes of Education; Postsecondary Education; Program Effectiveness; Qualitative Research; Secondary Education; Socioeconomic Status; Student Attitudes; Student Employment; Student Motivation; Student Needs; Tech Prep; Vocational Education; Work Experience Programs.

103. Ylijoki, O.-H., & Mantyla, H. (2003). Conflicting time perspectives in academic work. *Time & Society*, 12(1), 55-78.

This article explores the diversity of time perspectives in academic work. The background of the study stems from recent changes in university management and funding, which impose new demands for academic work, including its temporal order. Drawing on focused interviews with 52 academics, we discern four core time perspectives according to which academics experience their work: scheduled time, timeless time, contracted time and personal time. Scheduled time refers to the accelerating pace of work, timeless time to transcending time through immersion in work, contracted time to short-term employment with limited future prospects and finally, personal time to one's temporality and the role of work in it. In addition, we discuss the relationships between the different time perspectives, focusing on dilemmas and tensions between them.

KEY WORDS: Academic Work; Autonomy; Dilemmas; Higher Education; Time.

104. Zhao, J. J., & Alexander, M. W. (2002). Information technology skills recommended for business students by Fortune 500 executives. *Delta Pi Epsilon Journal*, 44(3), 175-189.

Responses from 51 Fortune 500 training and development executives identified 28 information technology skills strongly recommended for business graduates. A similar 1995 survey identified only 11 skills. The largest increase occurred in Internet/Web telecommunications and discipline-specific information systems.

KEY WORDS: Corporations; Employer Attitudes; Employment Qualifications; Information Systems; Information Technology; Job Skills; Telecommunications.



The Research Network on Work and Lifelong Learning
Resource Base Development Office
Centre for the Study of Education and Work (CSEW)
Ontario Institute for Studies in Education of the University of Toronto (OISE/UT)
252 Bloor Street W, #12-256, Toronto, ON, M5S 1V6, Canada
Tel (416) 923-6641 ext. 2392, Fax (416) 926-4751
E-mail: wallnetwork@oise.utoronto.ca